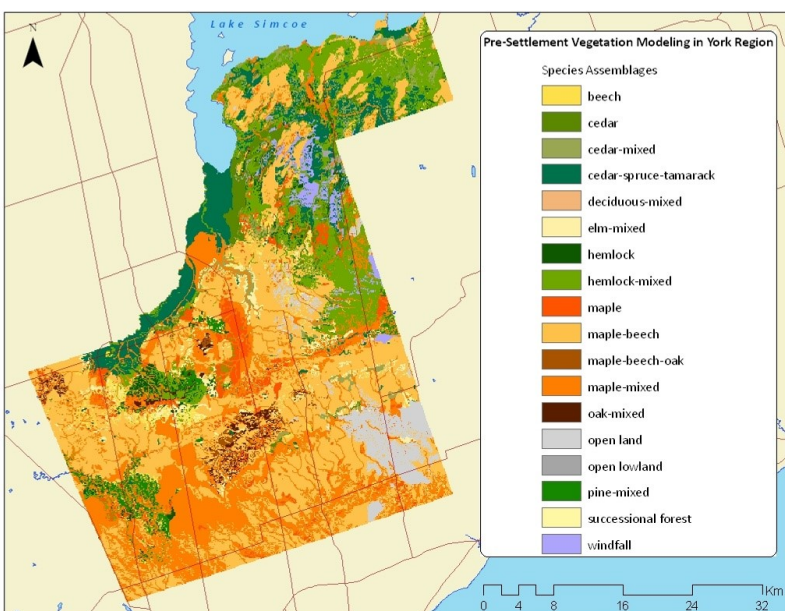


Pre-settlement landscape vegetation mapping in Ontario



In Ontario, statistically derived pre-settlement models and maps have been generated for Algonquin Park and the Temagami Sustainable Forest License Area, based on digital land surveyors' information collected from 1856 to 1958. Pre-settlement mapping was also completed for York Region in 2003. Most recently, pre-settlement mapping has been generated for the southwestern Golden Horseshoe.

Pre-settlement vegetation mapping completed for York Region in 2003 (left).



A woodlot west of Guelph, 1910.

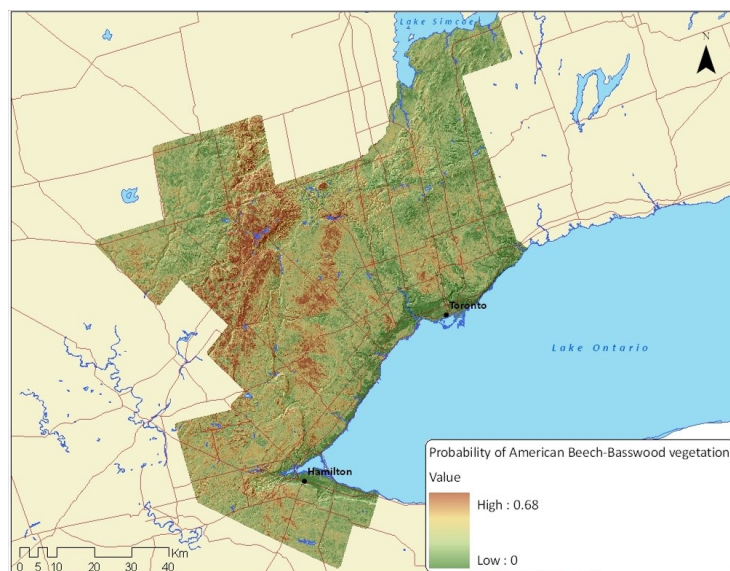


Tree stumps in Norfolk County, between 1906 and 1912.

Pre-settlement landscape vegetation mapping for the southwestern Golden Horseshoe

Most recently, pre-settlement vegetation mapping has been completed for the southwestern Golden Horseshoe. The study area covered includes the Regions of York, Toronto, Peel, Halton and Hamilton and the entire Credit Valley watershed.

The mapping products produced for the southwestern Golden Horseshoe area are diverse, and include numerous vegetation and tree species distribution maps for the pre-settlement era. Amongst these mapping products are reconstructions of the pre-settlement distributions of American chestnut, oak dominated forests, and wetlands.



The pre-settlement probability distribution of the American beech-basswood association (above).

Contact:

If you want to find out more about the science behind pre-settlement landscape vegetation mapping, applying this information, or the next steps for expanding the scope of this mapping in southern Ontario, including developing partnerships to expand mapping availability, please contact:

Dr. Danijela Puric-Mladenovic

Knowledge of pre-settlement landscape vegetation composition and structure is important because:

- It can be used to conduct gap analysis, which in turn provides evidence for setting conservation and restoration objectives and targets, and determining ecological thresholds.
- It can be used to direct forest management and silvicultural practices towards attaining historical vegetation species composition.
- It can help us determine the location of remnant vegetation patches that are important for gene conservation, and that can act as regional seed sources.
- Most of southern Ontario's species and wildlife are adapted to the landscape and vegetation structure that existed prior to European settlement; pre-settlement vegetation mapping can help target, protect and restore underrepresented plant and wildlife habitats.
- It can help us quantify and measure the extent and loss of biodiversity.
- It helps give us a sense of place, and appreciate the history of the land we live on.