Abstract:
Wetland monitoring often uses plant community composition to infer quality or integrity of sites. Unlike conventional aboveground vegetation surveys that can miss short-lived or dormant species, environmental DNA (eDNA) from soil can originate from any plant tissues – active, dormant, or dead. DNA metabarcoding of soil eDNA, therefore, has the potential to provide a more integrated view of local plant diversity from a single assessment.

I will be presenting the results of my research on this new DNA metabarcoding approach for surveying vegetation including a comparison of four DNA markers and an examination of the possible impacts of “zombie” DNA.

This research was conducted as part of the Biomonitoring 2.0 pilot project (http://biomonitoring2.org/) based in the Peace-Athabasca Delta in Wood Buffalo National Park.

Brief Bio:
Nicole completed her B.Sc. at the University of Toronto in 2011, where she studied Biology and Forensic Science. She continued her studies at the University of Guelph working with Mehrdad Hajibabaei, and completed her M.Sc. in Integrative Biology in December 2015. She is currently working in Mehrdad’s lab preparing to publish her findings.