

Seminar Series 2014-2015

BOGS I HAVE KNOWN: CARBON CYCLING IN PEATLANDS

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Peatlands have been given little respect in literature and until recently have been given little scientific attention, yet their coverage is large and their role in global change significant. Canada is the 'wealthiest' nation in terms of peatland area and carbon storage, on a per capita basis. I examine the ways in which carbon cycles in peatlands and the main processes, drivers and scale issues. I look at peatland carbon accumulation rates and why they appear to have small variability on the long time scales, though they vary from year to year. Methane, a greenhouse gas, is emitted from peatlands and I consider what the main drivers of this emission are, at varying scales, and the probable importance of beavers in the Canadian wetland landscape. Biogeochemically 'no element is an island' and I show how nutrients such as nitrogen and phosphorus play a role in the stoichiometry and ecology of peatlands and how they accumulate in peat profiles.

January 12, 2015 from 4-5pm

Burnside Hall, room 426

Department of Geography

