

**Cold Regions Research Centre Days**  
29-30 November, 2018  
Day 1: Thursday November 29

8:00 Reception (coffee/tea & name tags)  
8:30 *Cold Regions Research Centre*: welcome from Director  
*Office of Indigenous Initiatives*: welcome, acknowledgement and opening prayer  
*Wilfrid Laurier University*: welcome from Vice-President Academic & Provost

**SESSION 1: Process Understanding - Plot scale**  
Kaitlin Kok and Michelle Malandra (Conveners)

9:00 9:12 Evan Wilcox: Interactions between Shrubs and Snow, and its influence on Frost Table Depth  
9:12 9:24 Barun Majumder: Wind Model Ideal for Drift Formation on Gentle Slopes  
9:24 9:36 Branden Walker: High resolution mapping of snow using Structure-from-Motion Photogrammetry  
9:36 9:48 Brandon Van Huizen: Spatial Patterns in Seasonal Ground Ice Melt in a Boreal Peatland  
9:48 10:00 Brenden Disher: Examining the subsurface and thermal properties of treed bogs  
10:00 10:12 Colin McCarter: The effect of enhanced decomposition on solute transport in peat  
  
10:15 10:30 BREAK

**SESSION 2: Anthropogenic Influences and Engineering Implications**  
James Telford and Branden Walker (Conveners)

10:30 10:42 Ela Mastej: Keeping the ground frozen: snow cover manipulation and thermosyphons  
10:42 10:54 Erfan A. Amiri: Numerical Modelling of Permafrost  
10:54 11:06 Jasmina Vucic: Gravel pit lakes along the Dempster Highway: How do they compare with natural lakes?  
11:06 11:18 Weibin Chen: Formation of P and Fe solids during passive wastewater treatment  
11:18 11:30 Izbela Jasiak: Assessing spatiotemporal patterns of arsenic and other metals in sub-arctic lakes  
  
11:30 12:15 Lunch & Poster Presentation display

**Panel Discussion: How Climate Warming Affects Indigenous Communities in Cold Regions**

12:15 12:45 Joe Dragon: Deputy Minister, Environment and Natural Resources, GNWT, Yellowknife.  
12:45 13:15 Chris Burn: Professor, Carleton University, Ottawa.  
13:15 13:45 Caleb Behn: Lawyer and Activist, Vancouver.  
13:45 14:15 Moderator: David Livingstone, Chair, Laurier-GNWT Partnership Steering Committee, Yellowknife.  
  
14:15 14:30 BREAK

**SESSION 3: Indigenous Sovereignty in a Changing Climate and Landscape Change**  
Élise Devoie and Geoff Kershaw (Conveners)

14:30 14:42 Michelle Malandra: Resilience, Sovereignty, Innovation: Exploring Local Food Production in Kakisa  
14:42 14:54 Kaitlin Kok: A mixed methods approach to understanding the way it "used to be" in Kakisa, NT  
14:54 15:06 Michelle Liu: Impact of Global Warming on Northern Roads  
15:06 15:18 James Telford: Using paleolimnology to meet the needs of a northern community monitoring initiative.  
15:18 15:30 Pieter Aukes: Nature's tea - looking at dissolved organic matter and water quality in northern waters  
15:30 15:42 Nicola Day: Impacts of wildfire extent and severity on caribou habitat: woodland to barren ground  
15:42 15:54 Caren Ackley: Hydro-ecological impacts of a low-severity wildfire on a permafrost plateau  
15:54 16:06 Casey Remmer: Delineating extent and magnitude of river flooding in a delta using water isotope tracers  
16:06 16:18 Jessica Smart: The role of microtopography in permafrost thaw induced peatland transition  
16:06 16:18 Kevin Ng: Mercury Biogeochemistry in Thawing Permafrost Landscapes  
16:18 16:30 Christine Indrigo: Stability of the Drygalski Ice Tongue, David Glacier, East Antarctica  
  
16:30 End of Day 1

**Cold Regions Research Centre Days**  
29-30 November, 2018  
Day 2: Friday November 30

8:00 Reception (coffee/tea & name tags)  
8:30 *Cold Regions Research Centre*: welcome from Director  
*Office of Indigenous Initiatives*: welcome, acknowledgement and opening prayer with Mary Anne Caibaiosai

**SESSION 1: Stability of Cold Regions**  
Mikhail Mack and Cory Wallace (Conveners)

9:00 9:12 Kristine Haynes: Thaw-induced land-cover change in the southern margin of discontinuous permafrost  
9:12 9:24 Élise Devoie: Modelling permafrost thaw in peatlands  
9:24 9:36 Olivia Carpino: The trajectory of changes at Scotty Creek, NWT  
9:36 9:48 Mason Dominico: Energy and mass dynamics of a peat plateau in the discontinuous permafrost region  
9:48 10:00 Katherine Standen: Plant functional trait variation across a boreal productivity gradient  
10:00 10:12 Nick Wilson: Studying home range change of Barren Ground Caribou

10:15 10:30 BREAK

**SESSION 2: Process Understanding - Landscape scale**  
Tanner Owca and Nick Wilson (Conveners)

10:30 10:42 Geoffrey Kershaw: Precipitation inputs in a Nival basin, Mackenzie Mountains, NWT  
10:42 10:54 Cory Wallace: Patterns of establishment and seed dispersal of a tall shrub at tree-line  
10:54 11:06 Mikhail Mack: Distribution of fens across the Hudson Bay Lowlands and their influence on runoff  
11:06 11:18 Paul Dainard: The importance of rock flour to carbon cycling in glacial rivers, Lake Hazen  
11:18 11:30 Mackenzie Schultz: Arsenic mobility in terrestrial and aquatic ecosystems, NWT

11:30 12:15 Lunch & Poster Presentation display

**Panel Discussion: How Climate Warming Affects Indigenous Communities in Cold Regions**

12:15 12:45 Gladys Norwegian: Grand Chief, Dehcho First Nations, Fort Simpson / Jean Marie River.  
12:45 13:15 Jonas Antoine: Elder and Educator, Fort Simpson / Wrigley.  
13:15 13:45 Ken Hewitt: Professor Emeritus, Wilfrid Laurier University, Waterloo.  
13:45 14:15 Moderator: David Livingstone, Chair, Laurier-GNWT Partnership Steering Committee, Yellowknife.

14:15 14:30 BREAK

**SESSION 3: Process Understanding - Landscape scale continued**  
Evan Wilcox and Caren Ackley (Conveners)

14:30 14:42 Laura K. Neary: Influences on carbon balance of shallow lakes, Peace-Athabasca Delta, Alberta  
14:42 14:54 Kristen Coleman: Investigating Variability in Lake Response to Permafrost Thaw in Southern NWT  
14:54 15:06 Natalia Wegrzyn: Motor Vehicle-Based Travel: Experiences and Perceptions of Yukon Tourists  
15:06 15:18 Angela Elgie: The hydrological effect of seismic lines on Bogs in the southern NWT  
15:18 15:30 Casey Beel: Impact and timescale of recovery of sediment and particulate organic carbon fluxes  
15:30 15:42 Sarah Mediouni: The impacts of gold mining on vegetation and mycorrhiza in Northern Canada  
15:42 15:54 Jelle Faber: Baseline hydrological conditions and sediment metal concentrations from paleolimnology  
15:54 16:06 Tanner Owca: Using pre-industrial baselines to assess sources and pathways of metals in the PAD

16:06 Closing remarks, acknowledgements.

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Posters – By Session

**Process Understanding: Plot Scale (Thursday AM Break)**

Sarah McFadden: Assessing Seasonal Fine-Scale Thaw Subsidence and Subsurface Hydraulic Changes in Permafrost Landscapes

Brampton Dakin: A Water Balance Across a Small Sub-Catchment of Trail Valley Creek in the Western Canadian Arctic

Mercedes Huynh: Dispersal as a buffer against zooplankton community change in response to rising salinity levels on the Great Plains

**Anthropogenic Influences and Impacts (Thursday Lunch)**

Matthew Teillet: Impacts of granular material on water quality and fishing opportunities

**Landscape Change and Stability of Cold Regions (Friday AM Break)**

Thomas Pretty: Impact of Forest Fire on Aquatic Invertebrates in Subarctic Lakes of the Taiga Plains

Jeremy Leathers: The effect of climate change on arsenic mobility in peatlands: an experimental approach

Scott J. Davidson: Impact of wildfire on methane emissions and dissolved organic carbon at a boreal fen, Alberta, Canada

**Process Understanding: Landscape Scale (Friday Lunch)**

Rachel Cohen: Factors associated with macroinvertebrate communities in small arctic lakes, NWT

Dilshan Kariyawasam: Changes in lakes along the ITH (1950 - 2011)