

Sulphate and mercury methylation in northern peatlands: 20 years of insights and applications

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Although processes governing the formation of methylmercury in the environment are conceptually well understood, understanding mercury methylation at the landscape scale continues to present both scientific and management challenges. This seminar will present recent work linking sulphate supply to methylmercury formation in northern peatlands, focussing on the role of groundwater-surface water interactions, wastewater discharges, and mine rock leaching on mercury methylation. Prof. Branfireun will show that in profoundly sulphate-limited peatlands like those in the far north, even small additions of sulphate rapidly stimulate methylmercury production, raising questions about threats to aquatic ecosystems due to both climate and landuse change in the north.



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