

SHIKAAPAASHKWH TIPAJIMOOD

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Issue 2 | Spring 2018

NEWSLETTER

A community bulletin on the ongoing Comprehensive Research Program on COASTAL HABITAT of Eeyou Istchee.

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Welcome to our second edition of the Shikaapaashkwh Tipajimoon newsletter! The Comprehensive Research project is moving along quickly and we are looking forward to our first full field season this coming summer 2018. All of our researchers will be along the James Bay coast this summer, so please feel free to go talk to them and share whatever knowledge you may have. All information is extremely important for us. With this in mind, this issue is meant to introduce you to the different researchers so you know a bit about them. Enjoy!

Meegwetch! Jinnaskumdinnan! Thank you! Merci!

The Steering Committee

Ernie Rabbitskin

Coastal Habitat Research Liaison Officer

Originally from Chisasibi, I graduated from the Natural Environment Technology (NET) Program in 2014. I worked over two years as an environment technician at the Goldcorp's Eleonore Project. Niskamoon Corporation hired me full time last year in 2017.

In this project, I coordinate the field work between the researchers and the coastal land users. I ensure all the necessary logistics for fieldwork is organized, which includes such things as the rental of boats/snowmobiles, hiring of boat/snowmobile drivers, gas purchases. I actively maintain communication to the participating land users.

I would like to thank the coastal land users that help out with the project. Without their collaboration and traditional knowledge, this project would not be possible.



EELGRASS RESEARCH COMPONENT

Fred Short



I am a research professor at the University of New Hampshire in the Department of Natural Resources and the Environment. I study seagrasses, and have done seagrass research around the world for the past 40 years. I am very interested in eelgrass and began working in James Bay in 2004 at the request of the Cree Nation of Chisasibi.

I designed the current project and am the lead scientist of the eelgrass research component of this project. We are looking at the reasons why eelgrass no longer grows in some parts of James Bay.

The Cree people know a lot about their environment and have a vast body of traditional knowledge. Through this project, some Cree trappers are being trained to help gather scientific data on their traplines on James Bay. I really enjoy James Bay and working with the Cree Nation.



Dante D. Torio

I am a geo-information scientist and a postdoctoral researcher at the University of New Hampshire in the Department of Natural Resources and the Environment. I specialize in remote observation, cartography, and analysis of threats to coastal environments. I have been doing research on coastal environments for the last 10 years. I enjoy the outdoors being an avid recreational fisher and a gardener.

For this project, I oversee map production and analyses of threats to eelgrass habitats. I also lead the development and implementation of field survey methods and train local researchers to gather and analyze data on eelgrass and water characteristics. I help coordinate researchers activities with representatives from different traplines.

I would like to thank the Cree communities of Chisasibi, Eastmain, Wemindji and Waskaganish for the wealth of knowledge about the land and eelgrass they share during community discussions and field monitoring.



WATERFOWL RESEARCH COMPONENT

Jean-Francois Giroux



I'm professor at Université du Québec à Montréal and am interested by the ecology and management of migratory birds, especially waterfowl. I have studied Canada geese breeding in Alberta and southern Quebec, greater snow geese breeding in Nunavut and staging in Quebec, greylag geese wintering in France and during the breeding season in Iceland, and pink-footed geese wintering in Scotland and breeding in Iceland. I try to understand what influences the number of birds by looking at habitat use, migration strategy and by estimating different parameters like survival and reproductive success.

My contribution in the project will be to study the migration of Canada geese in spring and fall along James Bay east coast by tracking radio-marked Canada geese. We will determine the timing of migration, the location of staging areas and the habitat that characterize these areas. We will use historical banding data to determine where the birds harvested along the James Bay coast came from. Finally, we will conduct

faerial surveys to determine the number, the timing, and the staging areas used by Canada geese and Brant geese along the eastern James Bay coast.

A large number of Canada geese have been banded over the years along the Hudson Bay coast in Nunavik and all along the flyway. The collaboration of the Cree people would be greatly appreciated if they could hand in bands recovered during the upcoming hunts, but also include any bands that they have gathered over the years. We would like to know where and when the banded birds were harvested, but if the information is missing, it is not a problem. The band number is the most important information.

Jean Rodrigue



I am a waterfowl biologist at the Canadian Wildlife Service of Environment and Climatic Change Canada. I have surveyed the Ungava Peninsula to count Canada Geese for the last 20 years. I have worked on resident Canada Geese in southern Quebec since 1999. I am also in charge of duck banding in southern Quebec and involved in waterfowl hunting regulations.

We are concerned about the factors that may affect Canada Goose migration. The Canadian Wildlife Service has participated in the follow up of the Canada Geese migration with transmitters installed on them. My role in this project is to help to better understand the geese migration. When and where they fly over James Bay territory, where and how long are their migration stops during their travel to breeding grounds?

We need the Cree people's involvement and knowledge to have a better understanding of the Canada Geese migration. The information provided through the band returns, and hunting booklet will be very useful for the research on Canada Geese.

In addition to helping carry out some of the waterfowl research, I am also a participant in the overall research project of the Steering Committee.

OCEANOGRAPHY RESEARCH COMPONENT

Zou Zou Kuzyk



I am a professor at the University of Manitoba and I have been studying various aspects of the coastal oceanography of Hudson Bay for more than 10 years. My work involves determining sources of freshwater and sediment and tracing their movements in the coastal environment. I began working in James Bay in 2016 as part of a project with the Arctic Elder Society (Joel Heath) and the Cree Nation of Chisasibi.

My colleagues and I have learned a lot working with Cree hunters, in particular with George and John Lameboy, during the last two years. With these guides and others, we have made trips out on the coastal ice in January and April each year and also by boat in the summer. On these trips, we have collected scientific measurements of the ice

and water properties. The data will help answer questions about how the La Grande and other rivers influence the coastal waters north of Chisasibi, and what controls the properties of the water at the eelgrass beds. Changes in water properties may be part of the reason for the declines in some areas.

We are really enjoying working with the Cree people and the other scientists and want to contribute as much as we can to help the Cree people understand the reasons behind the changes they have observed.

Jens Ehn

I am originally from a coastal place in Finland which is quite similar to yours in James Bay...but a bit warmer! Now I work as a Professor at the University of Manitoba; I research and teach in the field of physical oceanography. I study sea ice and am especially interested in the interactions of sea ice with the ocean and the atmosphere, and how a sea ice cover affects physical (currents, tides, mixing, salinity, light climate) and biological processes such as ice algae/phytoplankton ecology, zooplankton vertical migration, and now also eelgrass growth.

My role in the project is to supervise students and lead the oceanographic measurements of physical properties of the sea ice and the water to help figure out how water masses circulate along the



James Bay coast, how the river plume spreads in summer and under the ice in winter, and how waters are mixed within the embayments that still have eelgrass. The oceanography of James Bay is very exciting to me. I enjoy a lot working with the Cree trappers in James Bay, but it is logistically very challenging. Winters are cold, distances are long, and logistics is pretty limiting. However, everybody in Chisasibi have been helping us a lot. I think the scientific research of eelgrass would be greatly stimulated by having a local research station that could host scientists and coordinate the logistics.

Urs Neumeier

I am a professor at the marine science institute (Institut des sciences de la mer de Rimouski, ISMER) of the Université du Québec à Rimouski (UQAR). I am the leader of the coastal oceanography project, assisted by Virginie Galindo (project coordinator) (see her profile below) and Michel Gosselin (co-leader) (pictured here).



(Michel Gosselin)

Several researcher of ISMER are involved: Myself (marine geology), Michel Gosselin (biological oceanography), Huixiang Xie (chemical oceanography), Simon Bélanger (remote sensing), Virginie Galindo (biological oceanography), André Rochon (marine geology), Jean-Carlos Montero Serrano

(marine geology), Guillaume St-Onge (marine geology), and Simon Senneville (physical oceanography). There are already two students working on the project, Rémi Costanzo and Amélie Évrard, and there may be more in the future. Several technicians and assistants are also helping for the field work.

For the scientific part, I am in charge of the sediment analyses, the bathymetry surveys, the water turbidity measurements, and the moorings that will measure salinity, temperature, currents and waves. Here the objective is to characterize the sedimentary and physical conditions around the eelgrass beds.

We understand the importance of healthy natural environments for the Cree people. We hope that our scientific research will contribute to understand the eelgrass conditions. We wish a good collaboration with local people during our field campaign. We will present our results in the communities.

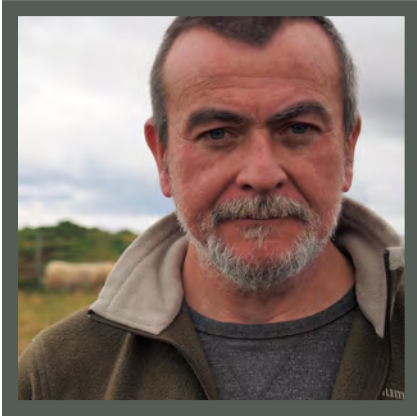
Virginie Galindo

I am a marine biologist and post-doctoral researcher at the Institut des sciences de la mer de Rimouski (ISMER). My research interest focus on algae and the impact of environmental changes (light, nutrients, salinity) on their communities. Over the past 9 years, I have been part of several field research teams in Arctic, thus working in James Bay is a new environment to explore.

I am the coordinator of the coastal oceanography project, so my role is to coordinate the fieldwork between the different members (biologists, chemists and geologists) of our team and the Cree communities (*via* Ernie Rabbitskin). I take care of all necessary logistics for day-to-day life, sampling and analysis in the laboratory. My job is both to ensure the relevance of our sampling (depending on limitation on the field) regarding the environment of eelgrass and its modern changes, and to obtain data necessary for the pursuit of several master student projects.

The implication of land users is important to the success of our scientific project, hence we are employing their boats and relying on their knowledge of the area for our sampling. We encourage the Cree people to engage with us, ask questions about our sampling and even help us in our gathering of samples in any step they wish. By working together, we will only improve our understanding of the oceanography of James Bay.





I am originally from Argentina, and I am now a Professor in the Université du Québec à Montréal since 2002. My group at the UQAM has been studying lakes, rivers and reservoirs across the boreal region of Québec for over 15 years, including in the James Bay region over the past decade.

The role of our team in this collaborative project is to understand what the major rivers that drain into the James Bay are exporting in terms of water, organic and inorganic materials and suspended solids. This is important because these materials exported by the rivers then influence the conditions in the coastal areas where eelgrass grow. Our team will include Serge Paquet, who is our Project Coordinator, Marie Gerardin and Caroline Fink-Mercier, both graduate students who will develop their

research thesis on the basis of this project, and a number of undergraduate interns and other colleagues who will likely join us at different times to help and collaborate. Over the course of the next two years our teams will be sampling the chemistry and the discharge of the largest rivers, and also of smaller rivers that are close to areas with eelgrass beds.

We are thrilled and grateful to be part of this Cree Nation initiative led by Niskamoon Corporation, and we are looking forward to working and interacting with the various Cree communities along the James Bay. We feel we have much to learn from these interactions.

Fly-overs

Many of you may have seen helicopters flying over your communities. It is some researchers conducting their sampling campaign, which has been approved by the local tallymen. We would like to inform you of the upcoming fly-overs along the coast of Waskaganish, Eastmain and Wemindji:

- Sunday, May 6th
- Sunday, May 13th

If the weather is poor, the fly overs will be moved to Monday, May 7th and Monday, May 14th.

Thank you for your collaboration!

**For more information or questions,
please contact your
local representative or email
info@niskamoon.org**

