From: Patrick Pow
To: Brown, Sandra
Subject: RE: Visiting UBC
Date: September 17, 2025 7:07:02 PM

[**CAUTION:** Non-UBC Email]

Hi Sandra, I'm always available to fill in :).

Title: CanN2ONet - Nitrous oxide emissions from flux-gradient sites in the Canadian Nitrous Oxide Network.

Abstract: In response to increasing nitrous oxide (N_2O) emissions from inorganic N-fertilizer use, the Canadian government has established a national emission reduction target for fertilizer-based N_2O emissions of 30% below 2020 levels by 2030. Baseline measurements of field-scale N_2O emissions in systems with enhanced N management practices will be required to inform N_2O mitigation efforts across Canada. This presentation provides an overview of the Canadian N_2O network (CanN2ONet), a recently founded collaboration between academic researchers, producer groups, industry, and government to achieve reductions in fertilizer-related N_2O emissions. The network currently comprises 6 existing long-term flux-gradient (FG) sites in Saskatchewan (1), Manitoba (2), and Ontario (3), which combine multi-plot FG and eddy-covariance methodologies to determine year-round measurements of N_2O and CO_2 emissions in grain and oilseed crops. A preliminary synthesis of the CanN2ONet data will be presented, including annual N emissions across management practices, soil types, and climate regimes. Standardization of the FG calculation across sites will be presented.

Bio: Patrick is a postdoctoral scholar under the supervision of Dr. Claudia Wagner-Riddle in the CWR Agrometeorology Lab in the School of Environmental Sciences at the University of Guelph. He completed an MSc and PhD at the University of British Columbia (UBC) with the UBC Biometeorology and Soil Physics Group under the supervision of Dr. Andy Black, with a focus on agricultural greenhouse gas emissions of CO_2, N_2O, and CH_4 using the eddy-covariance method. As a postdoc, Patrick's primary responsibility is flux data synthesis for CanN2ONet (https://cann2onet.org/), a network of agricultural greenhouse gas flux sites across Canada, which aims to identify management practices that enhance carbon sequestration while minimizing net greenhouse gas emissions, specifically N_2O.

Cheers,
Pat

From: Brown, Sandra <sandra.brown@ubc.ca>
Sent: September 17, 2025 11:23 AM
To: Patrick Pow <powp@uoguelph.ca>
Subject: RE: Visiting UBC

YES, I need a presenter for Oct 10. Are you in?
That would be amazing
Sandra

From: Patrick Pow <powp@uoguelph.ca>
Sent: September 16, 2025 2:03 PM
To: Brown, Sandra <sandra.brown@ubc.ca>
Subject: Visiting UBC

Hi Sandra, I'll be in town from Sept 29 – Oct 14, unless there is an emergency and I must travel to Alberta. Not sure if the wiki is up to date, do you need a presenter for the Oct 10 seminar?

Cheers,
Pat

Patrick Pow, PhD
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