

Muskeg offers climate clues

RESEARCH Feature

by Roxanna Thompson



Northern News Services
Scotty Creek

A long-standing research site is situated in the Deh Cho.

Located approximately 50 kilometres outside of Fort Simpson near Checkpoint, research has been taking place at the Scotty Creek research site since about 1995.

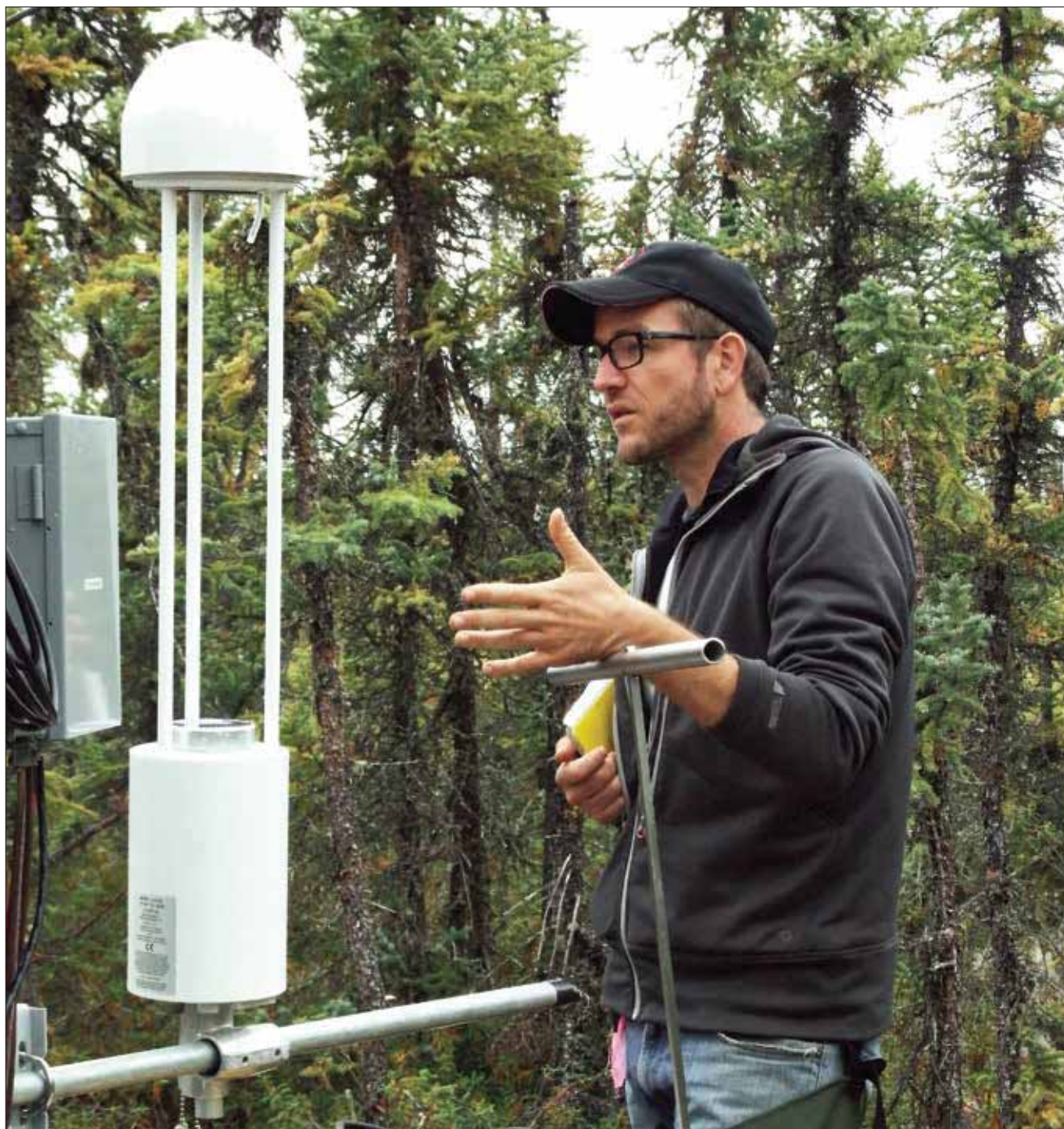
Bill Quinton, an associate professor at Wilfred Laurier University in Waterloo, Ont., established a camp at the site in 1999.

Since then, researchers have been at the site annually from mid-March to late August or early September. This summer, a maximum of

20 people were at the site at one time with 30 to 40 people coming through the camp.

Although they have different specialties and areas of interest, throughout the season the researchers are mostly examining how climate warming and associated landscape changes, as well as human-made seismic disturbances, are altering the ecosystem function of boreal peatlands on discontinuous permafrost.

A number of officials, including Environment and Natural Resources Minister Michael Miltenberger, were given a tour of the research site on Aug. 28.



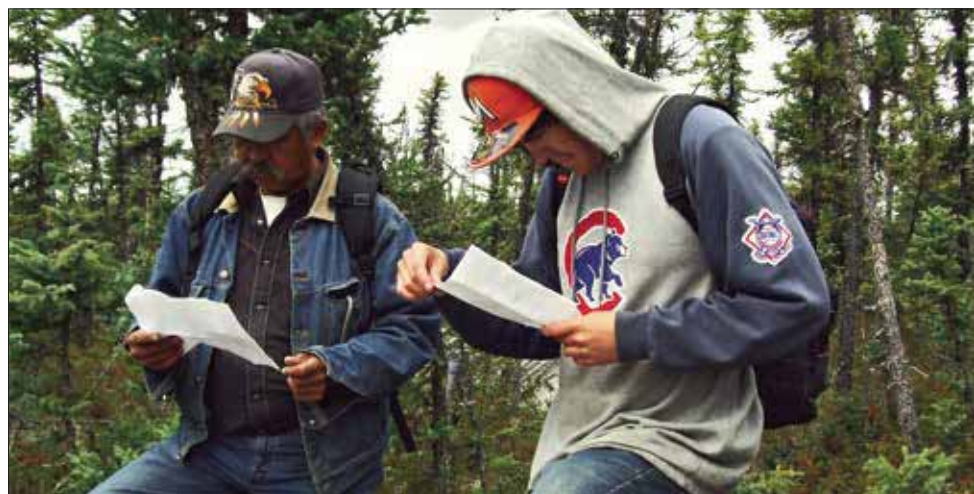
Oliver Sonnentag, an assistant professor at the University of Montreal, speaks about the work he is doing to record how much carbon is taken in and released by the ecosystem at Scotty Creek. The instrument beside Sonnentag is an infrared gas analyzer for measuring methane.



Bill Quinton, who founded the Scotty Creek research site, changes a storage module in a data logger that records information from instruments measuring snow depth, wind speed, and short- and long-wave radiation.



Environment and Natural Resources Minister Michael Miltenberger, at front of canoe, Nicholas de Pelham, an Aboriginal Aquatic Resource and Oceans Management community monitor with Liidlii Kue First Nation, Miltenberger's executive assistant James Tolley, and David Livingstone, chair of the science committee for the partnership between the territorial government and Wilfred Laurier University, paddle across First Lake to reach a second camp at the research site.



Edward Cholo, left, and Nicolas de Pelham, Aboriginal Aquatic Resource and Oceans Management community monitors for Liidlii Kue First Nation, look at maps that show the extent of the permafrost thaw at Scotty Creek since 1947.



At one of their test sites, the researchers have installed thermosyphons on a seismic line that was cut in 1985. They are trying to determine if the permafrost, which melted in part as a result of the forest being removed from the line, can be regenerated.