

# Research Chair on Northern Biodiversity in a Mining Context



## Objective 2

### TO BETTER KNOW OUR WETLANDS

#### Who we are

We are a group of university researchers, mainly from the University of Quebec in Abitibi-Témiscamingue (UQAT), who want to better understand the biodiversity of Abitibi-Témiscamingue and Eeyou Istchee-James Bay and better understand the influence of mining activities on this biodiversity.

#### Why is our research useful ?

There is a lack of scientific knowledge related to wetland biodiversity in the Eeyou Istchee-James Bay region. Knowing their value in terms of biodiversity but also in terms of indigenous use will help decision-making. For example, the most important environments could then be better preserved from mining activities, forestry activities, hydroelectric dams, etc. The scientific team will build the tool, then it will be up to the different decision-makers to take the information into account!

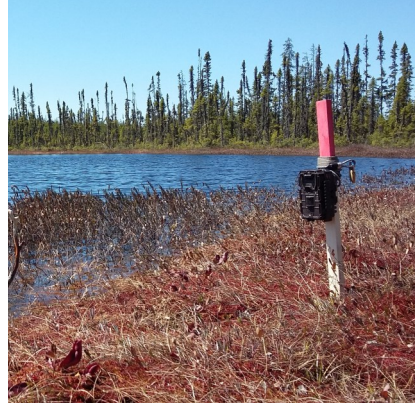
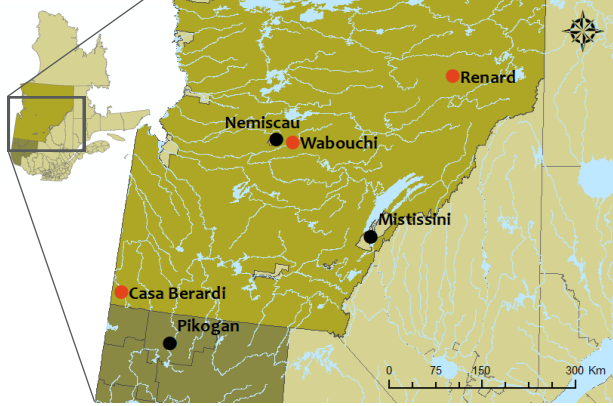
#### What are we doing ?

A team of 5 students work towards this goal, helped by many professors and researchers.

#### Marc-Frédéric Indorf

Marc-Frédéric identifies plants found in wetlands and thus he comes to know where different species live, and where there are rare species. He also looks at the soil type, the acidity of the water, and other factors that may explain why a particular plant or group of plants is present or absent in a particular wetland. He also tries to predict how climate change will affect those wetlands.





## Tana Route

Tana works with Marc-Frédéric, but she studies lichens, which are still poorly known in the region. She collects samples in the field and then identifies them in the laboratory, including two possible new species that have never been documented in the area!



## Mariano Feldman

Mariano counts the birds, frogs and mammals that come to use wetland ponds. He uses camera traps and records the birds and frogs singing to then identify them. This will make it possible to know if certain animals prefer certain ponds and if rare animals are only found in one type of wetland.



## Eliane Grant

Eliane is working to document the indigenous values of wetlands. Using interviews with members of the Nemaska, Mistassini and Pikogan communities, she tries to find out if certain environments are used for different cultural practices .



## Junior researcher to be found!

We will recruit a junior researcher (a postdoc who has finished their studies but doesn't have a job as a professor yet) for the final step. It will be the job of this junior researcher to put all this information together and to create an easy-to-use map-based tool for the different wetland values found by the other students.



Eliane is also working to see if mining activities and other environmental disturbances stress moose. This is a question that is often asked by communities because moose is a cultural keystone species. Hair samples will be collected during the hunting season and will be analyzed to measure the stress of the animal.



## Questions?

If you have any questions, do not hesitate to contact us, it will be our pleasure to explain our projects in more detail!

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