Measuring Carbon in Wetlands: A Rapid Assessment Protocol

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What are we doing?

- Generating estimates of carbon storage for upland and wetland landscapes in the boreal forest
- Using existing protocols for upland forest C assessment
- Developing a methodology for rapid assessment of carbon storage in wetlands
- Striking a balance between credible estimates and real-world feasibility

What are we doing? (2)

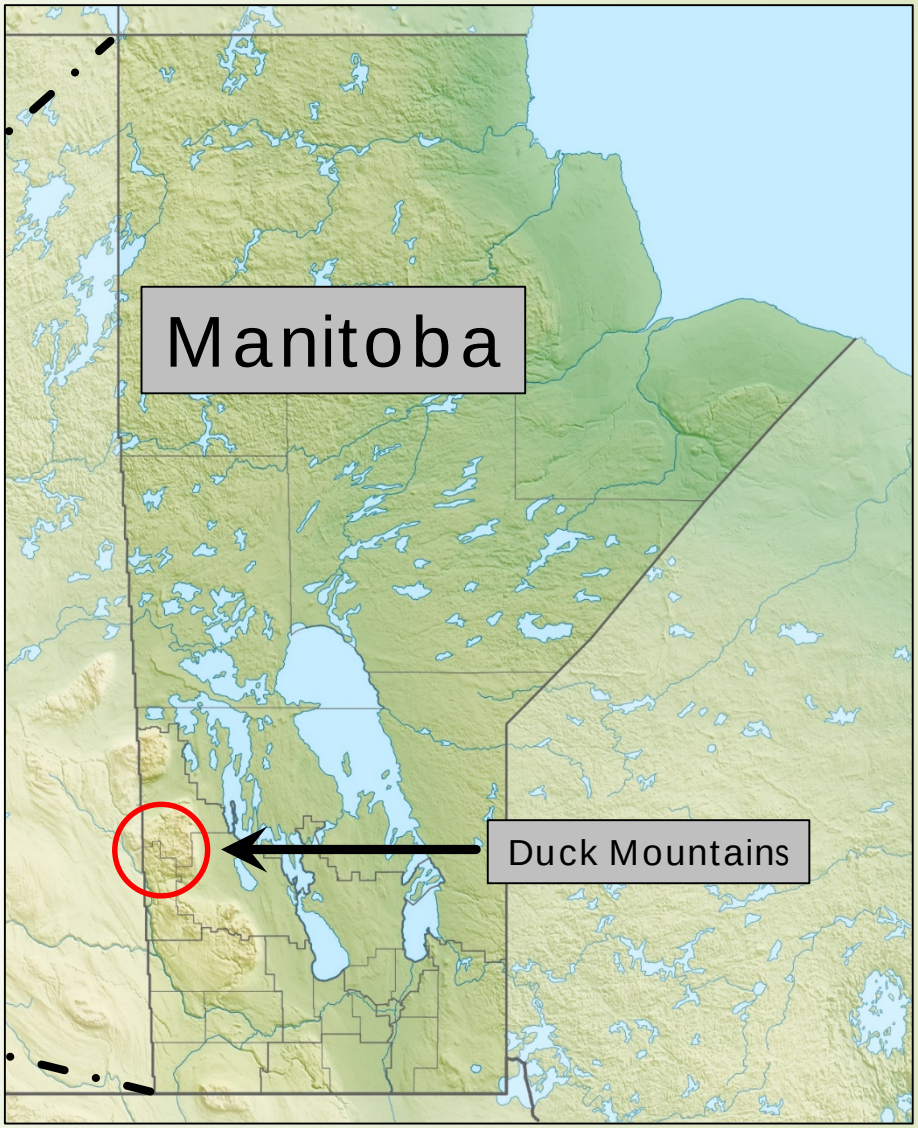
- Developing and testing the protocol on LP's managed forest landbase in western Manitoba
- Providing forest managers with a guidebook on the field work and analytical methods
- Making use of a range of public and professional communication outlets
  - E.g. twitter, blogs, op/ed pieces, Canadian Geographic, journal articles and others

Manitoba Wetland Landscape

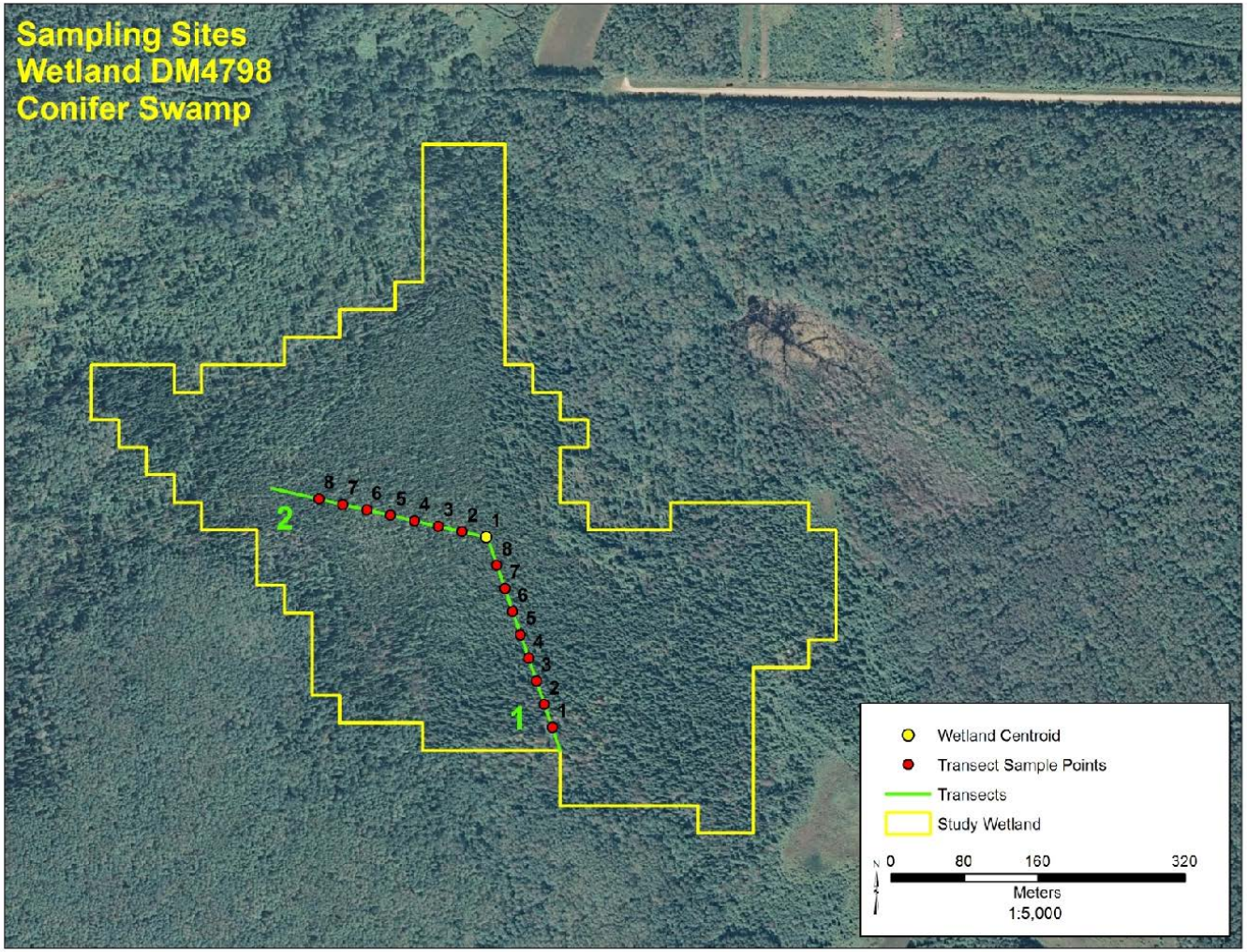
Ducks Unlimited Canada

Location of Study Site

https://commons.wikimedia.org/wiki/File:Relief_map_of_Canada.png



https://en.wikipedia.org/wiki/Manitoba



Transect-Based Sample Design:

2 per wetland

Depths at 30 m intervals

Cores at 1st and last point

Rapid vegetation assessment

Peat Core

Lab analysis:
C content
and BD

J. Morissette, Ducks Unlimited Canada

Rapid Vegetation Assessment

J. Morissette, Ducks Unlimited Canada

Why are we doing it?

- Helps answer one of SFI's conservation priorities – carbon storage in certified forest landscapes
- Wetlands store enormous amounts of carbon
- For example, wetlands in Canada store nearly 150 billion tonnes of carbon, or about 92 times Canadian and US annual C emissions, and about 4 times global C emissions.
- Forest managers need to know how much C is stored in these ecosystems
- And they need to make sure their SFM practices do not compromise this storage capacity

Why are we doing it? (2)

- Project also helps reinforce the message of wetland conservation
- Important for water storage and regulation at the landscape level
  - Supports SFI's water priority
- Wetlands are biodiversity hotspots – e.g. unique bird and plant communities
  - Supports SFI's biodiversity priority

Wetland Biodiversity

Loon.org

Cottagelife.com

M. Johnston

Wetland Biodiversity

Sundew, a carnivorous plant (*Drosera rotundifolia*)

J. Morissette, Ducks Unlimited Canada

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Questions?