

TITLE

Impact of the flooding of Lake Manicouagan by the Daniel-Johnson dam on the human and physical environments

DESCRIPTION

This doctoral project aims to document and quantify the impacts caused by human activities (hydroelectricity, mining, logging, vacationing, tourism) on the human and physical environments of the Manicouagan lake-reservoir and lac Dechêne using the analysis of sediment cores collected in the reservoir of the Manic-5 power plant and profiles of the physicochemical properties of the water column of the reservoir.

The student's tasks will be:

1. Participate in one or more field missions at the Manicouagan lake-reservoir.
2. Participate in interactions with the Innu of Pessamit community.
3. Analyze lake sediment cores.
4. Collect and analyze the physicochemical properties of the water column of the Manicouagan lake-reservoir.
5. Trace the ecological, geochemical and limnological trajectories of the lake and the impacts of its flooding by the construction of the Manic-5 dam.

This project is taking place as part of the multidisciplinary project “Imaging Manicouagan-Uapishka through Territorial Aquatic and Cultural Prospecting (IMPACT)”, funded by the Institut Nordique du Québec and the Sentinel North program. The project brings together a university team from five research institutes and partners from the Territories and Resources office of the Innus of Pessamit Council, the Manicouagan-Uapishka World Biosphere Reserve, and the Uapishka Station.

EXPECTED START DATE

As soon as possible

RESEARCH DIRECTORATE

This project will be carried out in co-direction with

Prof. Patrick Lajeunesse, Department of Geography at Laval University,

And

Prof. Pierre Francus and Dr. Léo Chassiot, Institut national de la recherche scientifique, Centre Eau Terre Environnement.

Collaborations: The Innu of Pessamit community, the Manicouagan-Uapishka World Biosphere Reserve, the Ndakina office of the Waban-Aki Nation, Caroline Desbiens and Justine Gagnon of the SSHRC Canada Research Chair in Indigenous Heritage and Tourism.

STUDY PROGRAM

PhD in Geography at Laval University

Or

PhD in Earth Sciences or Water Sciences at the INRS Eau Terre Environnement.

FELLOWSHIP

For this project, a grant of \$25,000/year is available for a period of 3 years. Candidates holding a scholarship or eligible for a scholarship from NSERC or FRQNT will be given preference.

REQUIRED PROFILE

Training in Earth sciences, physical geography, or any other appropriate discipline and:

- an excellent academic record;
- an interest in projects involving First Nations;
- experience in paleolimnological analysis;
- knowledge of the paleogeography of Quebec during the Quaternary;
- the ability to work alone and in a team.

TO SUBMIT YOUR APPLICATION

Interested candidates are invited to submit an application in a **single PDF file** to recruitment.ete@inrs.ca or to cen@cen.ulaval.ca or to quebec-ocean@qo.ulaval.ca including the following documents:

1. a resume
2. a cover letter
3. all university transcripts
4. a list of practical and technical skills
5. the names and contact details of two references

The selection will begin upon receipt of applications and will continue until the candidate has been recruited.

QUESTIONS ABOUT THE PROJECT

Patrick Lajeunesse: <https://www.ggr.ulaval.ca/patrick-lajeunesse>

Pierre Francus: <http://www.ete.inrs.ca/pierre-francus>