MINUTES OF THE MEETING
STEERING COMMITTEE (SC)

Meeting Nº 64
Friday, February 2, 2024
9:00 AM to 12:00 PM
Videoconference on TEAMS

Present:	Daniel Brosseau	Hydro-Québec
	Marc Dunn	Niskamoon Corporation
	Luc Duquette	Hydro-Québec
	Carine Durocher	Hydro-Québec
	Jean-Philippe Gilbert	Hydro-Québec left
	Louie Kanatewat	Cree Nation of Chisasibi
	Mélanie Leblanc	Niskamoon Corporation
	Geraldine Mark	Cree Nation of Wemindji
	Johanna Ménélas	Hydro-Québec
	Ernie Rabbitskin	Niskamoon Corporation
	Robbie Tapiatic	Cree Nation of Chisasibi
Guest:	Julián Idrobo	University of British Columbia
	Frederic Letourneux	University of Laval
	Manon Sorais	Dalhousie University
	Stephanie Varty	Eeyou Marine Region Wildlife Board
	Cassandra Weapenicappo	Cree Nation of Eastmain
Absence:	Félix Boulanger	EMRWB representative Nation Government
	James Bobbish	Cree Nation of Chisasibi
	John Lameboy	Cree Nation of Chisasibi
	Josée Lefebvre	Canadian Wildlife Service
	Marie-Eve Lemieux	Hydro-Québec
	Gregory Mayappo	Cree Nation of Eastmain
	Graeme Morin	Cree Nation Government
	Ernest Moses	Cree Nation of Waskaganish
	Roderick Pachano	Cree Nation of Chisasibi

[This meeting was initially scheduled for January 22; however, it was rescheduled and held on February 2, 2024.]

MEETING CHAIR AND SECRETARY

Melanie Leblanc chaired the meeting, and Johanna Ménélas acted as the meeting secretary.

PROPOSED AGENDA

1. Approval of the Agenda
2. Presentation of Final report for Cree Knowledge Team (Julián Idrobo)
3. Presentation of the report on "Preliminary assessment of the Canada geese population breeding on Long Island, NU, Canada" (Manon Sorais)
4. Update on data compilation from Phase I (Mélanie Leblanc)
5. Miscellaneous
6. Summary and Next Steps (Chair)
7. Next Meeting

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1. Approval of the Agenda

The Chair reviewed the agenda, and no additional points were proposed. Thus, the agenda was approved as presented.

Following the approval, it was proposed that Manon Sorais (**Mrs. Sorais**) presented item 3 first, and Julián Idrobo (**Mr. Idrobo**) followed with item 2.

2. Presentation of Final report for Cree Knowledge Team

[There was an adjustment made to the order of items on the agenda, resulting in Item 3 being presented before Item 2.]

Mr. Idrobo delivered a presentation titled "Eeyou Coastal Habitat Comprehensive Research Project – Cree Knowledge Component Report (overview)," and a copy of the presentation is attached to these minutes for reference.

Following the presentation, Robbie Tapiatic (**Mr. Tapiatic**), before leaving the meeting early announced that it would be Mr. Idrobo's last presentation as he was moving on to a new position. Congratulatory remarks were exchanged, with Mr. Idrobo expressing gratitude for the opportunity and acknowledging the transformative impact of the project on him. He revealed that his new role would be with the Ministry of Agriculture in the province of British Columbia, focusing on indigenous food systems and agriculture.

The Chair facilitated comments and questions from the Committee members. Carine Durocher (**Mrs. Durocher**) provided constructive feedback on the report, expressing the need for more elaboration on the methodology and suggesting improvements in referencing and organization. Mr. Idrobo acknowledged the comments and assured that revisions would be made to address

these concerns. Mrs. Durocher continued with additional feedback regarding accuracy and clarity in referencing and data presentation.

Marc Dunn (**Mr. Dunn**) emphasized the importance of clear metadata and sensitivity flagging in the data transfer process to the Cree Nation Government.

Mr. Idrobo explained the challenges faced in gathering historical data and clarified the logic behind the comparison of hunting site usage before and after the 1990s. Suggestions were made to separate the comparisons and provide clearer distinctions in the report. Geraldine Mark (**Mrs. Mark**) proposed sending English references to assist Mr. Idrobo in correcting inaccuracies. Mr. Idrobo expressed openness to receiving detailed comments and revisions, indicating a timeline of within the next couple of weeks to address the feedback.

As the discussion concluded, Mr. Dunn commended Mr. Idrobo for his dedication and perseverance throughout the project, despite facing challenges such as joining late and navigating through the COVID-19 pandemic. The Chair acknowledged the acceptance of Mr. Idrobo's paper by Human Ecology and inquired about any future outputs. Mr. Idrobo shared his plans for further publications before bidding farewell to the Committee, expressing gratitude for the opportunity to work with them.

3. **Presentation of the report on "Preliminary assessment of the Canada geese population breeding on Long Island, NU, Canada"**

    [There was an adjustment made to the order of items on the agenda, resulting in Item 3 being presented before Item 2.]

Mrs. Sorais delivered a presentation titled "Preliminary assessment of the Canada geese population breeding on Long Island – Coastal habitat comprehensive research project," and a copy of the presentation is attached to these minutes for reference.

As Mrs. Sorais began her presentation, Mr. Tapiatic raised an important correction concerning the spelling of a member's name in the fieldwork team and support staff, emphasizing that it should be Snowboy, not Snowball. Mrs. Sorais acknowledged the correction and promptly apologized for the oversight. She assured the Committee that the PowerPoint presentation would be rectified accordingly. Additionally, she reassured everyone that the correct spelling was already ensured in the report itself.

Following the presentation by Mrs. Sorais, the Chair commended her on her excellent presentation. She then invited questions and discussion from the Committee.

Mr. Dunn raised several inquiries, particularly regarding the size of Long Island in relation to the density of breeding nests per square kilometer. Mrs. Sorais provided insights into the island's dimensions and the sections surveyed, indicating a lower density of nests than expected.

In response to Mr. Dunn's further questioning about observed densities, Mrs. Sorais elaborated on the discrepancy between expectations and findings, highlighting the surprise of local residents at the decline in nesting activity over the years.

Jean-Philippe Gilbert (**Mr. Gilbert**) inquired about the durability of nests over time and the impact of predators on breeding success. Mrs. Sorais acknowledged the challenges of assessing nest longevity in arctic conditions and discussed the presence of predators such as wolves on the island.

Mr. Dunn also raised concerns about the potential influence of long-necked geese on breeding habits, prompting speculation on their impact and interactions with short-necked geese. Mrs. Sorais emphasized the need for further research to understand these dynamics.

Mrs. Durocher suggested incorporating Cree knowledge into the report, advocating for a section detailing observations shared during the study. The Committee agreed, affirming the importance of integrating Cree traditional knowledge into research endeavors.

Mr. Dunn invited Louie Kanatewat (**Mr. Kanatewat**) to share his observations. Mr. Kanatewat highlighted changes in predator presence over the past 40 years, noting an increase in eagles, which may deter geese from nesting. He emphasized the influence of eagles on geese behavior during migration. Mrs. Sorais and Mr. Kanatewat discussed the prevalence of eagles during different seasons and their potential impact on nesting geese.

The Committee delved into the difficulty of assessing old nests and the potential limitations of such endeavors. Frederic Letourneux (**Mr. Letourneux**) shared insights from his experience in the Arctic, suggesting that old nests may be challenging to locate due to environmental factors. The Chair raised the possibility of conducting a comprehensive survey using helicopters to assess nesting sites effectively. Mrs. Sorais and Mr. Letourneux discussed optimal timing for surveys and the importance of ground verification.

Mr. Letourneux emphasized the need to explore areas identified by the land users, suggesting a combination of aerial surveys and ground inspections. The Committee deliberated on strategies to engage local communities and gather traditional knowledge about nesting sites. Mrs. Sorais highlighted the significance of communicating with community members to enhance understanding and conservation efforts.

The Committee agreed on the importance of further investigations to verify nesting sites and understand the dynamics of the Canada geese population on Long Island. They underscored the value of integrating traditional knowledge and scientific research to develop comprehensive conservation strategies.

Mr. Dunn continued the discussion by expressing support for the continuation of the research project, emphasizing the importance of understanding changes in the coastal ecosystem. He underscored the challenge of tracking geese due to their extensive range and highlighted the

significance of engaging with land users. Mrs. Sorais responded, assuring the Committee that her role as a biologist is to provide recommendations based on observations without accusations.

The Committee deliberated on the need to establish contact with Inuit communities and navigate protocols respectfully. The Chair suggested leveraging existing projects for additional support and shared insights from her experience regarding the interaction between resident and migrant geese populations. Mrs. Sorais acknowledged the complexity of understanding these interactions without historical data but emphasized the importance of monitoring changes in geese behavior.

The discussion concluded with a request for the PowerPoint presentation and gratitude expressed to Mrs. Sorais for her thorough presentation.

Before moving on to the next agenda item, the Chair introduced the new Local Officer for Eastmain, Cassandra Weapenicappo (**Mrs. Weapenicappo**), who is now serving as the Niskamoon Coordinator for the Cree Nation of Eastmain. A warm welcome was extended to Mrs. Weapenicappo by the Committee, with an invitation to reach out with any questions or concerns. However, Mrs. Weapenicappo had stepped out momentarily at that time.

4. **Update on data compilation from Phase I**

The Chair provided an update on the data compilation process, stating that all teams have submitted their data except for Mr. Idrobo and Zou Zou Kuzyk (**Mrs. Kuzyk**). She noted that Mr. Idrobo had provided a portion of the data, with the remaining transcripts pending. The Chair assured the Committee that measures were being taken to securely store the data, with plans to ensure controlled access. She mentioned that the data is stored on an online cloud platform managed by Niskamoon, allowing researchers and stakeholders access as needed. The Chair estimated that the data compilation process is approximately 90% complete, marking significant progress in this phase of the project.

5. **Miscellaneous**

The Chair opened the floor for any additional points to be raised under miscellaneous items. Mr. Dunn requested a quick update on the Phase 2 NSERC request or preparation for it. The Chair provided an overview, stating that while Mary O'Connor (**Mrs. O'Connor**) is close to submitting her application for the eelgrass ecosystem project, others are still working on theirs, with potential submission dates in late February. She emphasized that funding was available to ensure fieldwork this summer, although the extent of activities may vary depending on funding availability. The question of replacing Mr. Idrobo in the Eeyou coastal study was raised by Mr. Duquette, to which the Chair responded that no replacement was deemed necessary as the research team believed they could carry on without him. Mr. Dunn suggested bringing the matter of social science oversight back to the research consortium, which the Chair agreed to carry forward.

The Chair reintroduced Mrs. Weapenicappo.

6. Summary and Next Steps

- Mrs. Sorais will proceed with planning another visit to Long Island and will provide further details to the Committee.
- Mrs. Durocher will send her comments to Mr. Idrobo regarding his report.
- Comments on Mr. Idrobo's report should be sent by February 16th.
- Follow up on the recommendation regarding the social science advisor will be conducted by the Chair.
- Copies of the approved minutes should be sent to Shirley Chiskamish for documentation purposes.

Mr. Dunn raised a question about the submission of Mr. Idrobo's report and the approval process by Niskamoon. Discussion ensued regarding the timeline for approval and the necessity of integrating comments before submission. Mrs. Durocher suggested waiting for Mr. Idrobo's final report, considering his transition to a new position. Mr. Duquette suggested sending a reminder for comments on Mr. Idrobo's report by February 16th and leaving the timeline for Mr. Idrobo's response to Niskamoon's discretion. Mr. Dunn emphasized the importance of meeting the March 31st deadline for financial purposes.

7. Next Meeting

The Chair proposed setting a late February meeting to review minutes and for Mrs. O'Connor to present the final report on eelgrass. Dates suggested were between February 19th to 29th, accommodating both agenda items.

Following the exchange on the availability of each, it was agreed that the next meeting will be held on Thursday, February 29, 2024, from 1:30 pm to 4:30 pm, via Teams.

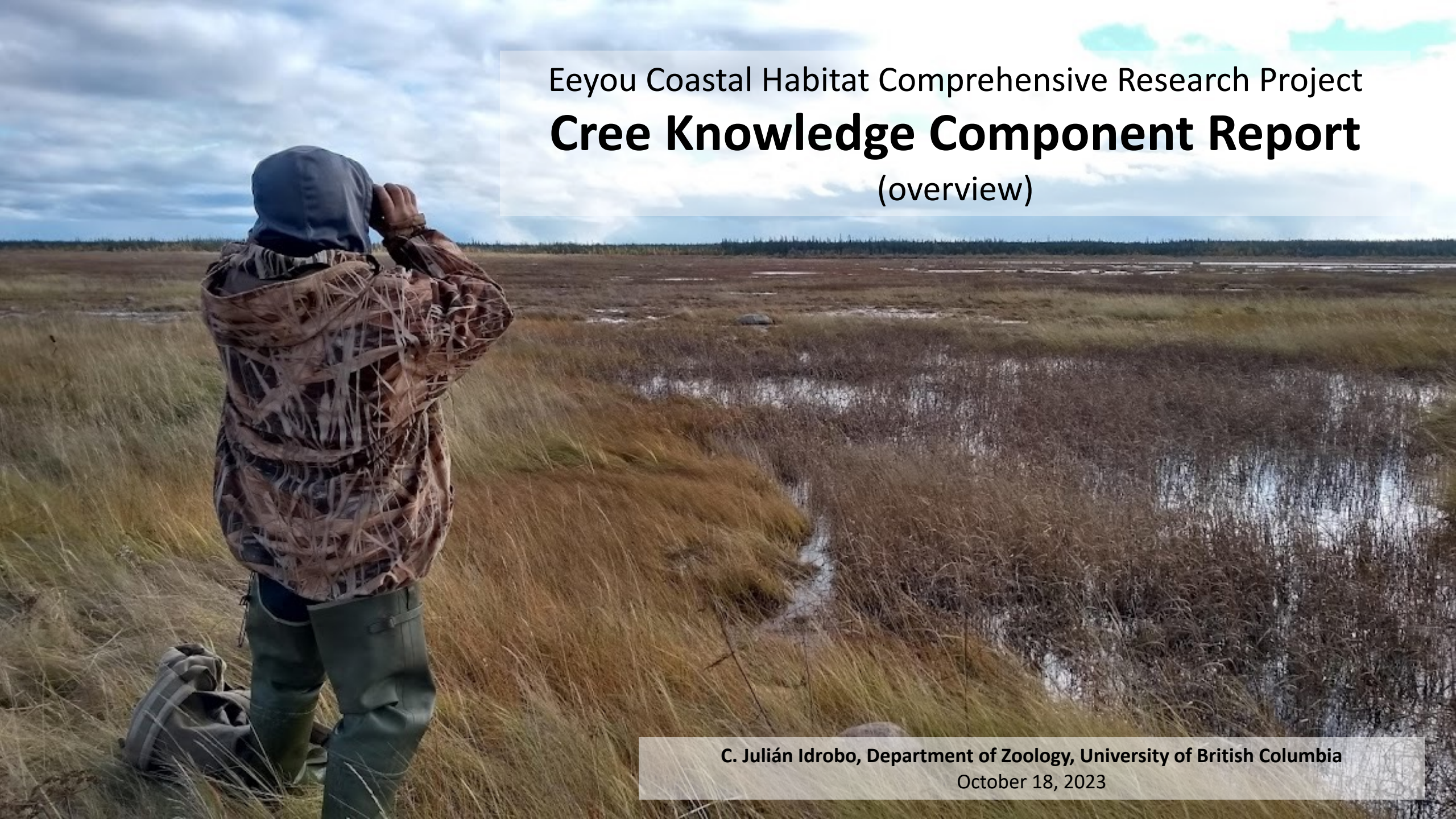
Additionally, plans for a visit to Tabusintac, New Brunswick, during the first week of October were outlined, with Mr. Duquette suggesting the necessity of securing the entire week for travel and activities. The Chair elaborated on the proposed activities, emphasizing cultural exchange and fieldwork related to coastal management, highlighting the potential for observing geese feeding on eelgrass. Logistics, including transportation and accommodation, were discussed, with consideration given to the distance and travel time. Mr. Kanatewat recommended coordinating the visit with the tidal cycle for optimal observation opportunities, while Mr. Duquette suggested blocking the calendar to ensure availability and the Chair committed to providing further details and coordination. The Committee concluded with a commitment to send out a placeholder calendar invite for the entire week and to develop a rough calendar proposal for future meetings, ensuring alignment with project objectives and participant availability.

ADJOURNMENT OF THE MEETING

Considering all agenda items addressed, the meeting is adjourned at 11:35.

The meeting secretary,

Johanna Ménélas



Eeyou Coastal Habitat Comprehensive Research Project

Cree Knowledge Component Report

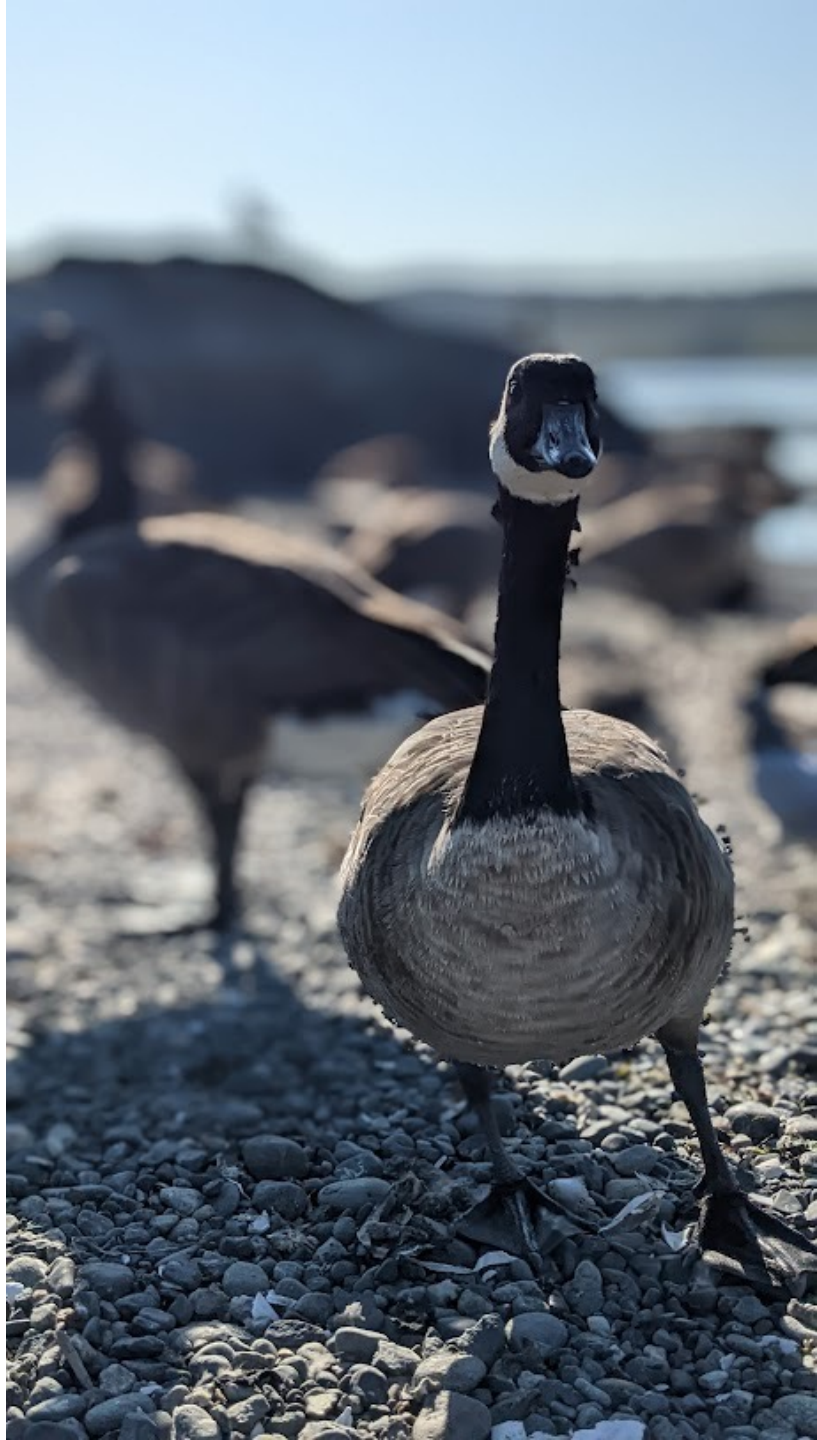
(overview)

C. Julián Idrobo, Department of Zoology, University of British Columbia

October 18, 2023

Outline

- Guiding Questions
- Methodology
- Conceptual Approach
- Question 1 and 2
- Coping and Adaptive Strategies



Local officers and facilitators

Community	Local Officer(s)	Research Facilitator(s)
Chisasibi	Ernie Rabbitskin	Anderson Jolly Karen Napash Willard Napash
Wemindji	Geraldine Mark	William Blacknead
Eastmain	Norman Cheezo Gregory Mayappo	Alex McDonald Stephan Gilpin
Waskaganish	Ernest Moses	Clarence Happyjack

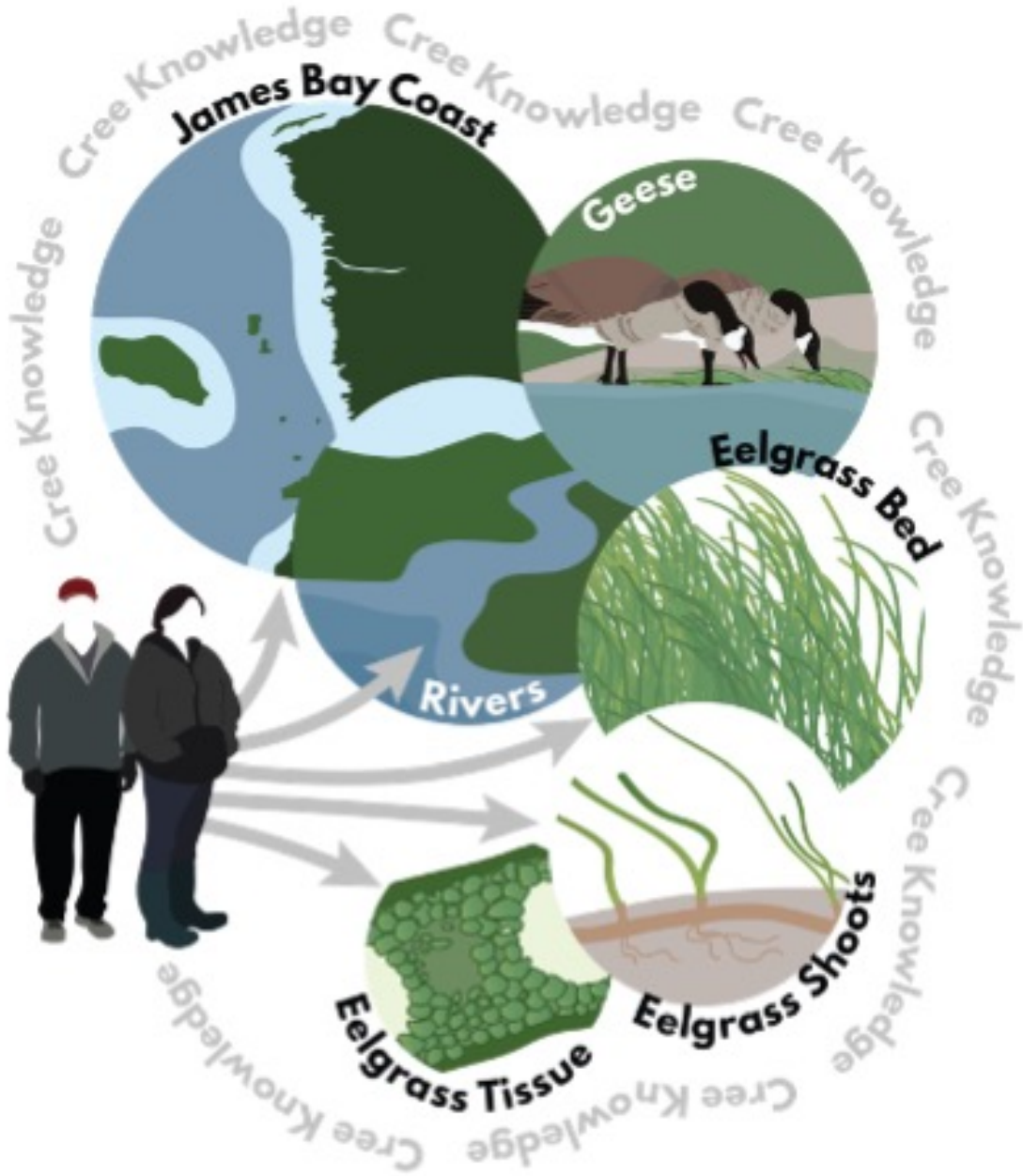
Visiting CH33 with Anderson Jolly

Cooking Sigabon with
Josephine and John Sam

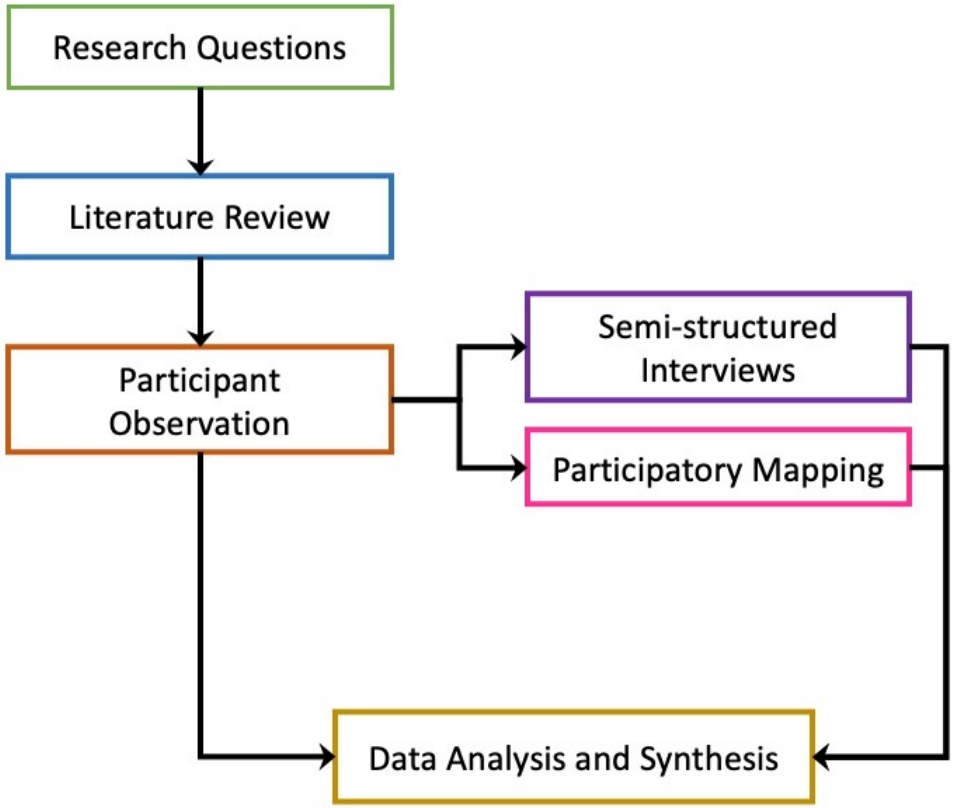
Guiding Questions

What are the main factors affecting the current state of eelgrass along the eastern coast of James Bay?

What is the impact of the current state of eelgrass on waterfowl presence and, consequently, Cree hunting activities?

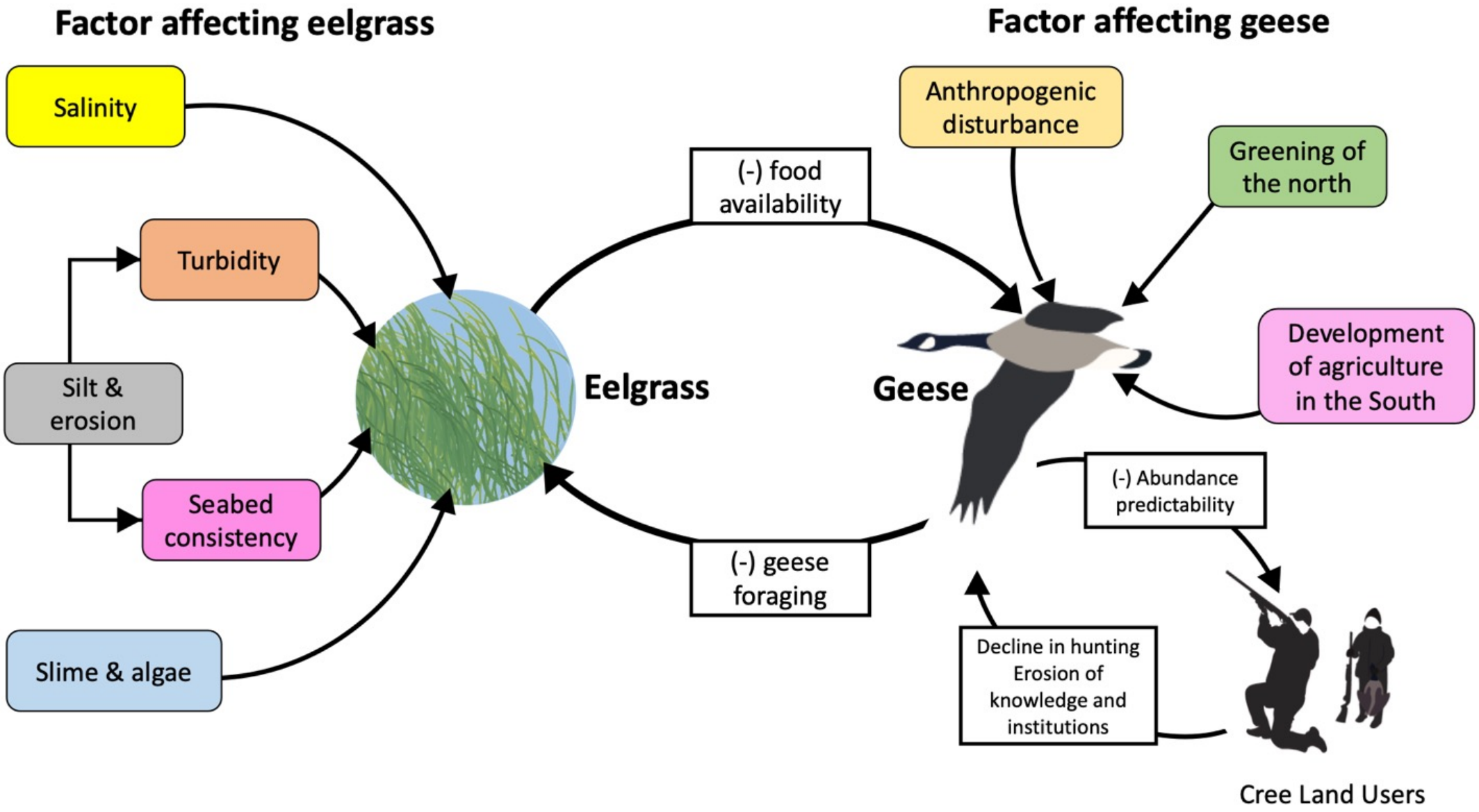


Methodology



Methodology

Conceptual Approach



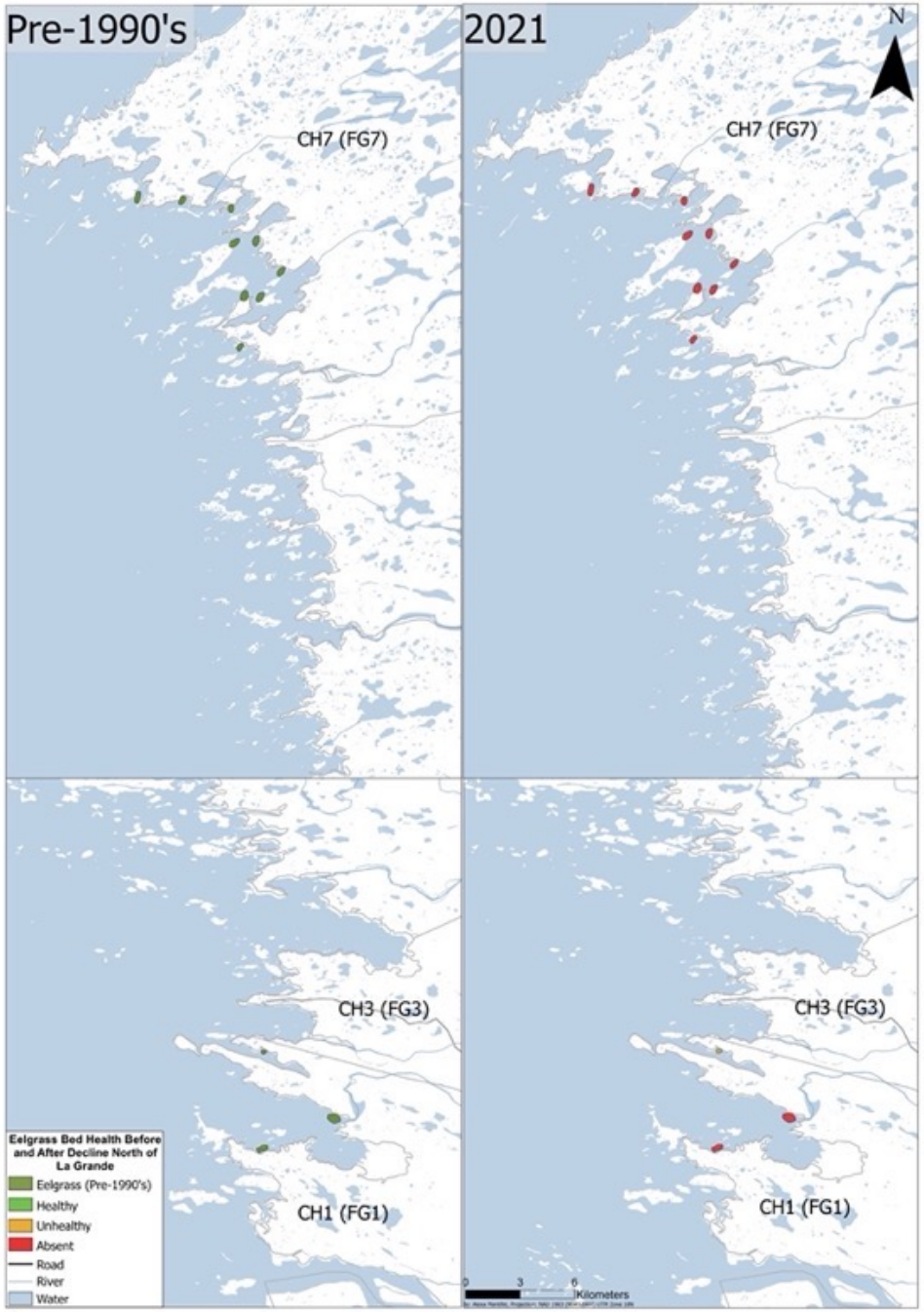
Question 1.

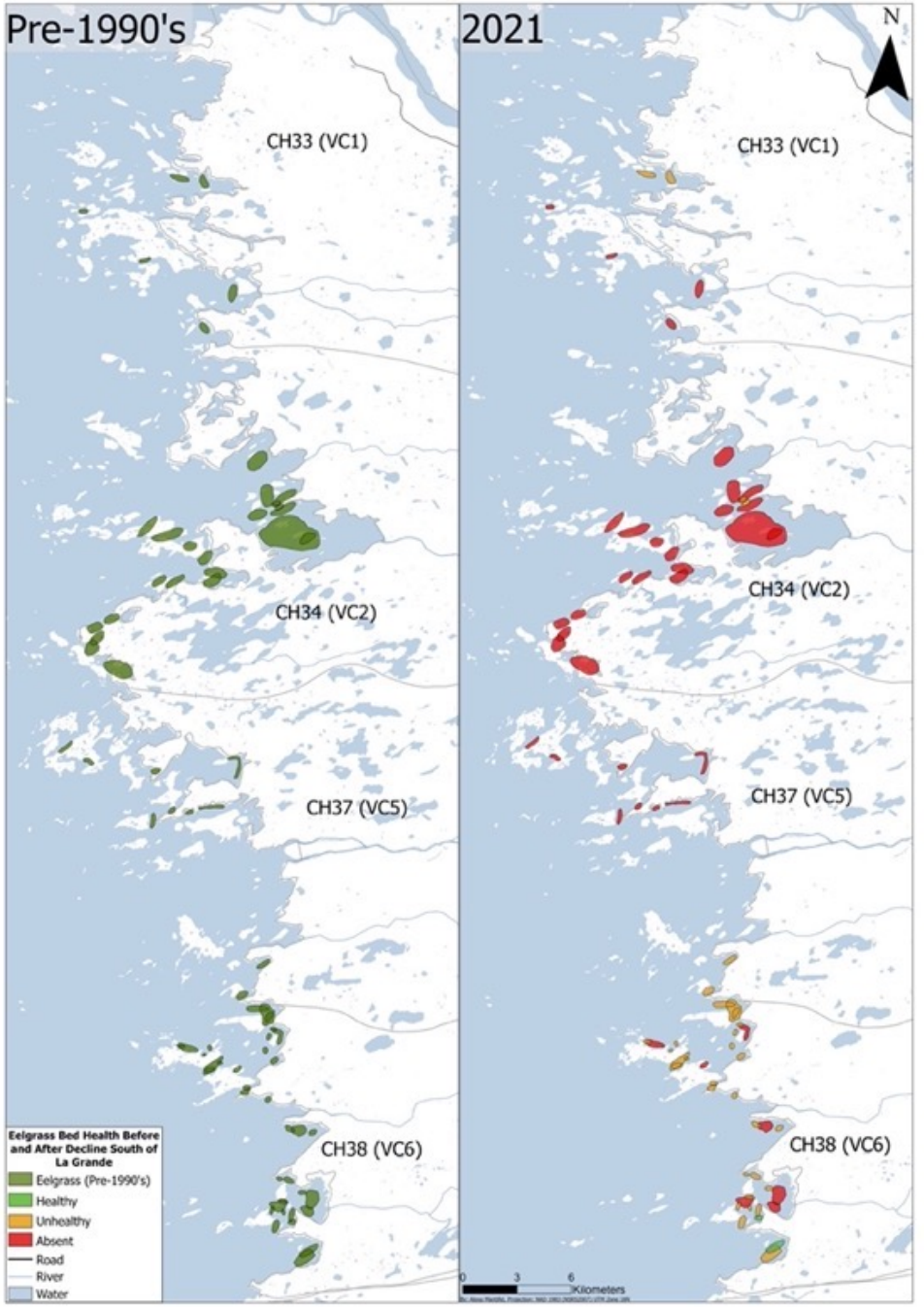
What are the main factors affecting the current state of eelgrass along the eastern coast of James Bay?

Eelgrass Conditions: Before the Decline and Current Status

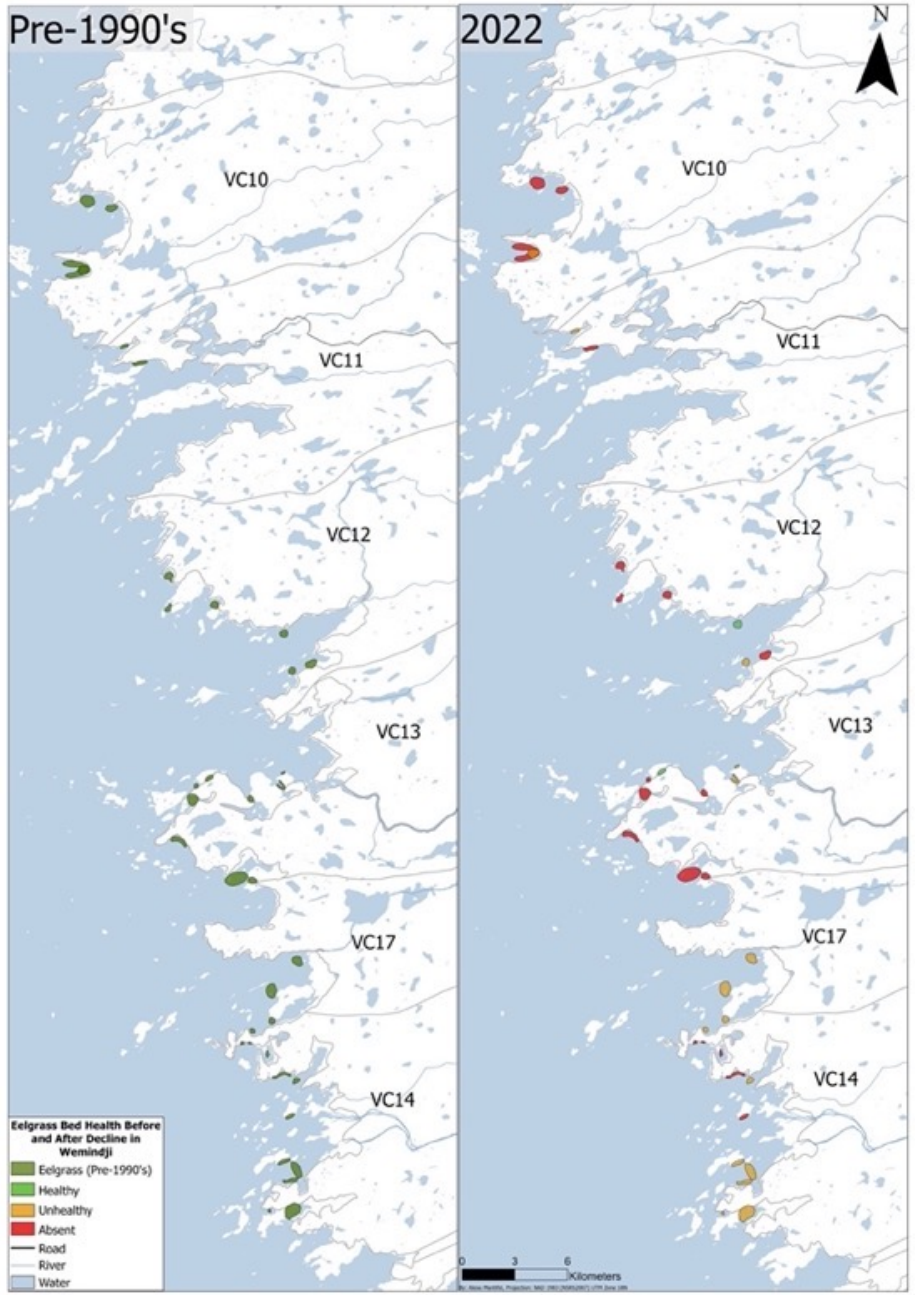
Conditions before the late 1990s	**Current observable conditions**
Leaves were **long (up to 3 m)** and **deep green**	Current eelgrass **short (no more than 1.5 m)** and **discoloured (yellowish and brown)**
Eelgrass beds were large and dense	Eelgrass beds are sparse and thin
Meadows abundant in late summer and fall	Meadows are thin and scarce
Floated above water in the low tide (looked like oil slick)	Eelgrass shoots are no longer seen floating
Used to calm the water where present	Does not have the calming effect anymore
Short necks and brants were often seen feeding on it	Short necks are rarely seen feeding on eelgrass, brants don’t come in the fall
Propellers used to get stuck with eelgrass leaves and wash ashore	Eelgrass is no longer stuck in propellers

Past and Current Eelgrass Distribution

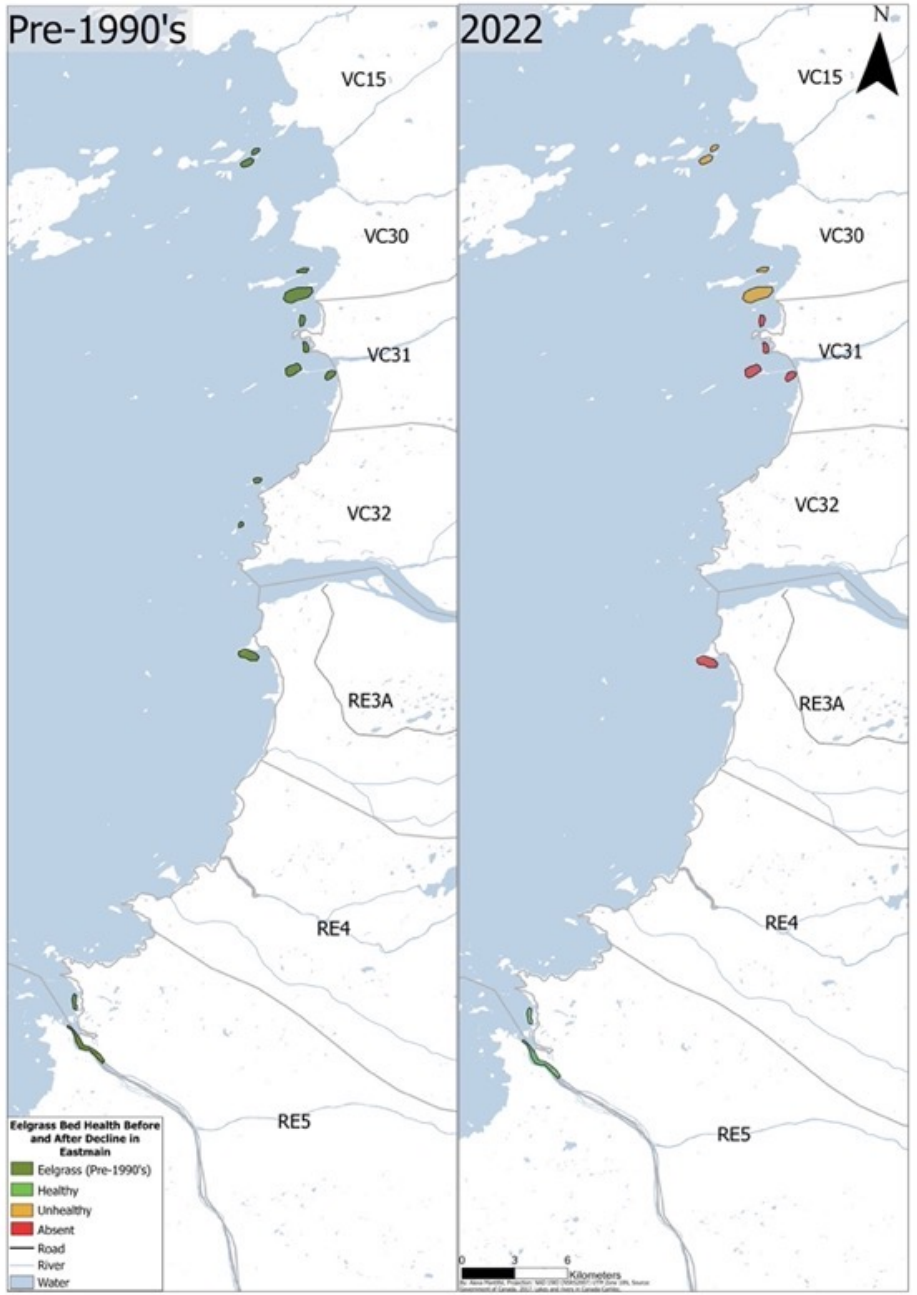




Eelgrass in Chisasibi

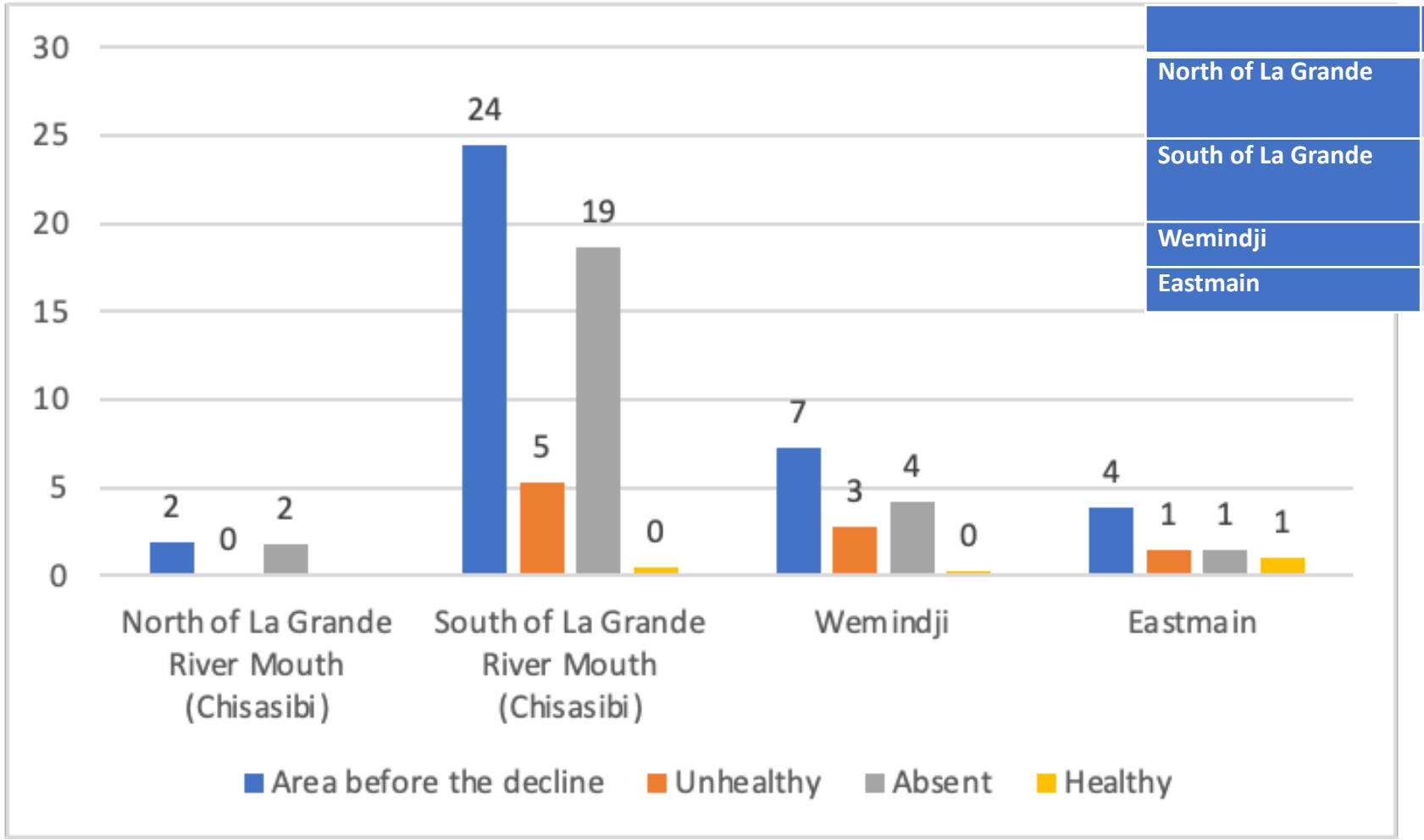


Wemindji



Eastmain

Eelgrass coverage: before the 1990s decline and 2021 and 2022 coverage (area reported in hectares - Ha)



	Absent	Unhealthy	Healthy
North of La Grande	97%	3%	0%
South of La Grande	76 %	22%	3%
Wemindji	58%	38%	4%
Eastmain	37%	38%	25%

Factors affecting eelgrass: Regional Perspective

Community	Salinity	Silt and Erosion		Slime and Algae
		Seabed consistency	Turbidity	
Chisasibi	Less salty	Hardened	Not clear anymore (murky / brownish)	Brown slime covering everything below the water and rocks along the shore (NR from CH07, CH34, CH37, CH38)
Wemindji	Less salty (VC09-12) Ambivalent (VC13) No change (VC17, VC14)	Hardened (VC10,VC11, VC14, VC17) No change (VC12, VC13) No response (VC09)	Not clear anymore (all but VC17) No changes, only when it is windy (VC17)	Slime and algae covering everything (All but VC10, VC11) NR from VC10, VC11
Eastmain	No change	Hardened (VC31, RE31) No change (VC15, VC31, RE04, RE05)	Not clear anymore (VC15, VC32) NR (VC30, VC31, RE03A, RE04, RE05)	White slime along the shores of the river. Not reported along the coast in the bay..
Waskaganish	No change Slightly saltier after the Rupert River diversion (R01)	No change	No change, except when it's windy or the tide is coming in	No change

Question 2.

What is the impact of the current state of eelgrass on waterfowl presence and consequently Cree hunting activities?

Annual average of animals harvested between 1972 and 1979 (James Bay and Northern Quebec Native Harvesting Research Committee 1982)

Annual average of animal harvested by weight(lbs)	Chisasibi	%	Wemindji	%	Eastmain	%	Waskaganish	%
Waterfowl	**183,450**	**44**	**44,970**	**29**	**35,140**	**37**	**83,100**	**39**
Fur mammals	56,020	13	41,680	27	20,820	22	37,000	17
Big game	23,520	7	15,360	10	14,890	16	58,540	27
Fish	86,660	21	27,970	18	11,700	12	18,730	9
Small game	55,910	13	21,120	13	12,130	13	15,450	7
Sea mammals	14,650	3	6,270	4	330	0	290	0
Total	420,210	100	157,370	100	95,010	100	213,110	100

Annual average of waterfowl harvested in Chisasibi and Wemindji in the 1970s and mid-2000s***

	Wemindji 1970s	%	Wemindji average 2005/2006	%	Wemindji: Decline between 1970s and 2000s (%)	Waskaganish 1970s	%	Waskaganish average 2005/2006	%	Waskaganish: Decline between 1970s and 2000s (%)
Canada goose	9069	52	3646	74	**29**	7506	36	5429	58	**42**
Lesser snow goose	1254	7	25	1	**2**	9734	47	1174	13	**11**
Brant	1891	11	102	2	**5**	134	1	19	0	**12**
Ducks	4390	25	1103	23	**20**	3322	16	2671	29	**45**
Loons	743	4	21	0	**3**	25	0	3	0	**11**

Bird species Eeyou land users report in decline

Common name	Scientific name	Chisasibi	Wemindji	Eastmain	Waskaganish
Snow goose /Wavy(ies)	*Anser caerulescens*	X	X	X	X
Brant	*Branta bernicla*	X	X	X	X
Short-necked/ Canada goose	*Branta canadensis interior*	X	X	X	X
Gadwall	*Mareca strepera*			X	
American black duck	*Anas rubripes*	x	x	X	X
Northern pintail	*Anas acuta*			X	X
Black scoter	*Melanitta americana*	X	X	X	
Red-breasted merganser	*Mergus serrator*	x			
Mallard	*Anas platyrhynchos*			X	
Sandpiper	*(Various species)*	X	X	X	X
American golden plover	*Pluvialis dominica*	X			X
Lesser yellow legs	*Tringa flavipes*	X	X	X	X
Greater yellow legs	*Tringa melanoleuca*		X	X	X
Short-billed dowitcher	*Limnodromus griseus*	X			
Sanderling	*Calidris alba*	X			
Red knot	*Calidris canutus*			X	
Ruddy turnstone	*Arenaria interpres*	X			
Whimbrel	*Numenious phaeopus*	X	X		X
Black guillemot	*Cepphus grylle*	X	X		
Arctic tern	*Sterna paradisaea*	X	X		X
Red throated loon	*Gavia stellata*	X	X	X	
Common loon	*Gavia immer*	X	X	X	
Horned lark	*Eremophila alpestris*		X	X	X
Snow bunting	*Plectrophenax nivalis*	X		X	X

At least 24 bird species declining across the territory according to Cree knowledge






Bird species Eeyou land users report in decline

Eastmain	
VC31	**Wavies** have declined. Not in my lifetime. I don't really remember it, but I have been told stories that the wavies came in thousands, lots of them. It was very abrupt when they stopped coming. **Black scoters and common mergansers** have declined. **In general, you see animals around, but when you look back you remember that there were many more animals.** "Yellow-headed birds" and snow buntings have declined. These are the two birds that we used to hunt when we were children all over the community in the spring. These are the birds that come right before the geese arrive. There used to be a lot of them, but now there aren't as many. There is a decline in almost everything (Mark-Steward, VC31 2019).
VC32	There is an **overall decline of waterfowl in the community and trapline**. Geese and ducks are fewer than what they used to be a few decades ago. **Wavies** disappeared drastically since the river was diverted. **Red throated loon** has become rare (Gilpin, VC32 2019).
RE03A	I used to see **wavies** when hunting with my dad, when I was 9 years old [spring 2000]. I don't see them anymore. There used to be a lot of **pintails** [Northern pintail], but hardly anymore. **Black ducks** are disappearing slowly (Cheezo and Gilpin, RE03A 2019).

Waskaganish	
R01	**Wavies** used to be very abundant around Cabbage Willows, where they used to have their feeding grounds. Now they are fewer in the springtime. Long time ago we used to see flocks and flocks of them, now they have disappeared because of the willows [vegetation overgrowth]. We used to have lot of ducks. **Pintails, mallards, and American black ducks** are fewer than before. We also have fewer Arctic terns, snow buntings, sandpipers, golden plovers and horned larks (Kapatuk, R01 2020). -- **Horned larks** used to be plenty. We don't see them anymore ((Diamond, R01 2020).
RE02	Waterfowl has been affected: **[Canada] geese, ducks, wavies**. They are not the same, [there are] not as many as before. **Black ducks** are not flying as much as they used to. They used to go back and forth along the shores. We used to have lots of **greater and lesser yellowlegs and sandpipers**. (Whiskeychan, R02 2020). -- **There are no wavies at all. Lesser yellowlegs, whimbrels and sandpipers** are not as common (Stephen, R02 2020)
RE02A	**Snow geese** surprise me. There are none here. Something has to do with the La Grande project and the diversion. There is a lot of sediment that is coming. That's the only thing that I can think. There are not as many **snow buntings and sandpipers** […]. **Arctic terns** ("Inuit seagulls"), there are fewer of them (Ricky Jolly, R02A)

Changes to vegetation affect waterfowl food availability and access to other key resources (Isostatic Rebound + Greening of the North)

We are also seeing changes in vegetation that are affecting the access birds have to food. Before snow geese used to go after clay and roots in the spring. Now there is too much vegetation that they cannot go through (CH03, Andrew Rupert)

Habitat transition

The bays used to be full of short necked and snow geese. Back then [1970s] they had good areas to graze, but today the land is covered with reeds and cattail. **There's a lot of moose now because what is now growing is their food** (CH33, John E. Sam)

Former marsh feeding area now covered by vegetation (R01, Waskaganish)

Cosmopolitan bulrush (*Schoenoplectus maritimus*) is an example of plant species colonizing goose feeding grounds.

This plant was not present in this area 40 years ago, and now is very dominant in the former feeding grounds (Victor Diamond, R01)

There are lots of bushes along the shore. The feeding grounds are covered by bushes. […] With the growth of the willows, things have changed a lot. We used to have lots of wavies in the fall. Now they are moving along the shore and not as plenty as they used to be. We used to see a lot of flocks, like dark clouds around Cabbage Willows. Not anymore. […] Swampy and wetlands are drying up. Now they are full of thick willows (Kapatuk, R01 2020)

Species that recently arrived or increased abundance in Eeyou Istchee according to land users

Species	Chisasibi	Wemindji	Eastmain	Waskaganish
Bird species				
Long-necked goose (*Branta canadensis maxima*)	X	X	X	X
Sandhill crane (*Antigone canadensis*)	X	X	X	X
Double-crested cormorant (*Nannopterum auritum*)	X	X	X	X
Bald eagle (*Haliaeetus leucocephalus*)	X	X	X	X
Golden eagle (*Aquila chrysaetos*)			X	X
American white pelican (*Pelecanus erythrorhynchos*)	X	X	X	X
Rock pigeon (*Columba livia*)		X		
Hummingbirds (unidentified species)		X		
Northern shoveler (*Spatula clypeata*)				X
Cf. Red-tailed hawk (*Buteo jamaicensis*)				X
Mammal species				
Moose (*Alces alces*)	X	X		X
Wolf (*Canis lupus*)	X			
Polar bear (*Ursus maritimus*)		X		
Wolverine (*Gulo gulo*)		X		

The bay is noisier than before:

"Motorized hunting and air traffic disturb the waterfowl"

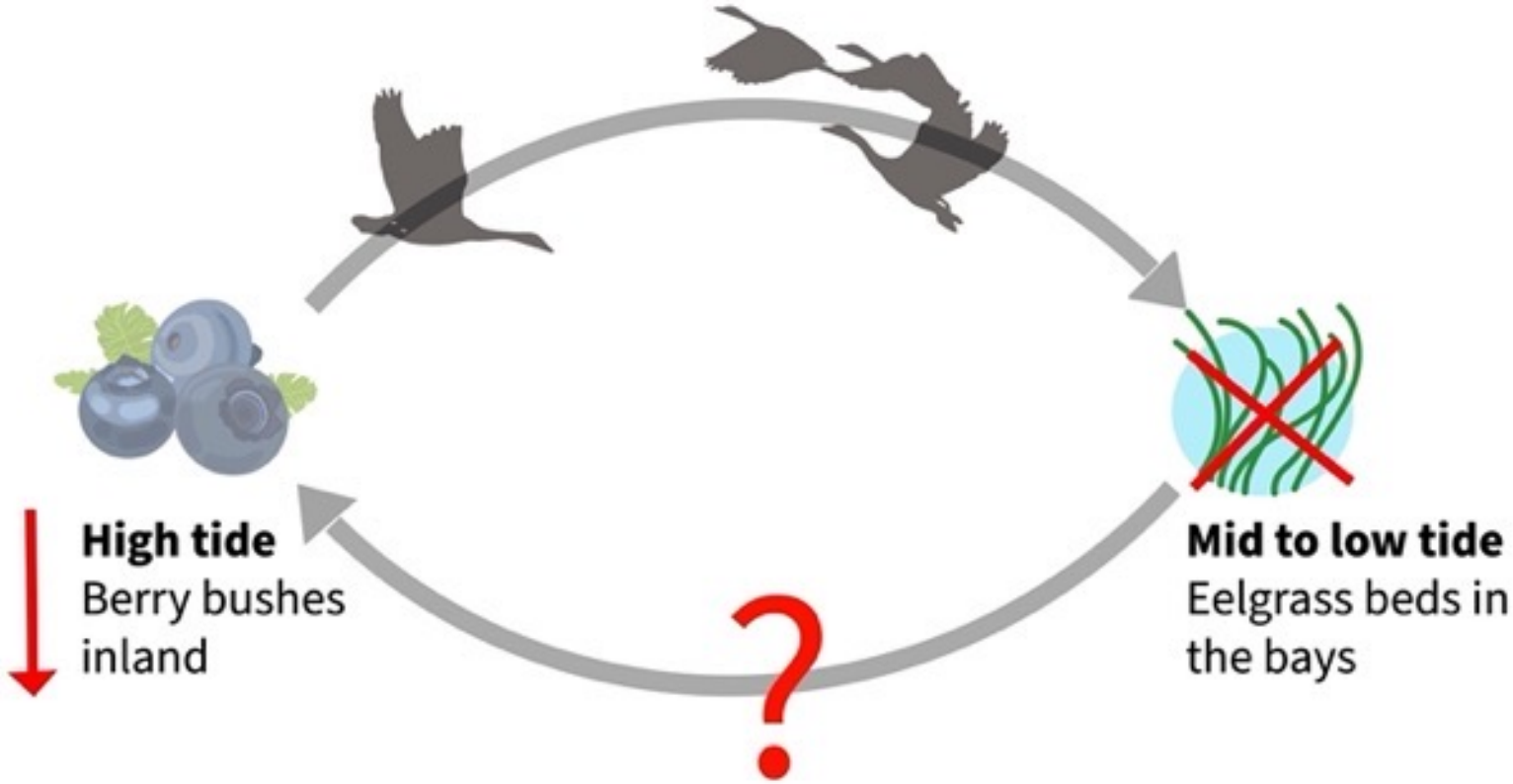
Changing food sources, flying paths and staging periods

Before eelgrass began to disappear, geese used to feed and fatten here; they used to stay longer. **Nowadays the geese feed on corn down south.** They are really fat when they come in the spring and fly over, don't stop. They don't need to stop. Before they would fatten up here (CH38, Louie Kanatewat)

Ever since they built the dams there is **more water inland**. That has changed the **geese migration paths** (VC17, David Hughboy)

Geese feeding behaviour relative to eelgrass before the eelgrass decline (Northern communities)

Canada goose feeding behaviour after the decline Northern communities



Disruptions to feeding behaviour in the fall

Less/no eelgrass = fewer geese

No obvious feeding or behavioural patterns/animals are hard to predict

- **Before we knew how birds were going to behave**, where from and how they would land. **Now we don't know anymore** (CH03, Andrew Rupert)
- […] the geese do not come because their food is scarce. In the fall they fly over and don't land in the bay (CH34, John House)
- Before, **when there was eelgrass**, there would be geese feeding in the bays all over the way from my camp in Seal River to Chisasibi. The **geese** that you see around these days are **mostly feeding on stuff on the land** (CH07, Reggie Scipio)

Changes to Migration Patterns

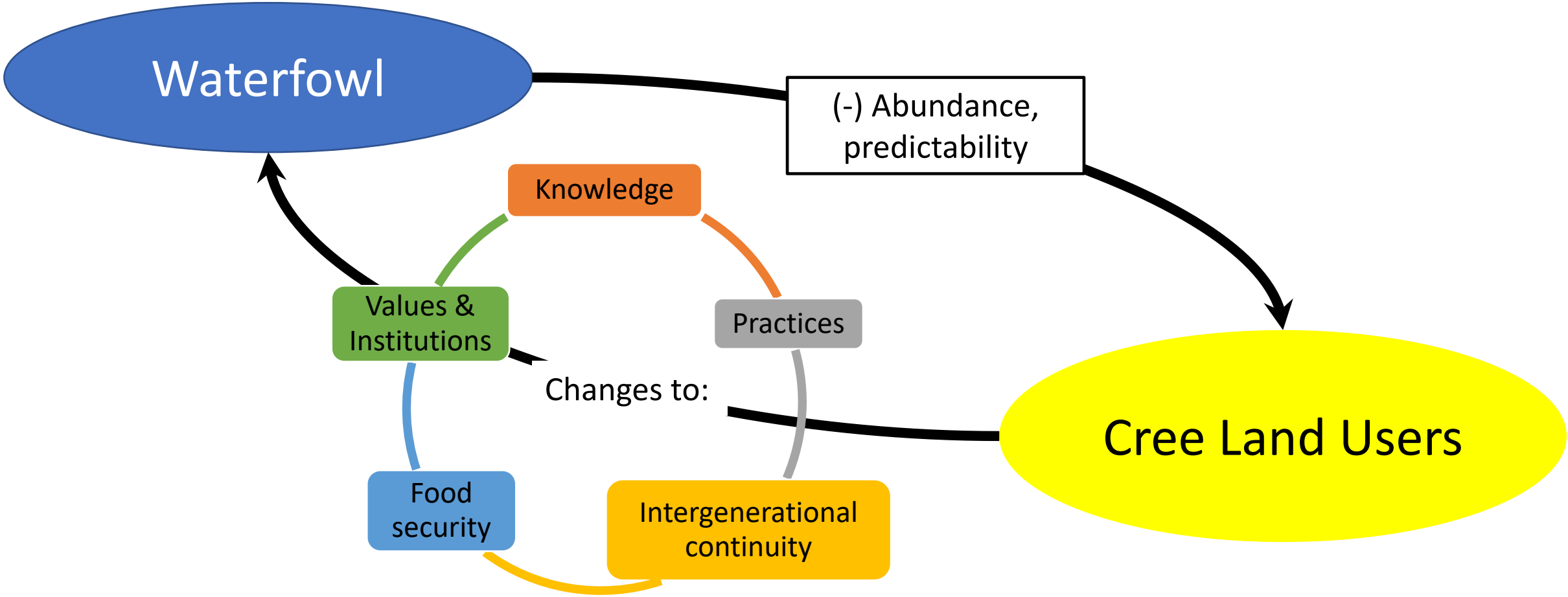
There used to be patterns for birds to arrive and to leave, but we don't see that anymore. They fly scattered now. It feels as if they could fly whenever they can and not in the organized way they used to (CH07, Reggie Scipio)

Most geese are flying inland: Short necks are now flying inland and we don't see them anymore (CH 33, Eddie Sam)

Fly too high and don't stop in the bay: Hardly see them, only hear them. Geese fly high and do not stop. Those that stop don't do it for long (CH03, Andrew Rupert) **[some geese used to stay in the bay until there was snow on the ground]**

Some fly at night: There are fewer geese and the ones still around have become smarter. They are flying over the reservoirs and the ones around fly at night (CH33, John E. Sam)

Changing Relations between Cree Land Users and Waterfowl



Changing Traditional Institutions: Goose Bosses and management

The goose bosses have lost their jobs because there are no geese. The goose bosses should get after Hydro for losing their jobs (CH38, Louie Kanatewat)

People do not respect the Goose Boss anymore. Before the eelgrass disappeared, the Goose Boss used to tell us where and when to hunt. Now, without eelgrass, we have lost the order that there used to (CH01, Malcom House)

The Goose Boss doesn't go hunting anymore. **He says: "Don't go there, there's nothing"** (CH03, Andrew Rupert)

Changes to hunting practices and effort

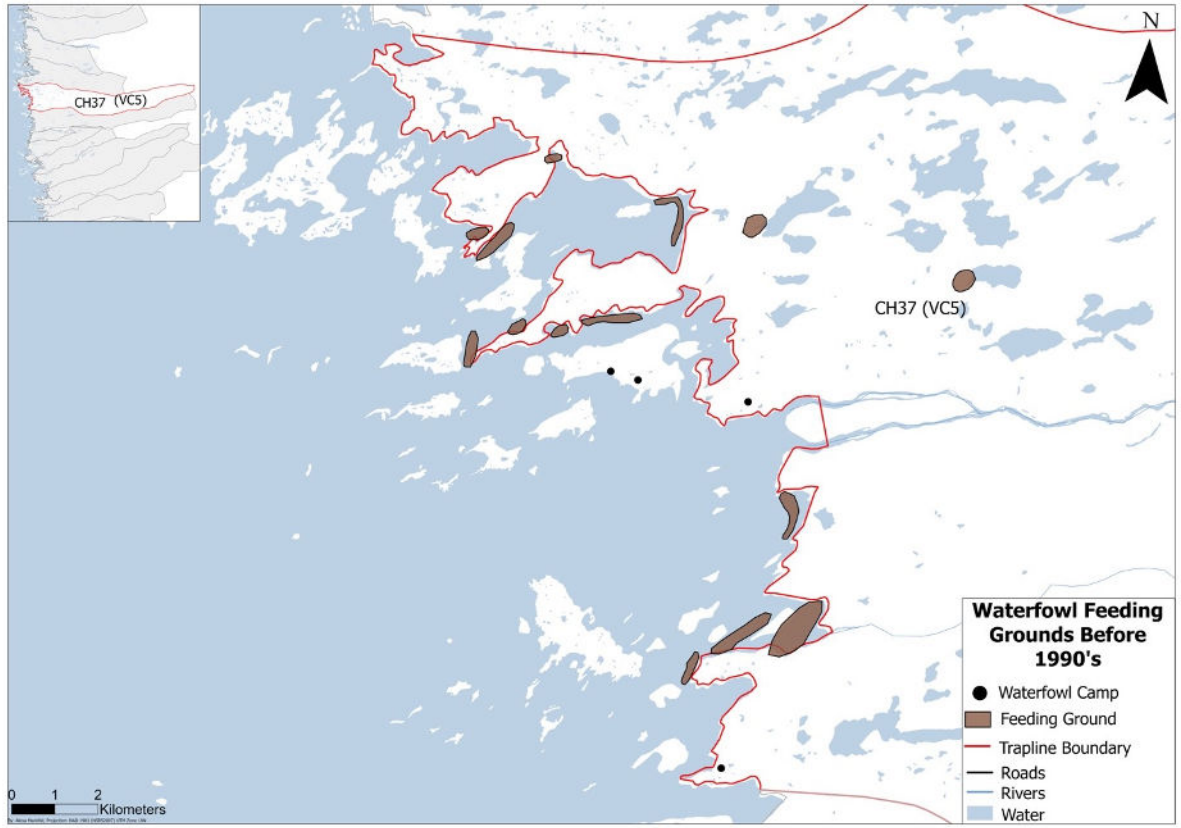
- From **collective** to **individual hunt [Chisasibi and Wemindji]**
- From **long hunting trips/seasons** to **day outings**
- Hunting with **corn, down south, something else**

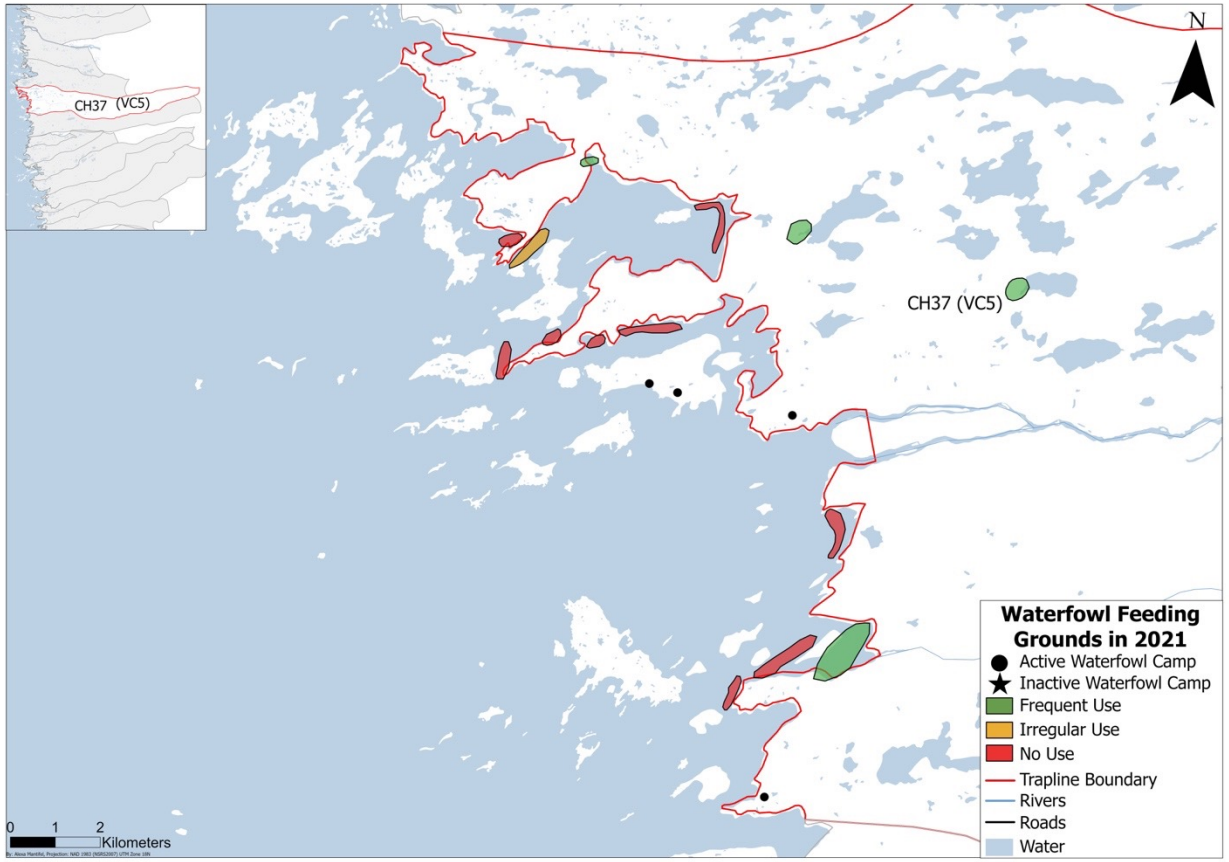
[Transition from to subsistence to hybrid economy subsistence/wage labour]

Number of hunting spots before and after the eelgrass decline

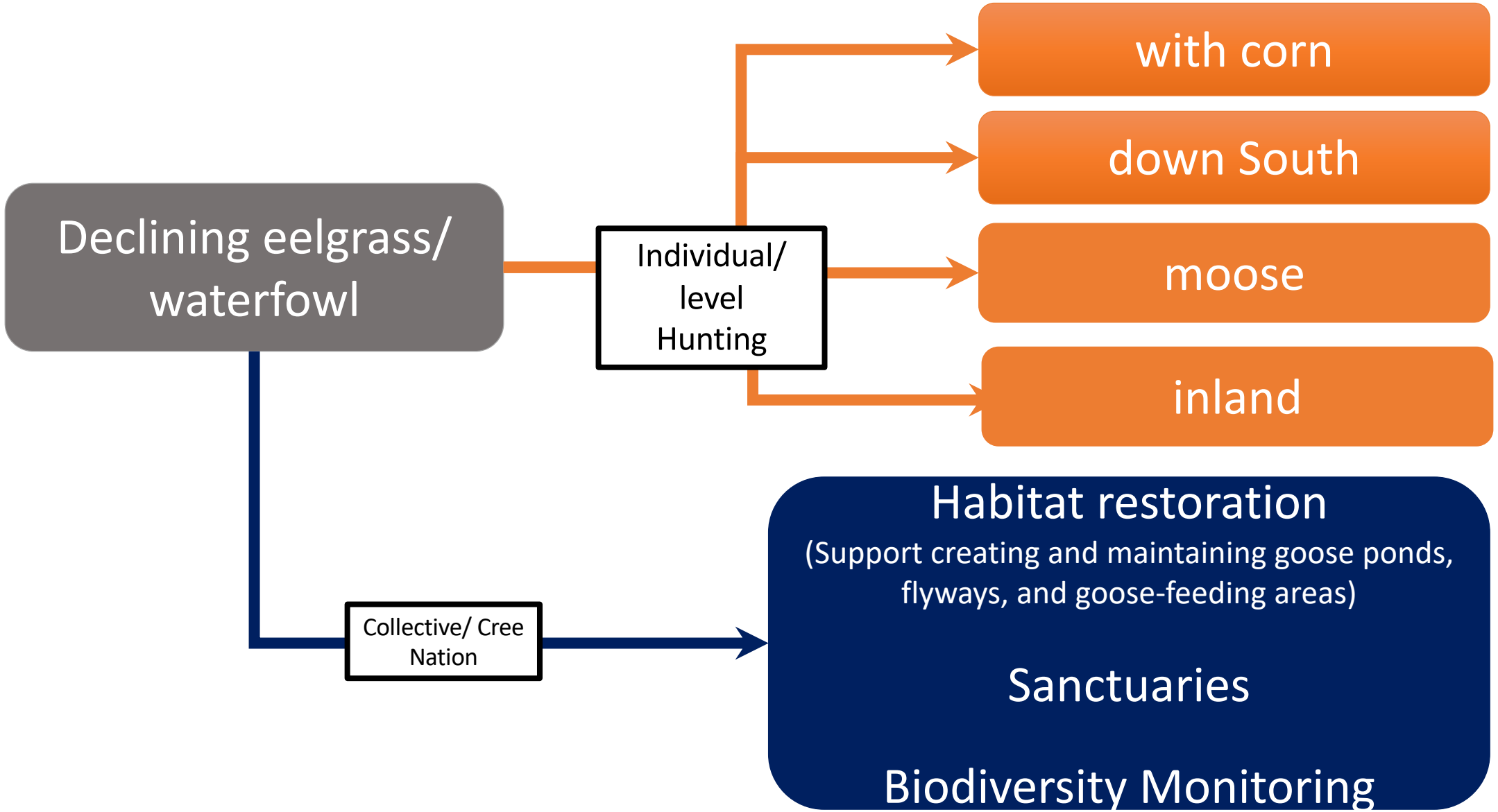
	Before 1990s	Frequently used (%relative to before 1990s)	Irregularly used (%relative to before 1990s)	Not used (%relative to before 1990s)
Chisasibi: North of La Grande	38	15 (39%)	14 (37%)	9 (24%)
Chisasibi: South of la Grande	72	32 (44%)	31 (43%)	9 (13%)
Wemindji	81	17 (21%)	48 (59%)	16 (20%)
Eastmain	24	15 (63%)	4 (17%)	5 (21%)

Waterfowl feeding grounds in CH37 (Chisasibi) before and after eelgrass and waterfowl declined in the late 1990s





Coping (now) and Adaptive Strategies (long term)



Thank you!

Preliminary assessment of the Canada geese population breeding on Long Island

Coastal habitat comprehensive research project

Steering Committee

Feb 2nd 2024

Manon Sorais, PhD

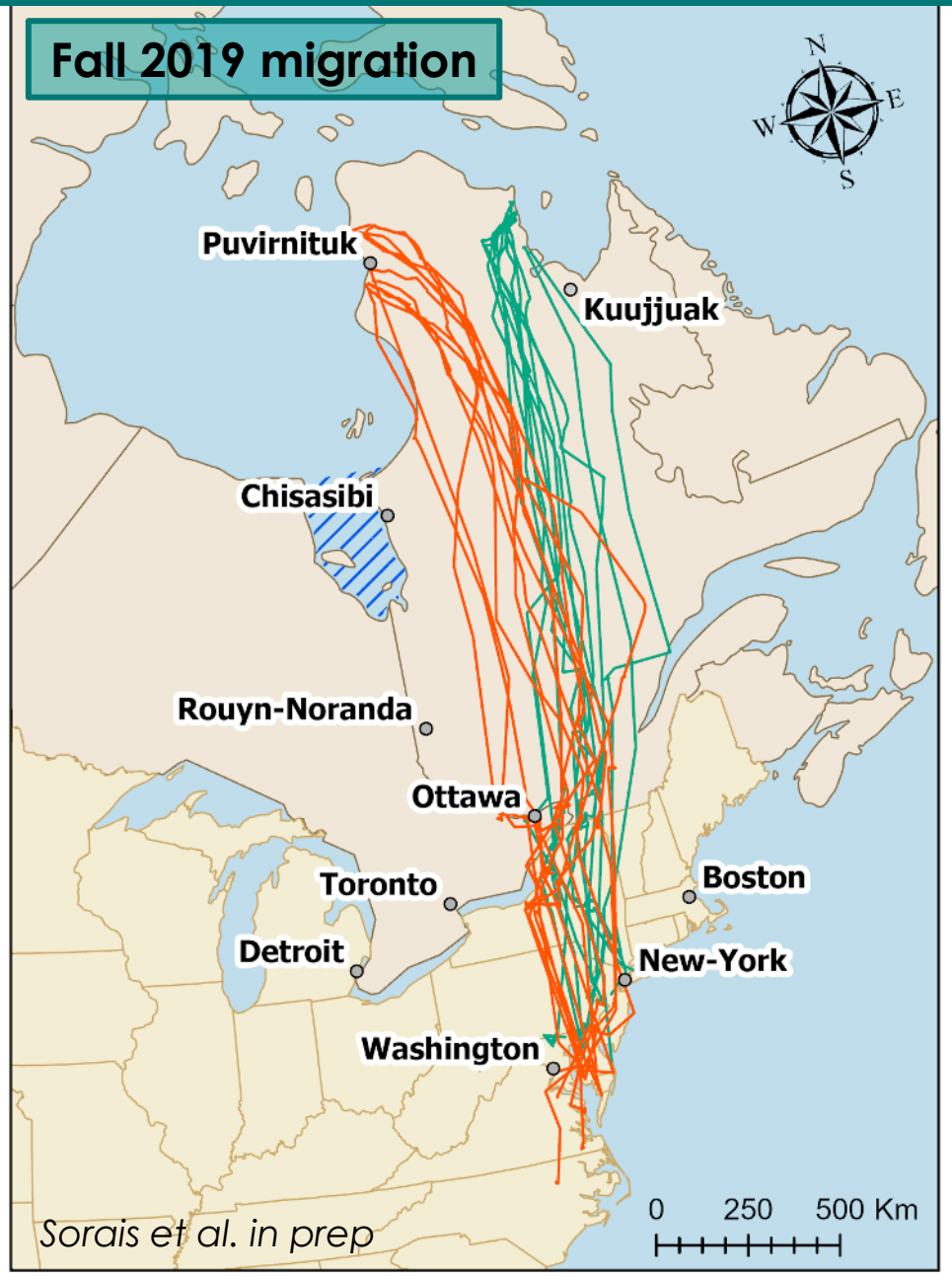
Background and objectives

Short-necks *(Branta canadensis interior)*

- Declining numbers staging in eastern James Bay
- Habitat use less predictible

HOW DO SHORT-NECKS USE EASTERN JAMES BAY DURING THEIR MIGRATION?

- Short-necked geese captured in Nunavik used the inland route
- Islands in Hudson Bay possible breeding sites for short-necks?



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Sorais 2023. NAD83 - main: MTM zone 10 - insert: north america lambert conformal coni

Fieldwork team and support

Coordination
Reggie Scipio

Field team
Ronnie Snowboy
Andrew Snowboy
Rupert Snowboy
Alex Sam
Fred LeTourneux

Support
Solomon Masty
Robbie Inukpuk
Their family

Initial planification

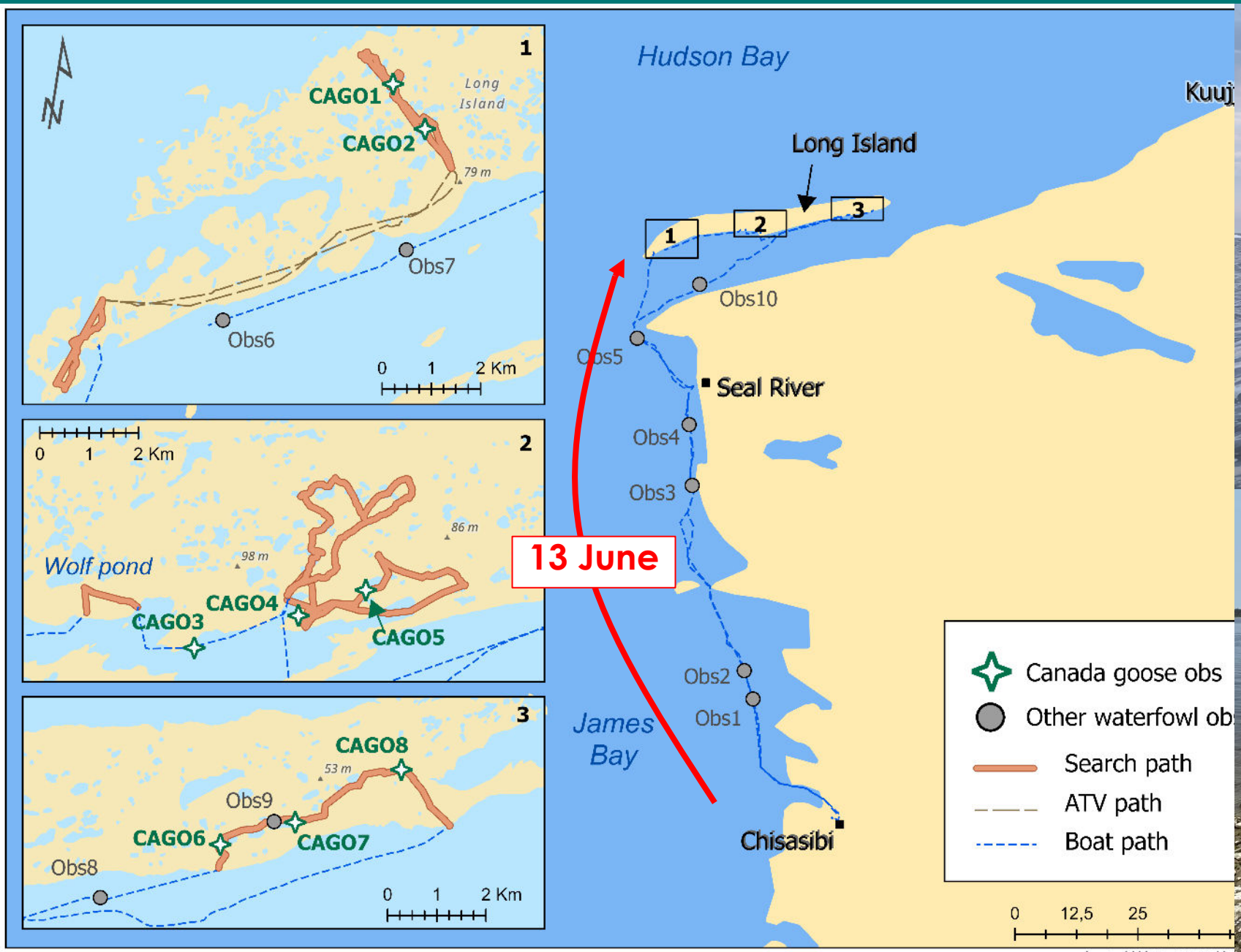
1st visit: mid-June

- Systematic search
- Inventory/marking of nests
- Egg lay dates (10 % nests)
- Assessment of Long Is as a working ground

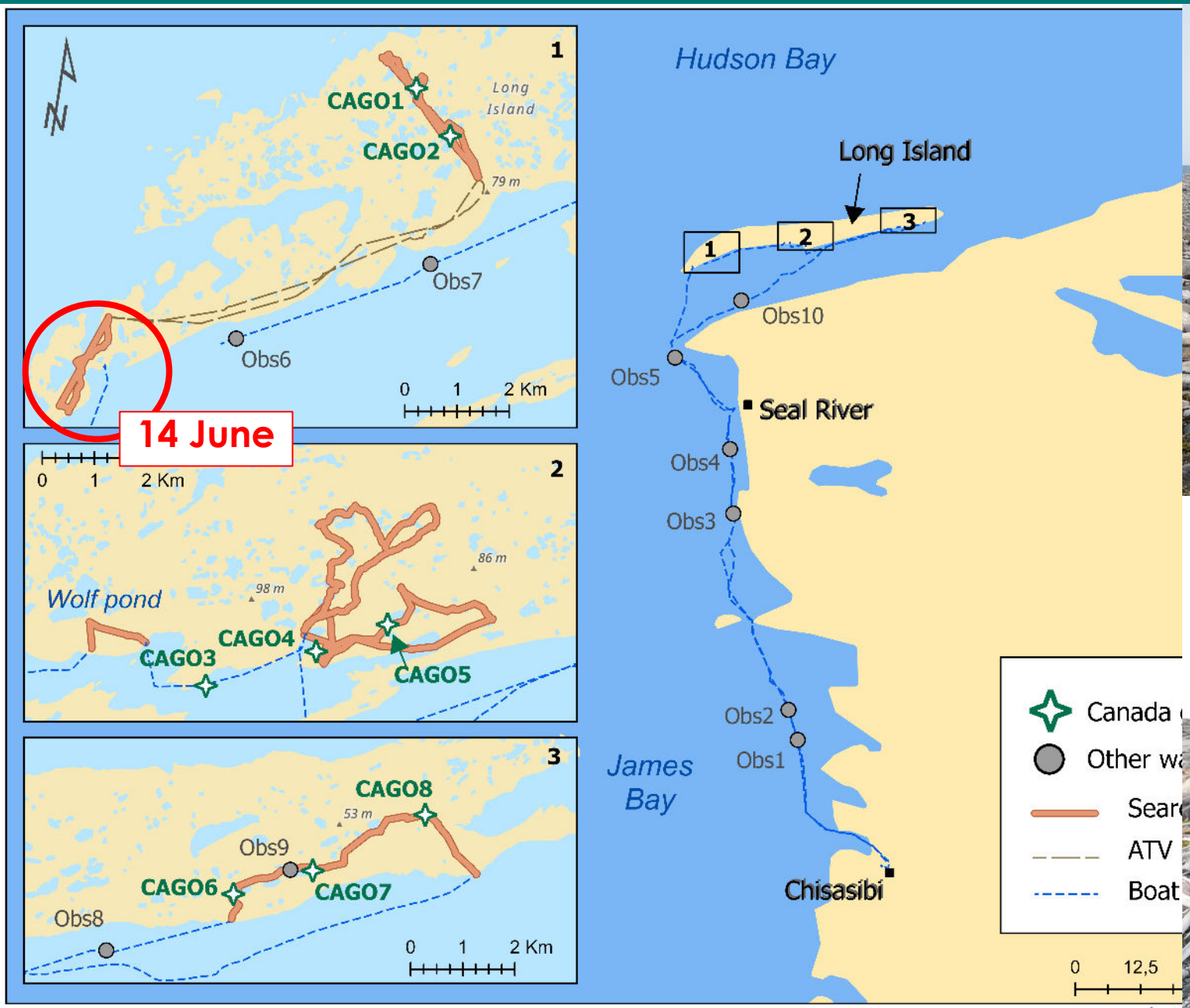
2nd visit: early-August

- Productivity
- Geese behavior

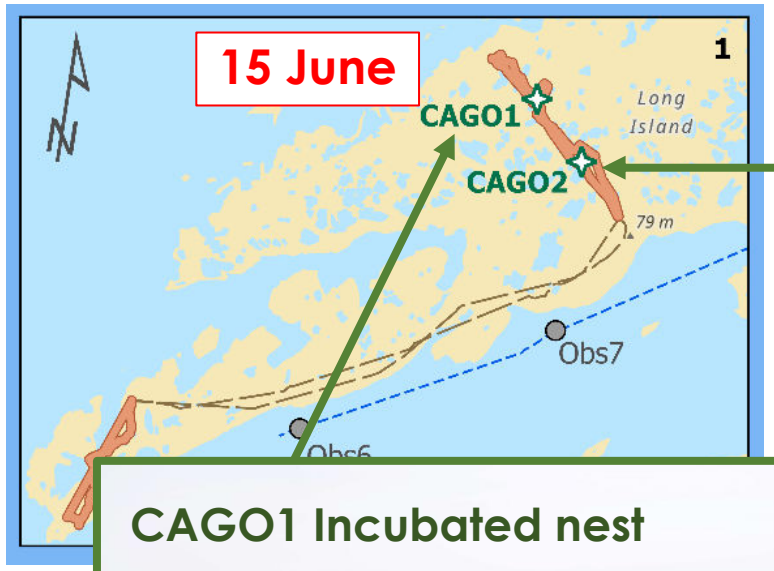
From Chisasibi to Long Island



Day 2 : western tip of Long Island



Day 3 : site A



CAGO2

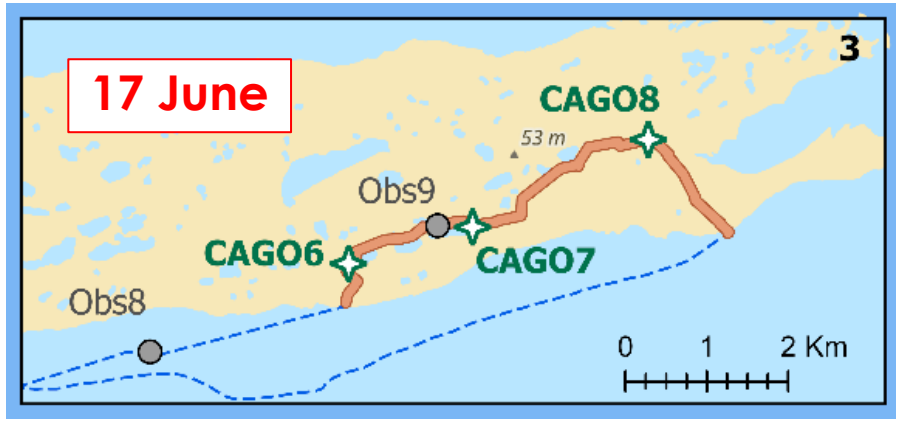
Predated nest

CAGO1 Incubated nest

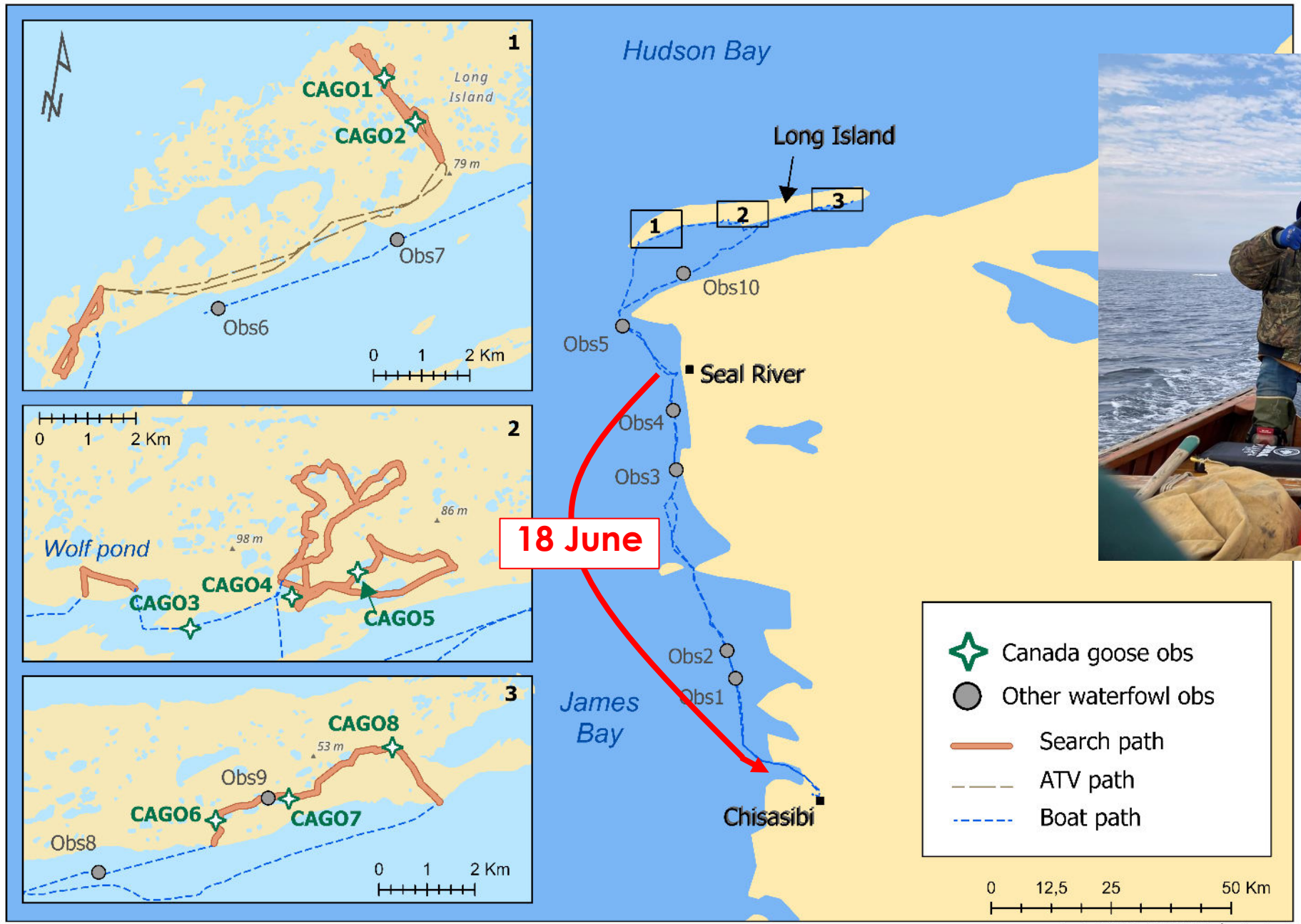
Day 4 : middle section

- CAGO3 20 adults on the water
- CAGO4 family with goslings out of the nest
- CAGO5 marsh with footprints and feces

Day 5 : eastern section



Day 6: back to Chisasibi



The second visit was cancelled because of the wildfires in Québec

Conclusions

- Long Island is not currently an important breeding site
  - One family, four nests, only one incubated
- Possible environmental pressures
  - Predators: wolfs, foxes, bears, peregrine falcons
  - Human activity: egg collection, hunting
- Long Island is likely used as a stopover area
  - Adult groups
  - Footprints, feces

Recommendations

- Aerial survey to confirm the low number of breeding pairs
  - from systematic search to exploration
  - early June
- Capture of short-necks during their migration in the spring
  - ensure data on habitat use by short-necks in the area
  - many challenges: the expertise of Eeyou land users and biologists will be required
- Investigate the number of breeding pairs decline
  - Identification of the drivers

Acknowledgements

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Rupert Snowboy
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Robbie Inukpuk
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Josée Lefebvre
Francis St-Pierre