SHARING WORKSHOP ON ECOLOGICAL MONITORING

SUMMARY REPORT

MITTIMATALIK, NUNAVUT
February 4-5, 2020
Authors: Catherine A. Gagnon, José Gérin-Lajoie, Joël Bêty and Pierre Legagneux

Acknowledgements

We thank the Mittimatalik Hunters and Trappers Organization, the Hamlet of Pond Inlet, Parks Canada, the Arctic College, Qikiqtani Inuit Association, Ikaarvik, Smart Ice and the Government of Nunavut for nominating delegates for the meeting. We also thank Rhoda Koonoo, Jocelyn Agnetsiak and Sarah Suqslak for the delicious food! Thanks to the fantastic translators: Elisheba Mucpa, Malachi Arreak and Morgan Arnakallak. We thank Environment and Climate Change Canada (ECCC) for providing accommodation, and especially Jamie Enook for facilitating our stay at the ECCC station. We thank Parks Canada for facilitating logistics as well as the Centre for Northern Studies for providing support. This workshop was possible thanks to the funding support of Polar Knowledge Canada, Sentinel North program funded by the Canada First Research Excellence Fund, the ArticNet Network of Centre of Excellence, the Natural Sciences and Engineering Research Council of Canada and the Northern Contaminants Program.

Executive Summary

After more than 30 years of terrestrial ecological studies on Bylot Island, researchers working at the Bylot Island Research Station (Goose Camp) organized a broad consultation held in Mittimatalik (Pond Inlet) in 2018. The goal of the consultation was to find ways to work more closely with the communities of Mittimatalik and Arctic Bay.

The 2020 sharing workshop was a follow-up to previous consultations and provided an opportunity to update the community about ongoing ecological research initiatives in the Mittimatalik area. This event included several face-to-face meetings with local organizations, a one-day workshop and a community 'open house' for the general public. All the activities took place in Mittimatalik from February 3rd to February 6th 2020, with 37 participants attending the one-day workshop and more than 40 community members visiting the open house. Organizations that attended the workshop included the Mittimatalik Hunters and Trappers Organization (MHTO), the Hamlet of Pond Inlet, the Qikiqtani Inuit Association, Parks Canada (Sirmilik National Park) and their Joint Park Management Committee and Inuit Knowledge Working Group, Environment and Climate Change Canada, students from the Environmental Technology Program of the Nunavut Arctic College, the Government of Nunavut, Ikaarvik and Smart Ice. It is noteworthy that five MHTO members attended the meeting.

The objectives of the 2020 sharing workshop were to inform, discuss and obtain feedbacks from local participants and organizations about:

- **conclusions and recommendations** that emerged from the broad consultation held in Mittimatalik in 2018 by our research group;
- **actions** that were taken by researchers since 2018 in response to recommendations and concerns raised during the 2018 workshop;
- ongoing ecological **research** projects and **initiatives** taking place in the Mittimatalik area;
- collaboration between researchers and the community concerning research initiatives and the establishment of a **future research station** in Mittimatalik;
- ongoing development of the **SIKU mobile application** including wildlife observations;
- community expectations and potential **collaborations** with researchers concerning the impacts of resources development in the area.

February 4th – Morning Presentations

Welcoming word by Catherine A. Gagnon. Erik Ootoovak was nominated as chair of the day, and Phanuel Enoagak did the opening prayer. There was a round table for participants to introduce themselves by mentioning their names and affiliations. The researchers took some time to present themselves and their pathways in details, as they were the only non-local participants.

Quick overview of the 2018 Mittimatalik workshop

José Gérin-Lajoie presented a quick overview of the 2018 Mittimatalik workshop. She presented the main goals, the diversity of people and organizations that were met, the themes that emerged from this collaborative work, and the actions that were taken since that time. These actions include ongoing discussions with fish experts, the project for a new Centre for Northern Studies (CEN) research station in Mittimatalik, new projects on contaminants in birds and recent changes in bird populations, and the development of new tools for northerners to monitor wildlife. José introduced the morning presentations, as well as the afternoon discussion tables related to these topics.

Update on the proposed research station in Mittimatalik

Joël Bêty presented an update about the proposed research station in Mittimatalik, including the funding application process, the draft plan, the collaboration between Centre for Northern Studies (CEN) and QIA, the joint scientific and management committee, the location in the community and the timeline. Participants expressed their will to have a community-based model and to involve the community in the following steps.

Sharing wildlife observations and more: the SIKU application

Joël Bêty introduced the SIKU mobile app and its latest developments. There was an official launch of SIKU in December 2019 at the ArcticNet Annual Scientific Meeting in Halifax, Nova Scotia. Joël explained the collaboration between the Goose Camp researchers and the SIKU team for designing the wildlife monitoring tool included in the SIKU app.

New project on contaminants in birds

Pierre Legagneux presented the new project on contaminants in birds funded by the Northern Contaminants Program (NCP) in 2019-2020. The analysis of contaminants in birds and their eggs were identified as a research priority by the community during the 2018 consultation. A comparison with historical data was made to track changes in bird contamination over time. Pierre explained why contaminants were increasing in the North, which contaminants were present (methylmercury, persistent organic pollutants), where they came from, and the birds as a source of potential contamination. He also presented some preliminary results from the analysis of eggs and carcasses that were collected last summer in collaboration with hunters and the Mittimatalik HTO. Preliminary results stated that: 1) no (or very low traces) contaminants were found in goose eggs so far; 2) low to moderate levels of mercury contamination were present in murre eggs; 3) emergent pollutant analyses need to be conducted on eggs and carcasses; and 4) information about the diet of community members is needed to assess overall exposure to contaminants. Pierre also announced a new health survey initiative called Qanuippitaa, which could start in 2021, as well as a new NCP application for 2020-2021 to pursue the work on contaminants in birds.

New project on Cackling/Canada geese & update on shorebirds monitoring

Joël Bêty presented a new project on the Cackling goose, implemented in 2019 on Bylot Island. The presentation included: 1) the difference between Canada geese and Cackling geese; 2) the different migration routes of Greater snow geese, Canada geese and Cackling geese; 3) the increasing population of Cackling geese on Bylot Island; 4) the potential locations of Cackling geese wintering grounds; 5) the tracking of geese migration using small devices placed on leg bands; 6) the study of Cackling geese nesting behavior on Bylot Island; and 7) the involvement of Inuit in field work. The second part of his presentation was about the migration of shorebirds breeding on Bylot Island.

Unravelling life under the snow

Mathilde Poirier presented some of her PhD work about lemmings and their secret life inside the Arctic snowpack. Her presentation included: 1) lemmings as a key species in arctic ecosystems; 2) the cycling fluctuations of their populations; 3) the different layers in the snowpack and their use by lemmings; 4) their digging patterns; 5) some videos of the digging experiment implemented at the Canadian High Arctic Research Station (CHARS) in Cambridge Bay; and 6) videos from camera traps deployed to study lemmings under the snow.

Participants shared a common lunch offered by the researchers organizing the workshop. Researchers hired three local cooks to prepare the main course, which was composed of a white-tailed deer stew made of meat provided by one of the researchers who hunted the deer in southern Quebec. Bannock and cakes were also served. Participants really appreciated the lunch and leftovers were distributed to participants after the workshop.

February 4th – Afternoon Round Tables

The afternoon was dedicated to break-out group discussions. Researchers started by explaining the context and process for the discussions.

Four tables were set up, with every table dedicated to a specific topic. Participants divided themselves among tables and the first round of small group discussions began. Each round was prefaced with the table facilitator (also acting as note taker) explaining the table's topic and announcing a set of questions specially crafted to trigger conversation around the topic. The same questions were used for every round. One person was designated to stay at the table with the facilitator and act as reporter at the end of the entire session. After thirty minutes, people were asked to move to a different table. Once all rounds of discussions were completed, the reporter and note taker from each table wrote a poster and shared the insights from their conversations in front of the entire audience. Throughout the process, interpreters navigated between tables to ensure that conversations were understood by all participants.

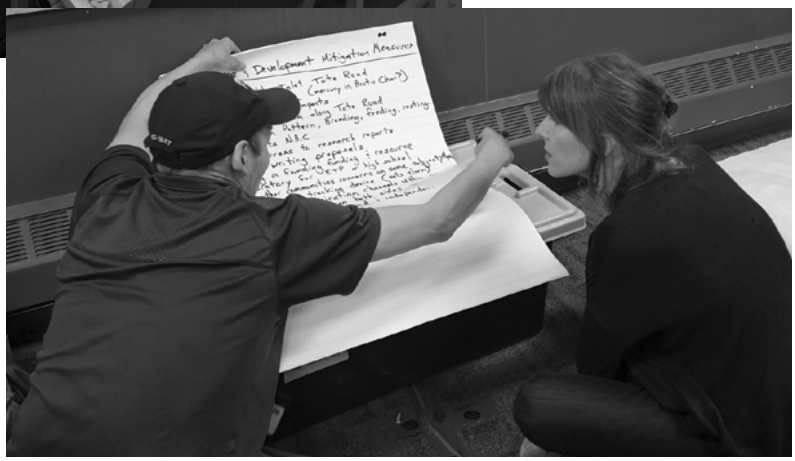


TABLE 1

Topic: A new research station in Mittimatalik
Facilitator and note taker: Joël Bêty
Presenter: Eric Ootoovak

Questions:

- Feedbacks on the proposed station (size, location in town, equipment, green energy)
- Joint Scientific and Management Committee: feedbacks on composition, functioning and role of the Committee
- Local training: What is missing in terms of local training that the station could contribute to?

Insights provided by participants:

- We don't want to repeat what was done with the Environment Climate Change Canada building (local people being ditched). Follow Piqqusilirivvik model (e.g. Clyde River)
- Include equipment that would be useful for the community:
  - Facilities and instruments to run analyses LOCALLY for water quality, air quality and toxicity of country food (e.g. trichinosis in walrus)
  - Live translation equipment available at the station
  - High speed internet
- Access to community members, everyone should be welcomed to the station (easy access, display traditional items/stories inside, the name of the station is important - not branded "CEN")
- Station should support Environmental Technology Program grads and students
- Location
  - In the community (and easily accessible to Elders to collect traditional knowledge)
  - The building should be in great shape when transferred to the community
  - Ideally the building should be 100% renewable energy. Make sure to select appropriate systems based on recent experiences conducted in Mittimatalik (e.g., wind can be calm for several weeks in winter, use grid-tied solar systems)
- Building
  - Lab space
  - Office space
  - Parking lot
  - A repair shop/garage area to fix equipment and snowmobiles
  - Board rooms for classrooms and trainings
  - Storage space for samples (freezer)
  - All spaces should be accessible to locals for research (including office space available for short time periods, e.g. to write grant proposals, and for people working full time, e.g. Smart Ice)
- Joint Committee
  - Should be dedicated for community research needs
  - Composed of different organizations, locals, not too big, 50% locals, 50% researchers; HTO, Hamlet and QIA should be part of the Committee. Consider having other groups or organisations attending Joint Committee meetings (Elders, youth, Parks Canada, and Baffinland)
  - Conduct regular meetings
  - Useful to provide updates on research activities and results

Questions and commentaries from the audience:

- There should be more meetings before the station is built, giving time for more adjustments and adapting the project to local needs.
- This research lab has been a long dream from the community.
- We do not want to repeat the experience of the ECCC research station: we had expectations from this ECCC station in relation to community access and involvement and it did not happen. Make sure this situation does not happen again.
- Researchers have been around for long time, and it will continue, so it is better to work together.
- Be sure to include in the station research on country food quality and safety, e.g. walrus research.
- When the wind comes from the East, precipitations seep through the windows and doors. Make sure to consult local Inuit for windows and doors orientation and location.
- Suggestion that local members from the Scientific and Management Committee for the station could attend international arctic oriented conferences.
- Designers for the station should take into account the size of water and sewage thanks. Tanks at the ECCC station are too small for the amount of people going in. The new station should have bigger tanks.
- Keep in mind that fuel costs in winter go up to $1,000 per month at ECCC station.

TABLE 2

Topic: Wildlife research
Facilitator and note taker: Pierre Legagneux
Presenter: Elisabeth Quassa

Questions:

- Are you interested in having a global picture of your overall exposure to contaminants? If yes, how would you assess your exposure?
- How do you perceive the change in number of Cackling geese?
- Do you think that warming could affect lemmings during winter? Should we monitor lemming activity and snow characteristics in winter? If yes, how should we proceed and could you be involved?
- Animal migration: Would you be interested in having real-time info of animal movements and migrations? If yes, how could it be implemented?

Insights provided by participants:

1. Contaminants

- INFORMATION: researchers could do more education/communication on contaminants: this should be the first thing to implement. Communication could take the form of broadcasts / website / radio interviews / videos instead of books and reports that are poorly accessible for community members.
  - Inuit should be included at the very beginning of a project and be involved in ALL stages of the project
  - Job opportunities
- DIET SURVEY :
  - Conducted by Inuit for Inuit.
  - Need to collaborate with other researchers not to duplicate efforts
  - Get overall exposure to contaminants
  - Researchers should communicate good/bad news and provide nutritional advices if possible
  - Because there are multiple emerging contaminants, researchers should inform about future risks and changes
  - It is a concern for human risk
  - Opportunities for co-designed research
  - If possible, provide information on the sources of contamination (local mine vs China industry)

2. Animal migration

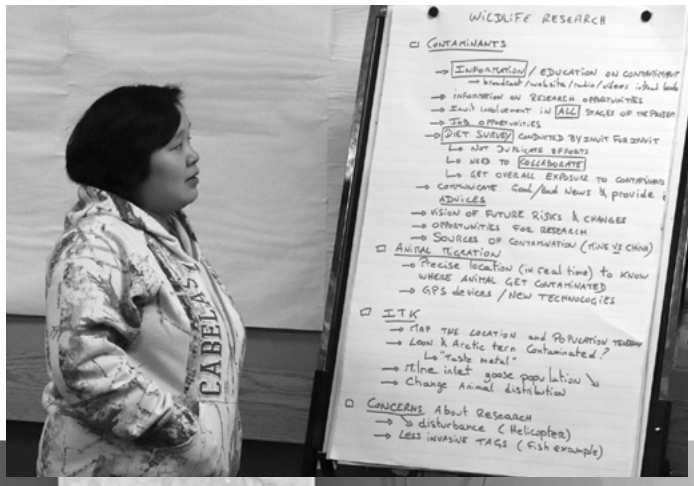
- Precise location (in real time) to know where animals get contaminated
- GPS devices / new technologies for monitoring new parameters such as heart or sleep rates - equipped animals with Apple Watch would be a double reward for hunters!
- Consult before implementing a new project

3. Inuit Traditional Knowledge

- Map the locations of wildlife and population trends
- Are loons and arctic terns contaminated? Because eggs of loons taste like metal and arctic tern eggs are a delicacy
- Milne Inlet goose population is decreasing
- A lot of changes in animal distribution occurred over the last 50 years
- Interest to map Inuit Knowledge on geese and compare with info from Goose Camp data
- Snowy Owls are protectors against predators
- Canada goose tastes better
- Cackling geese arrive from Baffin Bay into Eclipse Sound while snow geese arrive from Baffin Island

4. Concerns about research

- Disturbance through helicopters
- Should always try to put less invasive tags (fish example)
- Since the establishment of Goose Camp, there is less geese on the shore near camp, they go outside



Questions and commentaries from the audience:

- There are underwater glaciers in the fjords and sometimes these glaciers come out of the water (go up; glacier surge). We need to know why.
- There are all bunch of stuff to be researched in our community.

  – Question: Mercury is rising up in northern environments and animals. People are wondering where the mercury is coming from.
  – Answer from researchers: From coal extraction, industrial development, marine currents, China, USA, India.

  – Question: Is the pollution coming from ships contributing to atmospheric pollution? E.g. motor oils?
  – Answer from researchers: We should try to answer this question.

  – Commentaries from audience: Glad that you created records from past research
  – We have less seals nowadays in summer. They tend to congregate elsewhere.
  – The noise from ships/cruise ships is impacting the seals
  – Less fish in some places, like in a place named Iqaluit. Harder to get fish from that place. Takes more time to get the quotas.
  – Fish go elsewhere because of pollution.
  – We were not seeing Cackling geese here before, we don't know where they would nest.

– Question: We think there is less snow geese around here now. There is a lot more in Hall Beach and Igloolik area. Are the geese moving there? When researchers will leave Goose camp so the geese can come back?
– Answer from researchers: The goose numbers and density are stable around Goose Camp, but Cackling geese population is increasing rapidly. Goose populations are impacted by a number of factors, including hunting regulations in the South. The Bylot Island goose population represents around 15% of the whole snow goose population.
– We try to reduce the impacts of our research activities as much as possible, even when populations are increasing.

– Commentary from audience: Local people say goose population is decreasing and researchers say it is increasing. We don't agree. We should combine more Inuit knowledge and scientific knowledge.

– Question: Do you study more individuals, families, eggs? What are your priority research goals?
– Answer from researchers: The survival rate of adults. Where the adults get killed, the geese tend to move away from these areas.

– Question: One goose species come here to breed, another one comes here only to molt. Which goose species do you study more?
– Answer from researchers: We study both.

– Comment: There are a lot of farming activities and pesticide use in the South, where the geese stop during their migration. People in the South, do they take good care of the geese before sending them for migration?

– Question: Are the two goose species laying their eggs at the same time? Do the cackling geese lay up to 6 eggs/nest?
– Answer from researchers: Yes

– Question: If the weather warms up, do the lemmings have harder times?
– Answer from researchers: That's why we do long term studies, to be able to compare. We also monitor the air quality across the Arctic.

– Question: In the past, people trapped fox a lot. Lemmings were an indicator of fox populations. Some years there are lots, some years, there's nothing. Last May I was traveling and there were lemming tracks all over. I stopped to look at tracks, and could see they were going towards the ocean. Where do they come from, where do they go? Tell me, you are the experts.
– Answer from researchers: It's mostly the weasels/ermines that control the lemming populations. When we see them on Bylot Island, shortly after there is a lemming crash. On Bylot there are lemming peaks every 3-4 years.
– Answer from a hunter: When the lemmings go East they decrease, when they go North, they increase.
– Inuit Qaujimajatuqangit is different from scientific knowledge.

TABLE 3

Topic: The SIKU application, a wildlife tool
Facilitator and note taker: José Gérin-Lajoie
Presenter: Andrew Arreak and Chris Merkosak

Questions:

- What do you think about the wildlife monitoring tool in SIKU, and how could we improve it?
- There are specific tools for wildlife and for ice. What other tools could be implemented in SIKU that would be relevant to the community to track observations on the Land (snow, landslide, mudslide, trails...).
- Do you think SIKU is well promoted and used in the community? If not, should we improve its visibility and use? How?

Insights provided by participants:

What to improve:

- Encrypt information not to be hacked
- Better organize the species in groups (Fish, Birds, Marine mammals, Terrestrial mammals, Plants, Invertebrates)
- YouTube videos as tutorials how to use the app
- A better design for winter usage issues (battery life, simple ways for recording data, etc.)
- A search engine for finding data with dates and locations filters
- Real time satellite images (e.g. Sentinel, sentinel-hub.com)
- Different categories for local and researchers users
- More categories for tools and equipment

What to add:

- Iceberg locations
- Tagged animals
- Inuit Place Names
- A way to track changes on the Land, erosion, mudslides, permafrost melting
- Add "Unknown" species, landforms and phenomenon, new infrastructures on the land, little people...
- Lead cracks, natural bridges, crossings on sea ice
- Local names of sea ice (see Andrew Arreak, works with Kathryn Wilson - Smart Ice)
- New species, invasive species (e.g. wolverine, whales, mussels)
- Ice movements during summer
- Floe edge location, slushy ice, currents, polynyas (aukannik)

TABLE 4

Topic: Resources development
Facilitator and notetaker: Catherine A. Gagnon
Presenter: Sam Arreak

Questions:

- Are there new concerns on mining activities affecting the Land that were not expressed at the 2018 workshop?
- Expectations regarding the involvement of university-based researchers in review of environmental impact assessment - EXPERTS WORKING ON THE LAND (including wildlife).
- What do you need to put in place a community-based monitoring program to track the impacts of human activities on the Land?

Insights provided by participants:

Concerns

- Mary River and Milne Inlet: we are concerned about dust from the tote road, thus we should monitor:
  - Water sampling
  - Contamination of plants
  - Should put a time lapse camera along the tote road to see if caribou are passing through, and other effects
- Concerns about airport pollution especially in relation to de-icing products and dust.
- There are big concerns about effects on caribou migration patterns, breeding, feeding, resting areas.
- There is a concern that the train will cut Inuit jobs such as truck drivers (there will be only one driver for the train).

Collaboration with researchers

- Environmental Technology Program (ETP) students in Pond Inlet would like to establish collaborations with researchers to :
  - Have better access to research reports
  - Obtain help in writing funding proposals
  - Obtain information on sources of funding available to them
  - Have laboratory space for ETP or high school students
  - Hear about other communities' concerns about same topics
  - Gain more info on the ship tracking device (alarm on phone)
- Would appreciate help from researchers to review technical advices coming from the mine.
- Would appreciate obtain a list of experts and their specialities so that the community can reach out to them when they need expert advices. Send regular reminders and updates of the list to HTO and Hamlet.
- Encourage researchers to do more community outreach, training and presentations when they pass by. Radio-talks would be a good avenue.
- There should be better communication channels between groups in Pond Inlet to discuss and voice concerns about Mary River.
- There is a need for more environmental monitors from both sides: Baffinland and independent, unbiased monitors. There is a concern that advisors from QIA are not neutral.
- Mittimatalik HTO expressed the need for more collaborative efforts to voice our concerns about the mine.
- Felt that the HTO was skipped out during the Baffinland approval process.
- HTO members have seen new species and changes in local species.
- Narwhal behavior and abundance is changing in the Milne Inlet area.
- Feel that there is no mitigation measures for ship traffic (except speed) : increase in the number of ships is not mitigated.
- There should be more training for more specialised jobs at Baffinland. We should have training in trades, professional jobs and management jobs (not only kitchen, janitors and drivers).

The workshop ended with a dice game with prizes. Prizes included a beaver skin, a fillet knife, maple syrup, honey, herbal salve, a head-lamp, and baseball caps. All had lots of fun. The day ended in a joyful manner.

Feedback from participants was positive. Several stated it was a good workshop. Researchers concluded that future workshops should last 1.5 day instead of one day, in order to be slightly less dense and allow more time for casual discussion.

February 5th – Community Open House at the Nattinak Visitor Centre

The open house was designed so that community members could come and go and discuss with researchers in an informal setting. Community members were welcomed by José Gérin-Lajoie and Catherine Gagnon. A movie about wildlife on Bylot Island and about a water quality community-based monitoring program in Nunavik were projected on a large screen at the entrance of the Centre. In the Nattinak meeting room, four tables were set, on which pictures, research material and maps were displayed. Each table was hosted by one researcher and dedicated to the following topics:

Table	1	2	3	4
Topics	Research on snow and lemmings	New project on cackling geese, research on shorebird migration and proposed research station in Mittimatalik	Contaminants in bird eggs and snow geese migration and population dynamic	The SIKU mobile application
Table host	Mathilde Poirier	Joël Bêty	Pierre Legagneux	Andrew Arreak

The open house had previously been announced on the local radio and the Pond Inlet News page on Facebook. Invitation posters were also set up in various places in the community.

More than 40 community members attended the open house. Some stayed for a short visit, others spent the entire evening there. Through discussions at tables, researchers and attendees got a chance to exchange knowledge on the topics presented and beyond. Food and hot beverages were offered in the Nattinak's kitchen, offering a cozy space nurturing casual discussion.

Specific suggestions offered by community members through the Nattinak's open house included:

- The idea to include storage space for archives (about 240 square feet is needed) and provide a space to showcase interesting artifacts in the new research station. Several research projects have used archives and this can be advertised in the station.
- Information concerning past research projects that occurred in the area between the 1950's and 1970's concerning migratory birds and potentially contaminants.
- Information on how to report bands/collars/ear tags of marked animals is needed.

Attendees were invited to participate to a draw for prizes. At the end of the night, participants all gathered in the meeting room for the draw. Prizes included two beaver skins, a fillet knife, maple syrup and a head-lamp. Winners were announced on the Pond Inlet News Facebook page.

Short term concrete actions to be taken by researchers that were identified through the workshop

RESEARCH STATION

- Contact local organizations to quickly put in place the Joint Scientific and Management Committee for the station. This will allow maintaining ongoing communication between the community and researchers regarding the proposed research station.

CONTAMINANTS

- Request letters of engagement from local organizations and apply for funding through the Northern Contaminants Program to pursue research on contaminants in the Mittimatalik area (a letter of engagement was signed with the Mittimatalik HTO as of February 6th 2020).

SIKU APPLICATION

- Transfer the list of suggestions highlighted by the community of Mittimatalik to the Arctic Eider Society. Provide advice and assistance to the Arctic Eider Society to further develop the wildlife observation tool of the SIKU application considering feedbacks received by workshop and open house participants.

RESOURCES DEVELOPMENT

- Identify a list of potential funders to support community-driven environmental monitoring programs. Transfer this information to students of the Environmental Technology Program in Mittimatalik (see 2018 report where many funding sources had been identified for several projects).
- Identify potential mechanisms to establish mentorship and support community members in developing projects and apply for funding.

APPENDICES

APPENDIX A

List of Participants

Lynn Angnatsiak, Student, Environmental Technology Program - Pond Inlet
Cara Killiktee, Student, Environmental Technology Program - Pond Inlet
Noni Jon Pewatoaluk, Student, Environmental Technology Program - Pond Inlet
Andrew Jaworenko, Student, Environmental Technology Program - Pond Inlet
Jonathan Pitseolak, Student, Environmental Technology Program - Pond Inlet
Adrian Jimmy Pitseolak, Student, Environmental Technology Program - Pond Inlet
Chris Merkosak, Student, Environmental Technology Program - Pond Inlet
Ken Arreak, Student, Environmental Technology Program - Pond Inlet
Daniel Inuarak, Student, Environmental Technology Program - Pond Inlet
Tapisa Q. Kasarnak, Student, Environmental Technology Program - Pond Inlet
Erik Coleman, Instructor, Environmental Technology Program - Pond Inlet
James Simonee, Wildlife Officer, Nunavut Government
Jamie Enook, Environment and Climate Change Canada
Joshua Arreak, Mayor, Hamlet of Pond Inlet
Boazie Ootoova, Councilor, Hamlet of Pond Inlet
Andrew Arreak, Nunavut Operations Lead, Smart Ice - Qikiqtaaluk North Region
Peter Aglak, Mittimatalik Hunters and Trappers Organization
Nathan Ootoova, Mittimatalik Hunters and Trappers Organization
Eric Ootoovak, Mittimatalik Hunters and Trappers Organization
Phanuel Enoagak, Mittimatalik Hunters and Trappers Organization
Caleb Sangoya, Mittimatalik Hunters and Trappers Organization
Shelly Elverum, Ikaarvik
Charlie Inuarak, Qikiqtani Inuit Association
Elisabeth Quassa, Inuit Knowledge Working Group
Sam Arreak, Joint Park Management Committee
Terry Kalluk, Parks Canada - Sirmilik National Park
Randy Quaraq, Parks Canada - Sirmilik National Park
Carey Elverum, Park Manager, Parks Canada - Sirmilik National Park
Tess Espey, Parks Canada - Sirmilik National Park
Elisheba Mucpa, Translator
Malachi Arreak, Translator
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Catherine A. Gagnon, Cabinet-conseil Érébia (catherinealexandra.gagnon@erebia.ca)

APPENDIX B

Workshop agenda

AGENDA

SHARING WORKSHOP ON
Ecological monitoring and collaborative activities
Sauniq Hotel Conference Room
Tuesday 4th February 2020

9h00	Welcoming, Chair nomination, opening prayer, participants to introduce themselves, presentation of researchers	
9h30	Quick overview of the 2018 Mittimatalik workshop	José Gérin-Lajoie
	Update on the proposed Centre for Northern Studies research station in Mittimatalik	Joël Bêty
	Sharing wildlife observations and more: the SIKU application	Joël Bêty
10h30	Pause	
10h50	New project on contaminants in birds	Pierre Legagneux
	New project on Cackling/Canada geese. Update on shorebird' monitoring	Joël Bêty
	Unravelling life under the snow	Mathilde Poirier
11h30	Open discussions about the work presented during the morning	
12h00	Shared lunch*	
13h15	Time to exchange: Open discussions about the work presented during the morning Discussions about how the community and researchers can collaborate to better cope with large resources development projects (e.g. Baffin Land) and their impacts.	
16h00	Wrap-up	José Gérin-Lajoie Catherine Gagnon
17h00	End of meeting	

APPENDIX C

Invitation letters for the workshop and community event

Invitation to a sharing workshop in Mittimatalik, February 4, 2020

Dear partners,

Following the ecological monitoring workshop that took place on February 7-8 2018 in Mittimatalik, we would like to meet with you to follow-up on our joint and collaborative activities. This meeting will take place on **February 4, 2020** in Mittimatalik, and is aiming to:

- Share the work that has been done since the 2018 workshop;
- Present some results from the summer 2019 collection of goose eggs and carcasses;
- Display new maps about bird migration routes;
- Give an update on the proposed Centre for Northern Studies (CEN) research station;
- Organize an interactive hands-on workshop on the SIKU app;
- Discuss the community's expectations regarding the involvement of researchers with the Mary River Phase 2;
- Look at new funding possibilities to start monitoring projects.

Representatives from local and regional organizations are invited, and a hot meal will be served at lunchtime.

Please contact Miss José Gérin-Lajoie if you need more information and to confirm your interest to participate in this workshop scheduled for **February 4, 2020**.
Jose.Gerin-Lajoie@uqtr.ca 819 376-5011 #3369. A detailed agenda will follow.

We look forward to work together with you

Pierre Legagneux (Université Laval)
Joël Bêty (UQAR)
José Gérin-Lajoie (UQTR)
Catherine A. Gagnon (Erebia)

Invited groups:
Hamlet of Pond Inlet | Mittimatalik HTO | Youth Committee |
Students enrolled in the Pond Inlet ETP (Arctic College) | Ikaarvik | SmartIce |
Mittimatalik Water Quality Monitoring Group | Elders Committee |
Parks Canada - Sirmilik Joint Park Management Committee and Inuit Knowledge Working Group (Pond Inlet) |
Government of Nunavut - Dept. of Environment | Nunavut Wildlife Management Board |
Qikiqtani Inuit Association | Environment and Climate Change Canada/Canadian Wildlife Service

OPEN HOUSE ON ECOLOGICAL MONITORING
NATTINAK CENTER

February 5, 2020
19h00-21h00

Following the Sharing Workshop on February 4th, we invite you to discuss about:

- Wildlife and trace metals work on Bylot Island and beyond
- The SIKU application: a mean to share observations
- A Future research station to be built in Mittimatalik

Join us

Snacks to be served!

Prizes to be drawn!