

# Paleolake Ojibway: past islands and submerged hills, a vegetation survey in rare habitats

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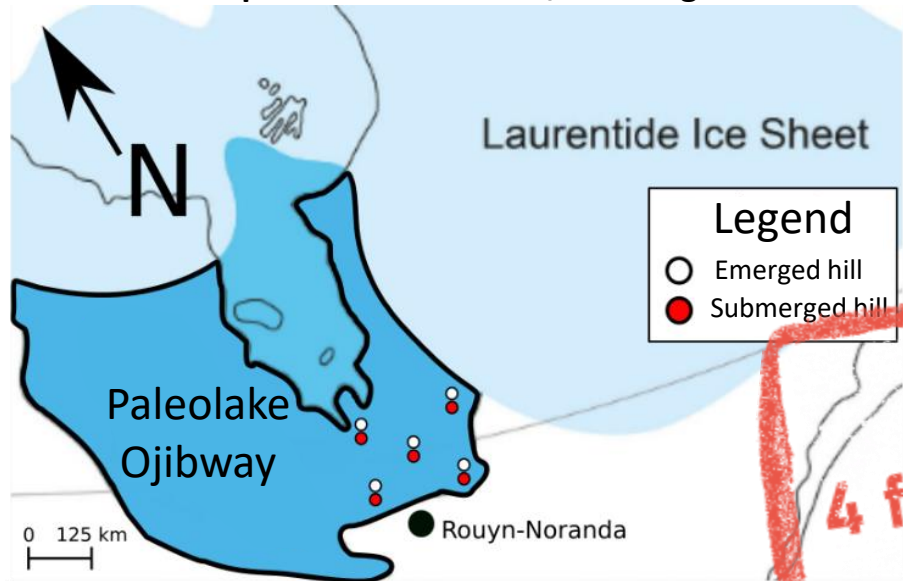
## Context

In a global warming and increasing anthropic context, systems are globally threatened. Better knowing and understanding them is a key point to reflex on such changes. Biodiversity surveys and analysis can be a solution to this lack of knowledge.

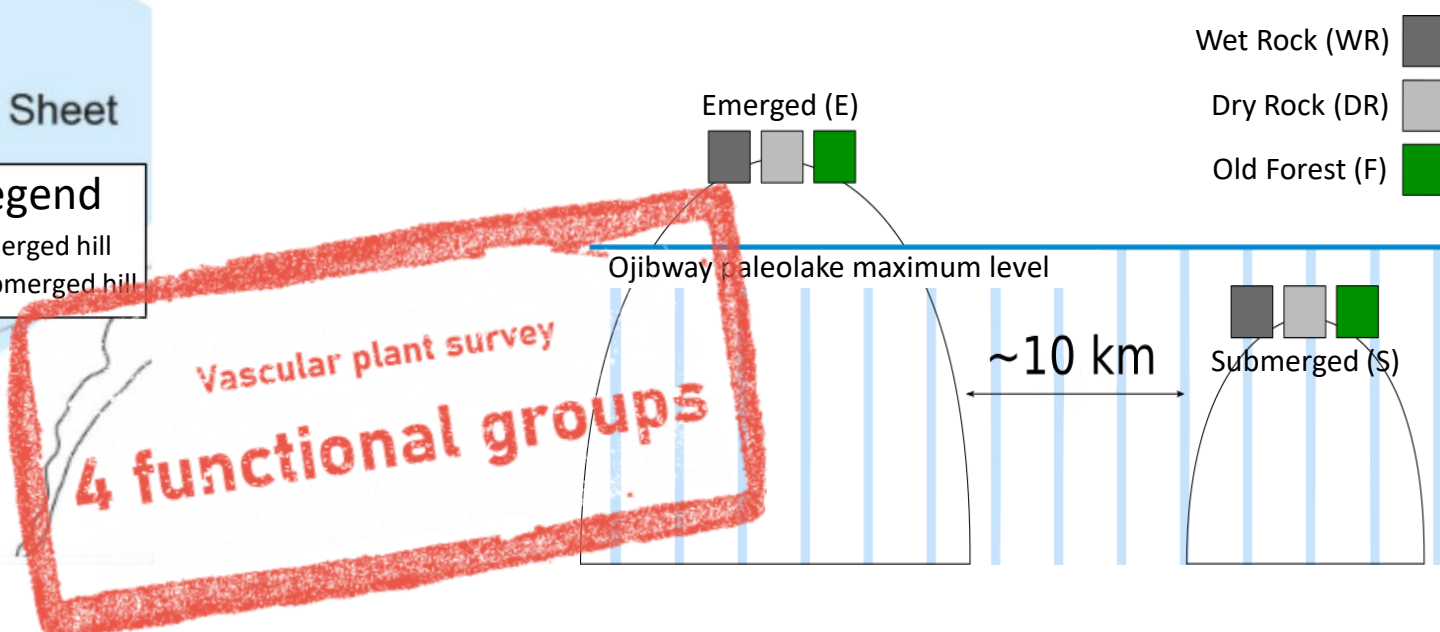
The Abitibi was covered by the paleolake Ojibway after glacial retreat. It created a 2000 years gap in colonisation between former islands and the rest of the territory. Forests and peatlands are well studied in Abitibi but this is not the case of this paleo-islands, as well as submerged hills at this time. Forests, dry rocks or wet rocks areas found there has been sampled and here is a progress summary.

## Method

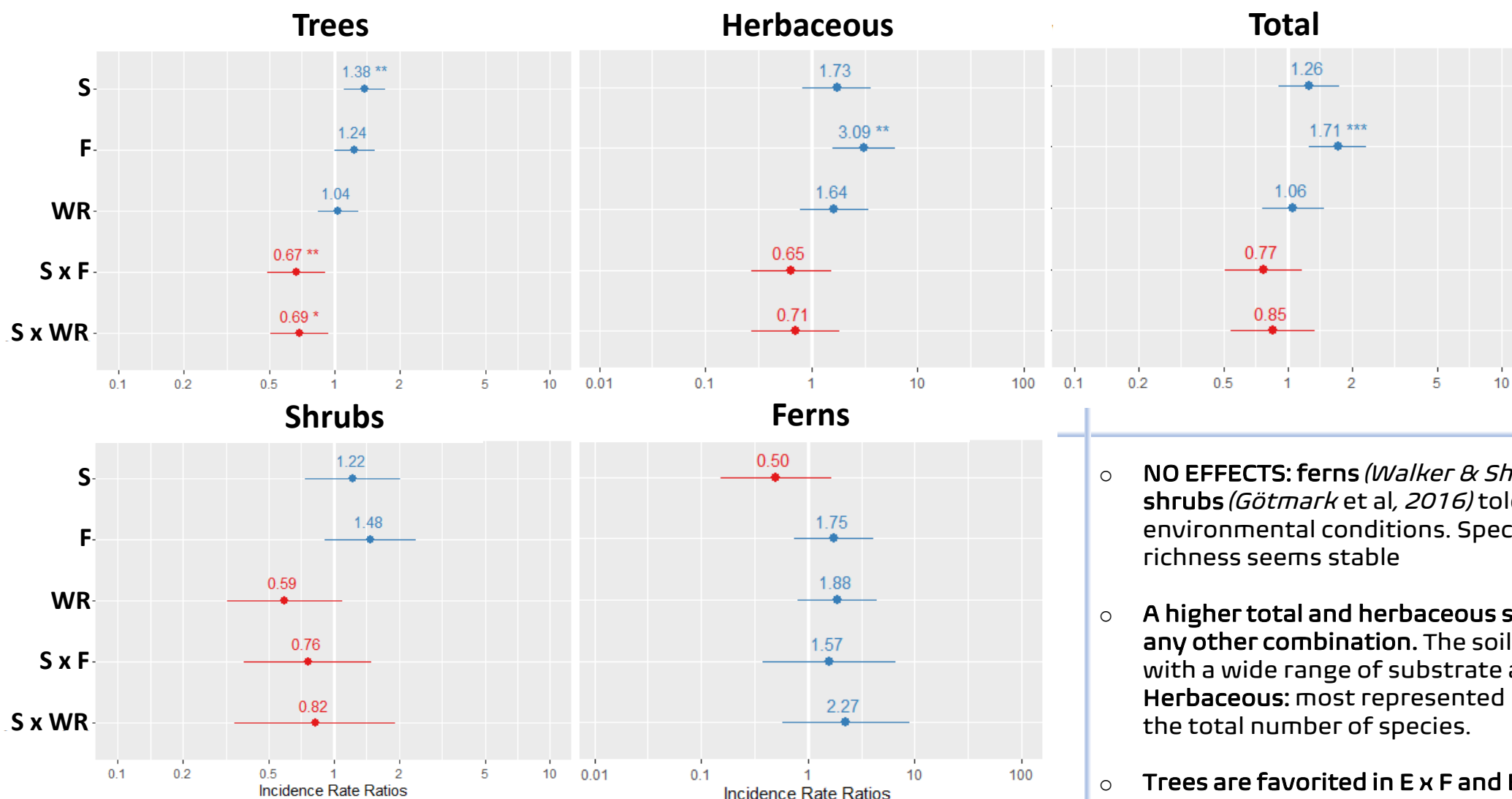
Selection of 5 pairs former islands/submerged hills



Selection of 3 hills specific habitats



## Results (glm)



- **NO EFFECTS:** ferns (*Walker & Sharpe, 2010*) and shrubs (*Götmark et al, 2016*) tolerate a wide range of environmental conditions. Species may vary but their richness seems stable
- **A higher total and herbaceous species in E\*F than in any other combination.** The soil is 2000 years older with a wide range of substrate and light exposition. **Herbaceous:** most represented group, contributing to the total number of species.
- **Trees are favored in E x F and E x WR, but not DR.** Less impactful fires and more contrasted conditions than DR: good for long-living organisms (*Lanner, 2002*). **S\*DR** shelters more trees than any other combination: because of few tree species and less fitted model?

Götmark F, Götmark E, Jensen AM. 2016. Why be a shrub? A basic model and hypotheses for the adaptive values of a common growth form. *Front Plant Sci* (Internet). (accessed 2021 Apr 9) 7. <http://journal.frontiersin.org/Article/10.3389/fpls.2016.01095/abstract>  
 Lanner RM. 2002. Why do trees live so long? *Ageing Research Reviews*. 1(4):653-71.  
 Walker LR, Sharpe JM. 2010. Ferns, disturbance and succession. In: *Mehlreter K, Walker LR, Sharpe JM, editors. Fern Ecology* (Internet). Cambridge: Cambridge University Press; p. 177-219.