

Transborder Detour/ Kesagami Caribou Forum

December 2-3, 2019

Forum proceedings



Written by:

Pier-Olivier Boudreault, Biol. Société pour la Nature et les Parcs (SNAP Québec)

Marion Séguy, Biol. M.Sc. RYAM¹ Forest Management

Marie-Eve Sigouin F. Eng. M.Sc, RYAM Forest Management

Benoit Tendeng, Biol. Société pour la Nature et les Parcs (SNAP Québec)

Edited by:

Don Bazely, RYAM Forest Management Ontario

Benoit Croteau, Abitibiwinini First Nation Council

Sonia Légaré, Biol. Ph.D, Ministry of Forests, Wildlife and Parks.

Chris McDonnell, R.P.F., RYAM Forest Management

Pascale Trudeau-Cananasso, Abitibiwinini First Nation Council

© July 2020

¹ Rayonier Advanced Materials



© Peter Mather

Detour/Kesagami Transborder Caribou Forum

Pikogan, December 2-3, 2019

Executive summary and collaborative actions

On December 2 and 3, 2019, the Detour / Kesagami Cross-Border Caribou Forum took place in the community of Pikogan in Quebec. About fifty participants, from Aboriginal communities, forestry and mining companies, environmental organizations, Government departments and others, were able to benefit from information sharing on this population of woodland caribou. With presentations, the first part of the program aimed to share

current knowledge about this population, present the various projects underway and express the aspirations of the various stakeholders present regarding the conservation of their habitat. On the second day, Forum participants took part in a workshop where they had to identify opportunities for collaboration on a range of themes. A list of concrete actions aimed at promoting cross-border collaboration has thus been compiled.

Actions identified during the thematic Workshops

Workshop	Lead
1. Data Sharing	
<ul style="list-style-type: none"> Send the description of the Detour Caribou project to Megan Hazell (Wood PLC, Mine Detour Gold). Request for data sharing for the caribou telemetry data of the Detour Gold Mine's monitoring program to contribute to caribou habitat use analyses and range assessment. 	La Sarre Caribou Committee
<ul style="list-style-type: none"> Request for data sharing from Kevin Solarik from the NCASI² Caribou Nutrition Research project. 	David Gervais, RYAM
<ul style="list-style-type: none"> Identify shared interests to share data with Indigenous partners in the context of Jérémie Maillé-Bizier's masters project on traditional Indigenous knowledge. Isaac Voyageur will check with his team who is the point of contact at CNG Make a template agreement that can be adapted to each community/organization. 	Isaac Voyageur Jérémie Maillé-Bizier
<ul style="list-style-type: none"> Put Jérémie Maillé-Bizier in contact with Patrice Bellefleur (ULaval Patrice's work includes the establishment of data-sharing agreements with Indigenous partners. 	Aude Tousignant
2. Harmonization of habitat and disturbance analyses between provinces.	
<ul style="list-style-type: none"> Contact the Abitibi River Forest Manager and OMNRF³ to see if habitat data exchange is possible (forest inventories; methodology for calculating disturbance rate; range delineation; etc.). 	La Sarre Caribou Committee
3. Management plan and timeline harmonization.	
<ul style="list-style-type: none"> Maintain a channel of communication between planners in Quebec and Ontario on plan timelines 	RYAM
4. Best practices for road closure and forest regeneration projects.	
<ul style="list-style-type: none"> Discuss the opportunity for a new road closure pilot project for the region north of La Sarre in coordination with the provincial caribou strategy. 	GOR La Sarre ⁴
5. Recognition of traditional Indigenous knowledge.	
<ul style="list-style-type: none"> See 1- Data Sharing workshop Master's Project on Indigenous Knowledge Integration 	Jérémie Maillé-Bizier

² National Council for Air and Stream Improvement

³ Ontario Ministry of Natural Resources and Forestry

⁴ La Sarre Regional operation group

<ul style="list-style-type: none"> Contact First Nation workshop participants to develop cross-border collaboration with the Ontario government to leverage existing relationships and partnerships. 	La Sarre Caribou Committee
6. Joint woodland caribou population inventories.	
7. Contact Lyle Walton, Grant Ritchie (Ontario Ministry of Natural Resources and Forestry) or Chloé Stuart (Ontario Ministry of Environment, Conservation and Parks) to discuss a potential joint inventory in 2021 and establish a common methodology (inventory protocol).	Guillaume Szor
7. New operational approach to forest management in the Caribou range.	
8. Test a new ecosystem-based management approach for a winter site to reduce impacts on caribou (road closures; one harvest; reduction of residual forest).	La Sarre Regional Operation group.
9. Recognize traditional and ecological knowledge at the operational site scale.	La Sarre Caribou Committee
10. Cost-effectiveness assessment for harvesting in caribou area (wood constraints vs. protection measures)	La Sarre Regional Operation group.



Table of content

Executive summary and collaborative actions.....	3
Actions identified during the thematic Workshops.....	4
Table of content.....	7
Forum context.....	8
Invitations.....	9
Schedule.....	10
Meeting Summaries	11
Workshop Highlights.....	22
1. Data Sharing	22
2. Securing Population Inventories	23
3. Best Practices for Road Closure and Habitat Restoration Projects.....	24
4. Management Plan and Timeline Harmonization	25
5. Integration of Indigenous Traditionnal Knowledge	25
6. Harmonization of Habitat and Disturbance Analysis Between Provinces	27
7. New Operational Methods	27
Conclusion	30
Appendix 1: List of participants	32
Appendix 2: Forum evaluation.....	34
Table 1: Content Assessment.....	34
Table 2: Format Evaluation	35
Table 3: Recommendations for Next Meeting.....	36
Appendix 3: List of Workshop Participants by thematic.....	38



Forum context

The Detour/Kesagami woodland caribou population is unusual in that its range spans the transborder area between Ontario and Quebec. Each province is subject to its own policy framework and management guidelines and the assessment of the herd's health and quality of habitat can only be ensured through collaboration between the two jurisdictions. Moreover, habitat management for the woodland caribou must be coordinated through a unified approach that is based on a combination of scientific and traditional knowledge.

RYAM Forest Management, in accordance with its FSC® Forest Management Certification, works with different partners to manage the habitat of the woodland caribou north of La Sarre (the Detour/Kesagami population) on the Quebec side, independently of Ontario. In 2019, RYAM Forest Management received funding from Environment and Climate Change Canada (ECCC) to carry out a project aimed at developing a collaborative approach to ensure the recovery of boreal caribou in the Detour/Kesagami ranges. The Canadian Parks and Wilderness Society (CPAWS Quebec) and the Abitibiwinini community are the principal partners in this project, along with the Ministère des Forêts, de la Faune et des Parcs du Québec.

Integrating traditional Indigenous knowledge is now considered indispensable to the development of habitat management plans for the woodland caribou populations. This is why it was deemed appropriate to hold the Forum in an Indigenous community that is directly affected by this population, namely the Abitibiwinini Algonquin community at Pikogan, to facilitate participation and the transfer of knowledge.

With this in mind, the Forum's organizing committee invited all the stakeholders from Quebec and Ontario concerned about the population of woodland caribou to attend and to share their knowledge about the herd. It provided an opportunity to inform others of the many projects currently underway or in development in connection with the Detour/Kesagami caribou population.



Invitations

Forest industry:

- RYAM Forest Management divisions Abitibi-Ouest and Québec
- RYAM Forest Management Ontario
- Abitibi River Forest Management
- Strategic Hub
- First Resource Management Group Inc.
- NCASI

Governmental organizations:

- Ministry of Forests, Wildlife and Parks
- Ministry of Natural Resources and Forests – Ontario
- Ministry of Environment, Conservation and Parks - Ontario
- Environment and Climate Change Canada (Canadian Wildlife Service, Science and Technology)
- Natural Resources Canada

First Nation communities:

- Abitibiwinini First Nation Council (Pikogan)
- The Grand Council of the Crees (Eeyou-Istchee)
- Wahgoshig First Nation
- Moose Cree First Nation
- Taykwa Tagamou Nation
- Washaw Sibi
- Indigenous Leadership Initiative

Mining industry:

- Detour Gold and Wood PLC – consultant to Detour Gold
- Casa Berardi Mine
- Probe Metals, Mining exploration company

Universities:

- Université du Québec en Abitibi-Témiscamingue
- Université du Québec à Montréal
- Université du Québec en Outaouais

Environmental non-governmental organizations:

- Société pour la Nature et les Parcs (Québec)
- Canadian Parks and Wilderness Society (Ontario), Wildlands League

Jour 1

Lors de la première journée, les participants seront amenés à présenter et échanger sur leurs connaissances de la population Detour/Kesagami, tant d'un point de vue traditionnel que scientifique. Les réalisations passées, actuelles à venir seront présentées pour chacune des provinces, en plus des stratégies et

plans d'aménagement en vigueur. During the first day, participants will present and discuss their knowledge (traditional and scientific) of the Detour/Kesagami woodland caribou population, the actions that are underway and those planned for the future. Elements of existing management strategies and forest management plans will also be

Horaire | Schedule

9:30 Accueil des participants | Welcome

10:00 Cérémonie d'ouverture et objectifs de la rencontre | Opening ceremony and objectives of the meeting

10:30 Approche collaborative pour l'aménagement de l'habitat du Caribou de la population transfrontalière Detour Kesagami

Marie-Eve Sigouin ing.f., M.Sc. Coordonnatrice certification forestière/Forest Certification Coordinator, RYAM Gestion forestière Québec

Pier-Olivier Boudreault Biol. Biologiste en conservation/Conservation biologist, Société pour la Nature et les Parcs (SNAP Québec)

Présentation des travaux passés et à venir pour l'aménagement de l'habitat du caribou issus d'un projet de collaboration entre plusieurs partenaires au Québec. Presentation of the past and upcoming work on the management of caribou habitat done in the context of a collaboration project involving a group of partners in Quebec.

10:50 Pause-santé | Coffee Break

11:00 Approche collaborative pour la conservation du caribou et de la planification de la gestion des forêts dans le nord-est de l'Ontario: Contexte, activités et prochaines étapes

Al Thorne, R.P.F., Chef forestier Ontario/Chief Forester Ontario

Chris McDonnell, R.P.F., Directeur des Relations Premières Nations et Environnementales/ RYAM Forest Management Ontario

Présentation de l'approche collaborative résultant du partenariat entre RYAM, Wildlands League (SNAP) et leurs partenaires dans le nord-est de l'Ontario pour la conservation de l'habitat du caribou.

Presentation of the joint approach developed by RYAM, Wildlands League (CPAWS) and their partners in Northeastern Ontario to conserve caribou habitat.

11:30 Point de vue autochtone | First Nation point of view Table ronde/Talking circle

Les représentants des communautés concernées sont invités à exprimer leurs volontés en lien avec la conservation du Caribou forestier et le partage des connaissances traditionnelles.

Representatives of the communities concerned are invited to express their wishes in connection with the conservation of the Woodland Caribou and the sharing of traditional knowledge.

12:30 Diner /Lunch



© Jérôme Spaggiari



© PeupleLoup





© Jérôme Spaggiari



© PeupléLoup

17:15
Activités sociales
Networking
19:00
Souper
Dinner

14:00 La science et le savoir autochtone pour prédire les changements de l'habitat du caribou et développer des pratiques durables pour en assurer le maintien | Using science and Indigenous knowledge to predict changes in caribou habitat and develop sustainable practices to ensure resiliency.

Solange Nadeau *Ph.D, Sociologue forestière, Ressources Naturelles Canada*

Environnement et changements climatiques Canada/ Environment and Climate Change Canada (ECCC)

Présentation des expériences acquises et des outils analysés par les chercheurs de Ressources Naturelles Canada pour permettre une meilleure intégration des connaissances traditionnelles autochtones dans la prise de décision pour la gestion de l'habitat du caribou forestier

Presentation of the experiences acquired, and the tools analyzed by Natural Resources Canada to allow for better integration of traditional Indigenous knowledge in decision-making for the management of forest caribou habitat.

14:30 Forestry context in Ontario

Chris McDonnell, *R.P.F., RYAM Forest Management*

Dave Pearce, *M.Sc. Conservation, Wildlands leagues (CPAWS)*

L'étendue des tenures forestière de la compagnie et des produits ainsi que le processus des plans d'aménagement forestier y étant associé en Ontario ont été présentés. En complément, CPAWS a souligné les travaux de collaboration en cours et à venir, et l'intérêt de la poursuite de ceux-ci. *Presentation of the scope of the company's forest tenures and portfolio and the process involved in forest management plans in Ontario. In addition, CPAWS highlighted ongoing and future collaborative work, and the value of continuing it.*

15:00 Pause-santé | Coffee Break

15:15 Stratégie pour les caribous forestiers et montagnards : Orientations gouvernementales et état des connaissances sur la population Detour et son habitat.

Jérôme Rioux *ing.f.M.Sc. Direction de l'aménagement de l'environnement forestiers*

Sonia Légaré *Biol. Ph.D. Direction de la gestion des forêts du Nord-du-Québec*

Guillaume Szor *Biol. Direction de la gestion de la faune du Nord-du-Québec*

Ministère des Forêts, de la Faune et des Parcs du Québec/Ministry of Forests, Wildlife and Parks of Québec

Présentation de la stratégie gouvernementale en élaboration pour le rétablissement du caribou forestier au Québec et de l'état de la situation pour la population Détour.

Presentation of the provincial strategy for caribou recovery in Quebec currently in elaboration and state of the situation for the Detour population.

16:00 Programme de surveillance du caribou forestier - Detour Gold Mine | Woodland Caribou Monitoring Program - Detour Gold Mine

Megan Hazell, *Biologiste Sénior et chargée de projet/Senior biologist and project manager, Wood plc*

Présentation des travaux réalisés par la mine Détour Lake pour la conservation et la restauration de l'habitat du caribou et des partenariats ainsi développés.

Presentation on the work done by Detour Lake mine to conserve and restore caribou habitat since 2008 and the partnerships developed in that context.

16:30 Processus d'exploration minière | Mining Exploration

Breanne Beh, *Géologue, Probe Metals*

Des activités d'exploration minière ont cours au sein de l'habitat du caribou forestier. Afin de bien comprendre la réalité de ces opérations, chacune des étapes de l'exploration minière seront décrites.

Mineral exploration activities are taking place within the woodland caribou habitat. In order to fully understand the reality of these operations, each stage of mining exploration will be described.

16:50 Synthèse de la journée | Wrap-up

Jour 2

Lors de la deuxième journée, des ateliers de travail permettront d'identifier des actions qui pourraient être réalisées en partenariat entre les acteurs au Québec et en Ontario.

During the second day, workshops will lead participants to identify actions that could be carried out in partnership.



Horaire | Schedule

8:45 Accueil des participants | Welcome

9:00 Projets de recherche en cours au Québec sur les connaissances traditionnelles et le Caribou | Research projects in Québec

Hugo Asselin, Jérémie Maillé-Bizier, Louis Imbeau, UQAT

9:30 Connaissances scientifiques sur le Caribou | Scientific knowledge on caribou

Kevin Solarik, National council of Air and Stream Improvement NCASI

10:00 Pause-Santé

10:15 Ateliers | Workshops

Les participants se réuniront en sous-groupe selon leur sujet d'intérêt afin d'identifier des opportunités de collaboration et des actions potentielles.

Participants will meet in subgroups according to their subject of interest in order to identify opportunities for collaboration and potential actions.

1. Partage de données / Data sharing

2. Harmonisation des analyses de l'habitat interprovincial et des taux de perturbations /

Harmonization of habitat and disturbances analyzes between provinces

3. Harmonisation des plans d'aménagement et échéanciers / Harmonization of management plans and timelines

4. Restauration des habitats : partage sur les bonnes pratiques pour les projets de fermeture de chemin et régénération / Habitat restoration: Discussion on good practices for road closure project and forest regeneration.

5. Contribution des connaissances traditionnelles autochtones / Traditional knowledge contribution

6. Arrimage des inventaires des populations de caribou forestier / Joint woodland caribou population inventories

7. Nouvelle approche opérationnelle d'intervention forestière dans l'aire de répartition du Caribou / New operational approach to forest management in the Caribou range.

12:15 Diner | Lunch

13:15 Plénière | Plenary session

Retour sur les discussions des ateliers et perspective vers les prochaines étapes pour la mise en œuvre d'une collaboration multidisciplinaire transfrontalière. *Review of workshop discussions over the past 2 days and forward thinking concerning next steps for the implementation of cross-border multidisciplinary collaboration.*



Conference summaries

Transborder Caribou Forum

Day 1

December 2, 2019

Collaborative Approach to Woodland Caribou Habitat Management for the Transborder Detour Kesagami Population

Marie-Eve Sigouin, F. Eng. M.Sc., Forest Certification Coordinator, RYAM Forest Management
Pier-Olivier Boudreault, Biol. Conservation Biologist, SNAP Quebec



RYAM Forest Management (formerly Tembec) and CPAWS Quebec presented the measures put in place for managing the habitat of the Detour woodland caribou population as part of the first management plan for the habitat north of La Sarre (2007), and the work carried out from 2013 to 2015 to update it by means of an addendum.

An outline of the 2019–2022 “Collaborative Approach” project stemming from Environment and Climate Change Canada (ECCC)’s Woodland Caribou Conservation Program was presented. This work, which was coordinated by RYAM in collaboration with CPAWS, together with Abitibiwinni and other First Nations and the Ministère des Forêts, de la Faune et des Parcs du Québec (MFFP), aims to build bridges with their Ontario counterparts and the mining industry to ensure that the Detour/Kesagami population is self-sustaining across its range.

The importance of collaborative work, with goals that reflect the requirements of indicator 6.4.5 of the new Canadian FSC® Standard, is integral to the framework in which the Transborder Forum serves.

Collaborative approach to Caribou conservation and forest management planning in northeast Ontario: History, Activities and Next Steps

Al Thorne R.P.F. Chief Forester, RYAM Forest Management Ontario

A historical overview of the work carried out in forest management between 2002 and 2019, and its continuation to 2022 with the approval of the new plan, was presented. Note that in Ontario, forest management policy describes a mosaic approach or Dynamic Caribou Habitat Schedule (DCHS). A group of partners including First Nations, RYAM, Town of Cochrane and Wildlands League propose that a modified approach be applied in the 2022 forest management plan, where caribou habitat is organized into three principal management zones and three levels of protection. It is important to realize that the Detour population's range extends 100 km farther south on the Ontario side than on the Quebec side. The presentation proceeded with technical details and maps of the caribou's preferred habitat and its occurrences in order to complete the next steps, the release of the next ten-year plan and the need for collaboration among the various partners.

Indigenous Talking circle

Moderated by Benoit Croteau of the Abitibiwinini First Nation, Pikogan.

Participants: Pascale Trudeau-Cananasso (Pikogan), David Erless Sr. (Waskaganish), Isaac Voyageur (Mistissini), Wayne Cheezo (Waskaganish), James Cananasso (Pikogan), Clarence Trapper (Moose Cree), Matthew Tanoush (Nemaska).

Representatives of the various communities present at the Forum spoke in a talking circle and expressed their concerns about the Detour/Kesagami woodland caribou population. The importance of considering traditional knowledge when implementing caribou management or protection measures was emphasized numerous times. Several speakers mentioned having or knowing someone with specific knowledge on the Detour/Kesagami caribou population and that this knowledge was often ignored. The land is disturbed by human activity, and mining and forestry activities are often incompatible with the well-being of caribou.



The caribou's cultural significance was repeated again and again, whether in connection with a traditional lifestyle or for ceremonial purposes. Some speakers expressed their desire to go further in terms of collaboration and that the Forum was an opportunity to open up discussions on the topic.

Using Science and Indigenous Knowledge to Predict Changes in Caribou Habitat and Develop Sustainable Practices to Ensure its Maintenance

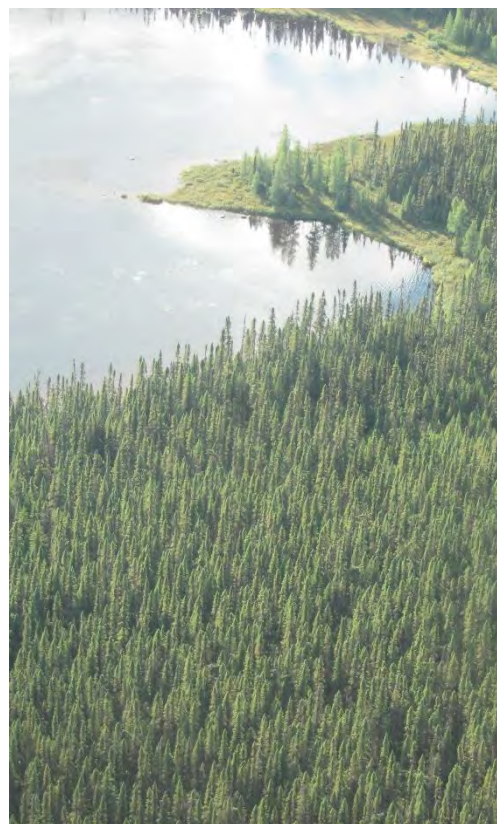
Solange Nadeau, Ph.D, Forest sociologist, Natural Resources Canada



The role of Natural Resources Canada (NRCAN) is to provide knowledge and tools for updating recovery plans at the federal level. For instance, interviews conducted with First Nations in different parts of Canada (Quebec, Ontario, Northwest Territories, Manitoba, Saskatchewan, etc.), allowed for their traditional knowledge to be considered and integrated into scientific knowledge.

In addition, various tools were tested in specific projects: fecal DNA analysis, the presence of lichens within different forest types and levels of disturbance, landscape habitat model, and all within the context of climate change.

These science-based projects are all necessary to guide the decision-making process. They have led to numerous collaborations with many partners, including the Pessamit community who shared their knowledge with respect to the quality of the caribou habitat in Nitassinan. Opportunities to collaborate with Environment and Climate Change Canada (ECCC) to determine whether caribou is indeed an umbrella species have also opened up.



Forestry context in Ontario

Chris McDonell, R.P.F., RYAM Forest Management and
Dave Pearce, M.Sc. conservation, Wildlands League



Rayonier Advanced Materials (RYAM) is a leader in the production of high-purity cellulose, lumber, pulp and paper. Its forest tenures are located in Ontario and Quebec and are all certified to FSC® Forest Management Standard.

Forest management in Ontario is planned over a 10-year timeline and it is the forestry companies that are responsible for planning, silviculture and operations. Most of the Detour population range in Ontario straddles the Abitibi River Forest, and it is Abitibi River Forest Management Inc.—an alliance of companies, and First Nations—that is responsible for forest planning and the development of management plans (including value protection, forest harvesting, silvicultural work including artificial regeneration).

CPAWS is a RYAM partner on the Caribou file in Ontario and is working collaboratively to propose a form of management that will lead to the maintenance and recovery of the Kesagami population (3-zone approach).

Woodland and Mountain Caribou Strategy: Orientations and State of the Population and Habitat

Guillaume Szor *Biol. Direction de la gestion de la faune du Nord-du-Québec*

Jérôme Rioux F. Eng. *M.Sc. Direction de l'aménagement de l'environnement forestier*

Sonia Légaré *Biol. Ph.D. Direction de la gestion des forêts du Nord-du-Québec*

Ministry of Forests, Wildlife and Parks of Québec

In April 2019, the Government of Québec unveiled the Woodland and Mountain Caribou Strategy development process and associated interim measures. Since then, regional operations groups (ROG) have been set up to identify issues and solutions for each of the large suitable areas, based on knowledge of the population's health status and the level of disturbance in the territory. It is from this perspective that the results of the inventory exercises conducted for the Detour population on the Quebec side (2001, 2006, 2011, 2019) were presented by Guillaume Szor. Recent inventories have recorded fewer caribou than in the past, however the calf to 100 females ratios are encouraging.

On the Quebec side, the habitat disturbance rate is 39% (considering harvesting, roads (with a 500 m buffer zone) and fires). Jérôme Rioux presented the developments that have taken place over the years in the management plan for the caribou north of La Sarre. Disruptions or disturbances related to mineral exploration are factors that should be included in the future. There may be a facet worth developing to consider the disturbance associated with these activities. Lastly, the overall government strategy for woodland caribou, specifically for the large suitable Detour area located north of La Sarre, was presented by Sonia Légaré. Until 2023, when the strategy will be endorsed and implemented, additional interim protection measures are being applied to the existing Caribou habitat management plan.



Woodland Caribou Monitoring Program – Detour Mine

Megan Hazell, Senior biologist and project manager Wood PLC, Consultant to Detour Gold



With its reopening in 2008, the Detour Gold mine in Ontario committed to implementing a woodland caribou monitoring program to identify critical habitat areas around the mine. The monitoring program (aerial surveys, the application and monitoring of 20 radio telemetry collars, habitat restoration) was conducted with members of the local First Nations.

The demographic results and maps that were presented were unprecedented. A variety of restoration techniques have been used to reduce the mine's footprint.

Mining Exploration Process – Probe Metals Inc.

Breanne Beh, Geologist, Probe Metals

Probe Metals is engaged in mineral exploration activities within the Detour Kesagami herd territory. Each stage of these activities was presented to provide the layperson with a better understanding: aerial surveys at low altitudes, rock sampling throughout the forest by the geologists, ground surveys with and without electric current, and finally, drilling. To perform drilling, a 5 m wide access must be cleared and the drill site itself requires a radius of 15 m.

The timber harvest is subject to the Regulation respecting the sustainable development of forests in the domain of the State (RADF) and requires a permit application for other purposes. Ideally, the drilling itself is done using crawler drills followed by mitigation measures. When drilling is located in a site targeted by the Habitat Management Plan for the caribou north of La Sarre, the drilling site and access corridors are reforested.



December 3, 2019

Caribou Research at the Université du Québec en Abitibi-Témiscamingue (UQAT)

Louis Imbeau, PhD. Professor- Researcher, UQAT

Louis Imbeau presented a research project conducted by one of his students that was designed to analyze the connectivity of caribou habitat north of La Sarre. Various maps showing anthropogenic disturbances in Quebec were also presented as part of the work done by the provincial Woodland Caribou Recovery Committee (Tyler Rudolph's work). His ongoing caribou research focuses, among other things, on the use of roads by wildlife.

Indigenous Forest Knowledge

Hugo Asselin, PhD, Professor-Researcher, UQAT

Hugo Asselin has conducted numerous research projects with Indigenous communities. He explained an approach to consider Aboriginal traditional knowledge on an equal footing with conventional scientific knowledge. This approach could help to understand which species are (were), where, when and why with a Spatial and temporal precision hardly reachable with "standard" scientific studies

Indigenous Knowledge About the Detour/Kesagami Woodland Caribou Herd

Jérémie Maillé-Bizier, Biol. Master's student at UQAT

Jérémie presented the research project conducted in collaboration with the Pikogan community in particular and the results he expects to draw from it (maps related to traditional knowledge, a contribution to the development of the next management plan, etc.). This project is the cornerstone for incorporating Indigenous knowledge into the creation of a strategy for the Detour-Kesagami Caribou population in Québec. The project will also involve other First Nations. Examples of participatory mapping were presented.

NCASI Caribou Nutrition Research Update

Kevin Solarik, Director of Forestry Research, National Council for Air and Stream Improvement (NCASI)

NCASI is an organization that supports member companies in achieving their environmental goals. NCASI conducted a research project on caribou forage, especially in spring, summer and fall, to help fill some knowledge gaps. To achieve this, a small herd of domesticated caribou and their foraging was monitored in British Columbia and Ontario.

Through this program, NCASI has gathered a broad range of findings to describe caribou foraging habits throughout the year including within the Abitibi River Forest in Ontario.



Note: The presentations summaries are intended to provide an overview. The PowerPoint presentations were shared with all participants and are available upon request.



Workshop Highlights

1. Data Sharing

In general, participants agreed that it is crucial that data be shared among the various stakeholders, but especially between the provinces, particularly on the status of populations and disturbances. The importance of building trust, of signing agreements concerning the use and sharing of data and providing compensation for data acquisition (particularly traditional and ecological knowledge) was emphasized. Data is currently available on both sides of the border, within the various Indigenous communities, the provincial natural resource agencies, the federal government (ECCC and NRCAN—particularly in forest science), as well as from Caribou research groups and at the Detour mine.

The regional Cree Government and the community of Moose Factory have information that they would potentially be willing to share, depending on the subject matter, under certain conditions, and following the signing of a confidentiality agreement. To paint a complete picture of the caribou population and to assess its likelihood of self-sufficiency, the provincial government would like to obtain data on subsistence hunting from communities. However, the lack of resources or capacity could be a barrier to this sharing at the community level, and funding should be provided. A list of available data was shared with participants.



Challenges identified

- Essential to share data between Ontario and Québec
- Capacity issues in communities to be able to provide the data needed (\$)

Proposals for actions:

- Request for data sharing from Detour Gold (Megan Hazell) by MFFP
- Request of nutrition data from Kevin Solarik (NCASI) by NRCAN
- Identify shared interests to share data with Indigenous partners (Jérémie Maillé-Bizier's project)
- Put Jérémie Maillé-Bizier in contact with Patrice Bellefleur

Potential collaborations:

- The Cree Nation Government might have harvest data or could be a good partner to access this data
- Some Traditional Ecological Knowledges and harvest data are available from Ontario First Nations communities.
- Partnership between the Caribou Committee and the Detour Mine regarding collar data and aerial surveys.
- Use of hunting cameras to validate the use of specific areas by caribou (David Gervais, NRCAN, Pascale Trudeau-Canasso, Pikogan)
- Patrice Bellefleur, ULaval; Jérémie Maillé-Bizier, UQAT: On how to establish agreements with Aboriginal partners on data sharing.

2. Securing joint Population Inventories

Since the Detour/Kesagami population spans the border between Quebec and Ontario, collaboration between the two provinces is essential for inventory exercises. Yet, it appears that organizational changes at OMNRF have placed constraints on conducting a joint inventory this year. A list of people to contact in Ontario along with their contact information is included in the rough notes on this workshop. The importance of employing a common methodology and of clarifying the area to be inventoried was emphasized. Quebec would like to see a joint inventory with shared teams and material.

Challenges identified

- Coordinate inventories between the two provinces;
- Define a common methodology for carrying out the inventory;
- Discussion on habitat scope – challenge of range delineation.

Proposals for actions

- Contact the people in charge of the inventories in Ontario through Quebec

Potential collaborations

- Work to implement existing data sharing between governments and other organizations (e.g. Detour Gold Mine).



3. Best Practices for Road Closure and Habitat Restoration Projects

Several road closure pilot projects were discussed during this workshop: the Valrennes site north of La Sarre (1.1 km); a trial area on the North Shore, Manicouagan sector (75 km); Cochrane (80 km). The main obstacles encountered during the projects were social acceptability, availability of labour, as well as Indigenous peoples' access to the land. It is vital to consult with trappers regarding the use of roads and the location of caribou but above all to involve them in the process. It was even suggested to make the trapline a unit of analysis for this type of project in areas where the territory has this type of system. In short, the early planning stage of a project (consultations) is essential.

To promote proper conduct in restoration projects, it was suggested to focus on examples that have worked well, and to select small sections. Working in collaboration with FPIInnovations, certain Innu communities, MFFP, OMNRF and the National Boreal Caribou Consortium's subgroup on Restoration should be considered. Temporary bridges would be helpful during road closures. Signage for closed roads (especially at the entrances) is an important safety feature. The use of techniques such as roadblocks (rocks, trees) was also suggested.

Challenges identified:

- Winter roads
- Road acceptability for tallyman (lead trapper)
- Health and safety issues (maximum 30-min. walk permitted by CNESST⁵)
- Social acceptability to reduce access
- Availability of manpower and equipment
- Seed availability (winter).

Proposals for actions

- Pilot project for road closures north of La Sarre
- Gather examples of road closure techniques.

Potential collaborations

- Collaborations could be considered with FP Innovation, certain Innu communities, the MFFP, OMNRF and the restoration sub-group of the National Boreal Caribou Consortium.

⁵ Commission des normes, de l'équité, de la santé et de la sécurité du travail (Standards, Fairness, Occupational Health and Safety Commission)

4. Management Plan and Timeline Harmonization

The working group primarily discussed how forest management planning works on each side of the border. This provided a better understanding of the processes in place for each province. It could take a long time to establish coordinated planning between the two sides. Further meetings will be needed to identify joint actions that could be taken by the Quebec and Ontario governments.



Potential collaborations

- Maintain a channel of communication between planners in Quebec and Ontario on the timelines of the plans.

5. Integration of Indigenous Traditional Knowledge

Many issues regarding this subject were brought forward during the workshops. Once again, it is essential that initiatives involving the sharing of traditional Indigenous knowledge be clear on how the data will be used and, where it is the wish of the Indigenous people, that its use be set out down in clear agreements (e.g., protection of sensitive sites/core conservation).

The cultural approach to obtaining data was discussed: meetings on site rather than in offices; talks instead of written surveys; “Elders in Residence” in company offices; qualitative data, narratives; winter rather than summer for the caribou.



In addition, it was acknowledged that traditional Indigenous data is of great value and could be compensated or exchanged (principle of reciprocity, agreements). The importance of the Elders' knowledge was emphasized in several respects. The need to reduce our human footprint and forestry opportunities were highlighted in several workshops, as were the consideration of cumulative impacts and the importance of having a more holistic view.

At a practical level, the OCAP™ principles⁶ were reiterated as an ethical framework for data sharing. It was suggested that more transborder work could be done and the possibility of pooling the knowledge of First Nations was raised. The type of knowledge varies, ranging from data on behaviour and land use (movement, sensitive areas) to observations of land use, etc. Existing tools, such as Cree Hunting Law, were mentioned.



While FSC®⁷ certification is generally recognized as a useful tool, it is essential that traditional Indigenous knowledge be considered in more than just Principle 3. The need for Indigenous “approval” (particularly through FPIC) is essential and helpful. Section #22 of the JBNQA⁸ was also mentioned.

Challenges identified

- How to obtain information in a culturally appropriate way
- Facilitate the dialogue, ensure “better proximity”
- Openness to sharing information, confidentiality and usage agreements
- Importance of explaining the purpose for obtaining information, how it will be helpful to improve industrial practices
- Recognize Indigenous community capacity.

Proposals for actions

- The La Sarre Caribou Committee will contact First Nation workshop participants to develop cross-border collaboration and engage with the Ontario government.

Potential collaborations

- Finding a program to facilitate the exercise of traditional activities
- Quebec can follow up to find ways to communicate with Ontario.

⁶ OCAP™ – Ownership, Control, Access and Possession

⁷ FSC® – Forest Stewardship Council®

⁸ JBNQA-James Bay and Northern Quebec Agreement

6. Harmonization of Habitat and Disturbance Analysis Between Provinces

Among the issues identified on this subject, considering that habitat information comes from two jurisdictions, it is essential to first ensure the consistency of information when conducting analyses. Such is the case for data on disturbances (road network, camps, mining activity) or habitat (forest inventory data). The issue of the “restoration of disturbances” also needs to be assessed as it appears there are differences between Ontario and Quebec.



With respect to disturbances, intensity was discussed, particularly the matter of buffer zones in relation to future protective measures (forestry, mineral exploration/mining, but also disturbance caused by noise, lighting, vehicles, etc.). A suggestion was made that predator data be included in caribou management plans. Potential collaboration with Abitibi River Forest Management (ARFM) was suggested for forests inventory data or directly with the Ontario government (OMNRF, Far North data). A description of the habitat data available on each side of the border is contained in the rough notes.

Challenges identified

- Consistency and harmonization of data used on both sides of the border.

Proposals for actions

- Contact the Abitibi River Forest planner and OMNRF to see if a habitat data exchange with Quebec is possible.

Potential collaborations

- General Manager from ARFM for Forest inventory data (and other) and Caribou Committee
- Between the governments of Quebec and Ontario for data sharing specific on habitat and disturbance rates.

7. New Operational Methods

During this workshop, there was a lot of discussion about the importance of properly managing road network development during forestry operations. Joint planning between the mining and forestry sectors was also identified as a crucial issue to address for the management of the Kesagami/Detour caribou population habitat. It is apparent that there needs to be more discussion with mining stakeholders to ensure the effectiveness of operational measures in

place in the territory. As well, engaging industry and the public in the protection of caribou is a critical factor in fostering the social acceptability of new operational approaches.

Under proposed actions, suggestions included characterizing timber in terms of constraints (forestry potential), reviewing the supply chain from forestry potential to operational reality and incorporating traditional knowledge in the work sites. It was also suggested that the operational trial projects on the North Shore and in the Saguenay–Lac-St-Jean region be used as a model, where the reduction of roads and residual forest has led to a reduction in costs.



Challenges identified

- Mining and forestry industries don't talk to each other much
- North of La Sarre is a winter operating area, more difficult to access (same for Northeastern Ontario)
- Roads implementation induce disturbance
- No Link between forest management and other industrial developments

Proposals for actions

- Testing a new ecosystem-based winter range for woodland caribou
- Recognizing traditional knowledge into at the operating site level
- Analysis of the cost-effectiveness of operations in the caribou plan area

Potential collaborations

- Improving links between forestry, mining and other activities
- Improved communications with Indigenous nations even where not mandatory
- Via the MFFP, get inspiration from the Pilot test in North Shore and Saguenay Lac-St-Jean regions.

Conclusion

The variety of organizations that were represented and a good atmosphere seemed to be the factors of success for this Forum. The great participation of various Indigenous communities was an absolute success. A great deal of information sharing was able to take place as a result. Regarding the content of the Forum, most people greatly appreciated the quality of the presentations and the good level of participation by everyone during the discussions. However, some people would have liked more time to ask questions and to increase the participation of Indigenous communities in the meetings. In addition, while cordially invited, Ontario partners from the Ministry of Natural Resources and Forestry were

unable to attend, which led to some general disappointment. Many stakeholders had been counting on their presence and participation to develop relationships and obtain information. In terms of the format, the location and quality of the Abitibiwinni community's hospitality was very much appreciated by all. It created a sense of belonging for the Indigenous communities present and was very beneficial to the discussions. For a follow-up to the forum, some suggested that it be held in Ontario. For the next steps, the Caribou Committee will monitor actions taken and further discussions will resume as part of the ROG. A reunion could be organized around the time of the next North American Caribou Workshop or other event on woodland caribou.





Appendix 1 : List of participants

Name of participant	Organisation
Hugo Asselin	Université du Québec en Abitibi-Témiscamingue
Don Bazeley	RYAM Gestion forestière Ontario
Breanne Beh	Probe Metals
Annie-Claude Bélisle	Pikogan (Abitibiwinni)
Annie Belleau	Ministère des Forêts, de la Faune et des Parcs
Pier-Olivier Boudreault	Société pour la Nature et les Parcs (Québec)
James Cananasso	Pikogan (Abitibiwinni)
Jean-Denis Cananasso	Washaw Sibi (Cris), Cérémonie
Diane Caouette	Traductrice
Alain Chabot	FPIInnovation
Wayne Cheezo	Waskaganish (Cris)
Benoît Croteau	Pikogan (Abitibiwinni)
Elaine Cyr	Ministère des Forêts, de la Faune et des Parcs
Florence Daviet	CPAWS
Matthieu Dessureault	Probe Metals
Gilbert Diamond	Waskaganish (Cris)
Harry Erless	Waskaganish (Cris)
David Erless Sr.	Ainé de Waskaganish (Cris)
Paul Fantin	Abitibi River Forest Management
Isabelle Fortin	Ministère des Forêts, de la Faune et des Parcs
Roxane Germain	Pikogan
Dave Gervais	Ressources Naturelles Canada
Léa Harvey	Ministère des Forêts, de la Faune et des Parcs
Megan Hazell	Wood plc - Detour Gold Mine
Louis Imbeau	Université du Québec en Abitibi-Témiscamingue
Jérémy Kistabish	Pikogan (Abitibiwinni), Pikogan, Photographe/Vidéo
Maurice Kistabish	Pikogan (Abitibiwinni), Cérémonie
Geneviève Labrecque	RYAM Gestion forestière Québec
Mélissa Leclair	Detour Gold Mine
Vicky Ledoux	Wahgoshig First Nation (Algonquins)
Sonia Légaré	Ministère des Forêts, de la Faune et des Parcs
Matthew Longchap	Mistissini (Cris)
Jérémy Maillé-Bizier	Université du Québec en Abitibi-Témiscamingue
Chris McDonell	RYAM Gestion forestière
Elvis Moar	Waskaganish (Cris)
Solange Nadeau	Ressources Naturelles Canada
Stéphane Ouellet	Gouvernement de la Nation Crie
Patrick Paiement	RYAM Gestion forestière Abitibi-Ouest
Dave Pearce	CPAWS – Wildland League
Geoff Quaile	Gouvernement de la Nation Crie
Tommy Rabbitskin	Oujé-Bougoumou (Cris)
Jérôme Rioux	Ministère des Forêts, de la Faune et des Parcs
Marion Seguy	RYAM Gestion forestière Québec
Marie-Eve Sigouin	RYAM Gestion forestière

Name of participant	Organisation
Kevin Solarik	NCASI
Doris St-Pierre	Traducteur
Guillaume Szor	Ministère des Forêts, de la Faune et des Parcs
Matthew Tanoush	Nemaska
Benoit Tendeng	Société pour la Nature et les Parcs (Québec)
Al Thorne	RYAM Gestion forestière Ontario
Aude Tousignant	Ressources Naturelles Canada
Clarence Trapper	Moose Cree First Nation
Jimmy Trapper	Ainé de Waskaganish (Cris)
Pascale Trudeau-Cananasso	Pikogan (Abitibiwinni)

Appendix 2: Forum evaluation

Table 1: Content Assessment

Organization	CONTENT					
	Quality of Presentations	Workshop Procedure	Plenary Discussions	Shared Information	Participation	Comments
Industry	4	3	4	3	3	-
Non-Profit Organization	3.7	3.3	3.0	3.7	3.7	<ul style="list-style-type: none"> Content is very “orientative” with respect to participation, good job
University	4	3.3	2.7	4	4	<ul style="list-style-type: none"> The workshop sessions may have been a bit long, people seemed tired during plenary
Government Agency	4	3.6	3.3	3.5	3.6	<ul style="list-style-type: none"> Ontario’s contribution would really have been valuable; A pleasant atmosphere in which to discuss such a difficult subject. Bravo! Perhaps insist on a more concise summary of the results of focus groups... I felt that people were losing interest. People participated well, but the schedule was a little tight for the amount of information that was shared Great diversity, a nice atmosphere of openness during the discussions
First Nations	4	3.7	3.7	3.7	3.7	<ul style="list-style-type: none"> Disappointment Ontario provincial government no show
Average	3.9	3.4	3.3	3.6	3.6	3.6 out of 4 for content

Table 2 : Format Evaluation

Organization	FORMAT					
	Duration	Location	Translation	Prior Info	Stakeholders Present	Comments and Next Event Proposal
Industry	4	3	N/A	4	3	<ul style="list-style-type: none"> • Refreshments and meals were better on Monday
Non-Profit Organization	3.7	3.7	3.7	3.3	3.3	<ul style="list-style-type: none"> • To prepare people well, provide more generalities
University	4	4	4	3	4	<ul style="list-style-type: none"> • Where is Ontario? Do it in Ontario next time • Excellent! Prior info could have been a little clearer but I'm just saying that to fill in the space
Government Agency	3.7	3.9	3.6	3.5	3.6	<ul style="list-style-type: none"> • Congratulations to the organizers • Except for OMNRF • Because no Ontario • The quantity and diversity of participants was phenomenal!
First Nations	3.7	3.8	3.7	3.5	3.6	<ul style="list-style-type: none"> • Really important to have representatives from both provinces. I know you found out at the last minute so I don't hold you responsible. • More parking
Average	3.8	3.7	3.8	3.5	3.5	3.6 out of 4 for format

Table 3: Recommendations for Next Meeting

Organization	NEXT MEETING										
	Data sharing	Habitat analyses	Disruption rates	Development plans	Habitat restoration	Traditional Indigenous knowledge	Scientific knowledge	Inventories	Operational approach	Other themes to be addressed	Comments that would contribute to the success of the next one
Industry	N/A	3.0	N/A	4.0	4.0	3.0	4.0	4.0	4.0	<ul style="list-style-type: none"> Access to seed for the rehabilitation of sites in winter, a problem according to MFFP 	<ul style="list-style-type: none"> To have the people from OMNR present
Non-Profit Organization	4	3.7	4.0	3.7	3.7	4.0	3.0	3.3	3.7	RAS	
University	3.7	3.7	3.5	3.0	3.0	3.7	2.5	3.3	3.3	<ul style="list-style-type: none"> Experiences in other jurisdictions/nations or with other animals to provide additional insight. 	<ul style="list-style-type: none"> Nothing to say. There's no need to change a winning formula!

Table 3: Recommendations for Next Meeting (Continued)

Organization	NEXT MEETING (continued)										
	Data sharing	Habitat analyses	Disruption rates	Development plans	Habitat restoration	Traditional Indigenous knowledge	Scientific knowledge	Inventories	Operational approach	Other themes to be addressed	Comments that would contribute to the success of the next one
Government Agency	2.5	3.3	2.8	2.9	2.1	3.1	2.9	2.9	3.0	<ul style="list-style-type: none"> • Climate Change and Caribou Strategy • Get feedback from another region (industrial, Indigenous community) tackling the caribou issue 	<ul style="list-style-type: none"> • The presence of OMNRF is expected • Maybe have more researchers studying caribou (not just the Detour herd) • Maintain communication and relationships • Do it in a community (Pikogan or another). Around the May conference, good idea • Maintain communication and relationships
First Nation & Cree Government	3.0	3.0	2.5	3.0	3.5	4.0	3.5	3.5	1.0	<ul style="list-style-type: none"> • How to organize all the work, structure of the project 	<ul style="list-style-type: none"> • SharePoint, Google
Average	3	3	3	3	3	4	3	3	2	3 out of 4 for the next meeting	

Number of evaluations per participant category

- Industry: 1
- Non-Profit Organization: 3
- University: 3
- Government Agency: 8

First Nation and Cree Government: 3

Appendix 3: List of Workshop Participants by thematic

Ronde 1

Table #1	Contribution des connaissances traditionnelles autochtones		Hugo Asselin James Cananasso Vicky Ledoux Wayne Cheezo Matthew Tanoush Jérémy Maillé-Bizier Pascale Trudeau Cananasso Solange Nadeau	UQAT – Professeur Pikogan Wahgoshig First Nation Waskaganish First Nation Cree of Nemaska UQAT – Étudiant maîtrise Pikogan RNCAN
	Autochtone 1			
Table #2	Contribution des connaissances traditionnelles autochtones		Geneviève Labrecque Dave Gervais Melissa Leclair Lea Harvey Guillaume Szor Matthew Longchap Gilbert Diamond Harry Erless	RYAM RNCAN Detour Gold Mine MFFP MFFP Mistissini Waskaganish Waskaganish
	Autochtone 2			
Table #3	Nouvelles méthodes opérationnelles de foresterie		Sonia Légaré Benoit Tendeng Dave Pearce Matthieu Dessureault Breanne Beh Louis Imbeau Alain Chabot Benoit Croteau	MFFP SNAP Qc CPAWS – Wildland League Probe Metals Probe Metals UQAT FPInnovation Pikogan
	Opération			
Table #4	Harmonisation des analyses de perturbations et de l'habitat interprovincial		Pier-Olivier Boudreault Annie Belleau Kevin Solarik Don Bazeley Clarence Trapper Megan Hazell Annie-Claude Belisle Marion Seguy	SNAP Qc MFFP NCASI RYAM Gestion forestière Moose Cree Wood PLC Pikogan RYAM
	Habitat			
Table #5	Bonnes pratiques pour les projets de fermeture de chemins ou de restauration d'habitat		Jérôme Rioux Patrick Palement Stéphane Ouellet Tommy Rabbitskin Chris McDonell Isaac Voyageur David Erless	MFFP RYAM Gestion forestière GNC Oujé-bougoumou RYAM Forest Management Mistissini Waskaganish
	Restauration			
Table #9	Harmonisation des plans d'aménagement et des échéanciers		Al Thorne Isabelle Fortin Florence Daviet Paul Fantin Elaine Cyr Roxanne Germain Geoff Quail Aude Tousignant	RYAM Gestion forestière MFFP CPAWS Abitibi River Forest Management MFFP Pikogan GNC RNCAN
	Plan			

Ronde 2

Table #7	Partage de données générales	Guillaume Szor Jérémy Maillé-Bizier Megan Hazell Stéphane Ouellet Benoit Tendeng Wayne Cheezo Annie-Claude Belisle Solange Nadeau	MFFP UQAT – Étudiant maîtrise Wood GNC SNAP Waskaganish Pikogan RNCAN
	Données 1		
Table #8	Partage de données générales	Pier-Olivier Boudreault Dave Gervais Isaac Voyageur Aude Tousignant Clarence Trapper James Cananasso Vicky Ledoux Pascale Trudeau Cananasso	SNAP Qc RNCAN Mistissini RNCAN Moose Cree Pikogan Wahgoshig Pikogan
	Données 2		
Table #3	Nouvelles méthodes Opérationnelles de foresterie	Jérôme Rioux Hugo Asselin Elaine Cyr Roxane Germain Patrick Paiement Kevin Solarik	MFFP UQAT MFFP Pikogan RYAM Gestion forestière NCASI
	Opération		
Table #1	Contribution des connaissances traditionnelles autochtones	Chris McDonell Tommy Rabbitskin Geoff Quail Alain Chabot Benoit Croteau David Erless Marion Seguy Sonia Légaré	RYAM Gestion forestière Oujé-bougoumou GNC FPInnovation Pikogan Waskaganish RYAM Gestion forestière MFFP
	Autochtone 1		
Table #5	Bonnes pratiques pour les projets de fermeture de chemins ou de restauration d'habitat	Marie-Eve Sigouin Gilbert Diamond Matthew Tanoush Isabelle Fortin Melissa Leclair Louis Imbeau	RYAM Waskaganish Nemaska MFFP Detour UQAT
	Restauration 1		
Table #6	Bonnes pratiques pour les projets de fermeture de chemins ou de restauration d'habitat	Don Bazeley Matthew Longchap Florence Daviet Matthieu Dessureault Breanne Beh Harry Erless	RYAM Forest Management Mistissini CPAWS Probe Metals Probe Metals Waskaganish
	Restauration 2		
Table #9	Arrimage des inventaires entre le Québec et l'Ontario	Dave Pearce Paul Fantin Al Thorne Lea Harvey Geneviève Labrecque Annie Belleau	CPAWS – Wildland League ARF RYAM Forest Management MFFP RYAM MFFP
	Inventaire		



This Forum was part of the "Collaborative Approach to Habitat Management for the Detour/Kesagami Transboundary Caribou" project funded by Environment and Climate Change Canada



Environment and
Climate Change Canada

Environnement et
Changement climatique Canada