



GWICH'IN RENEWABLE RESOURCES BOARD

# news

Fall 2017



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### who we are

The **Gwich'in Renewable Resources Board (GRRB)** was established under the guidance of the Gwich'in Comprehensive Land Claim Agreement (GCLCA) to be the main instrument of wildlife, fish and forest management in the Gwich'in Settlement Area (GSA).

### who we work with

The GRRB works with its co-management partners - Gwich'in Tribal Council (GTC), Government of the Northwest Territories (GNWT), Environment and Climate Change Canada (ECCC), Fisheries & Oceans Canada (DFO) - to communicate with the public and encourage conservation of renewable resources in the GSA. The GRRB works in collaboration with the four Renewable Resources Councils (RRCs) in the four communities (Inuvik, Tsiigehtchic, Fort McPherson, and Aklavik) to educate and promote sustainability of resources within the GSA.

### our mission

The GRRB works in cooperation with the Gwich'in people, governments and stakeholders and in accordance with the GCLCA to effectively protect, conserve and manage renewable resources in the GSA. It does this in a respectful, transparent, communicative and inclusive manner, using the best available traditional and scientific knowledge.

### our vision

The GRRB is a model of renewable resources co-management. Working with its partners, the Board plays a leadership role in ensuring that the fish, forests and wildlife of the GSA remain healthy and sustainable.

### our mandate

The GRRB is the main instrument of wildlife, fish and forest management in the GSA. The Board acts in the public interest, representing all the parties to the Gwich'in Comprehensive Land Claim Settlement – the Gwich'in, the people of the Northwest Territories and all Canadians.





Photo credit: N. Westover, GRRB

## Amy Amos executive director

*As the Executive Director for the GRRB, I lead a team of dedicated experts to implement the Board's decisions and responsibilities in accordance with the land claim agreement. I am committed to building strong relationships with respect, compassion and integrity.*

A Nihtat Gwich'in participant, I was born in Inuvik and grew up in Halifax, Nova Scotia with my father, Wallace Thompson. My mother is Susie Thompson (Linklater/Kaye) from the Kaye & Stewart family.

2018 will mark my 12th year with the GRRB! I was hired as a biologist and was promoted to Executive Director in 2009. My main job is to ensure that the Board's direction is implemented at the staff level. My job description can be broadly categorized into personnel management, financial management, Board administration and liaison activities.

**Personnel management** In 2017, there were four major

staffing updates to our permanent team. In January 2017, Sarah Lord was hired as our new Fisheries & Forestry Biologist. We also received notice that our long-service Wildlife Biologist, Kristen Callaghan, would be leaving us by the end of summer 2017. This allowed lots of time to plan for her replacement. In June 2017, we hired Édouard Bélanger as our new Wildlife Biologist. Kristen and Édouard had some overlap in June, then she took leave as she prepared for her big move. In July 2017, I am pleased to announce that we finally secured sufficient funding to offer Kaytlin Cooper, our Species at Risk Biologist, a permanent, full-time employment contract with the GRRB. In July, we also held an open farewell gathering for Kristen to thank her and wish her all the best. The new staff are getting into the communities and settling into their positions well. The rest of our permanent team has been with us for a while. Cheryl Greenland, GRRB Office Manager, joined us in February 2009. Janet Boxwell, GRRB Renewable Resources Manager, has been with us since August 2010.

For casual employment, we hired two summer staff. Jordan Norman-Goose was hired as our Technician Trainee. Jordan is a Gwich'in Participant entering his second year of the Environment and Natural Resources Technology Program here in Inuvik. This was Jordan's second year with the GRRB and his big project was supervising youth to help with the small mammal monitoring project and updating the GRRB's equipment inventory. Joelle Charlie was hired as our Summer Student. Joelle is a Gwich'in Participant entering Grade 12 at East Three Secondary School. She demonstrated strong office skills and helped us catch up on some of our administrative

and file management items. We continue to have a remote contract in place for website maintenance and administrative assistance with Chelsea Hermus on an ongoing basis.

Our team environment is important to me. We continue to work together and hold regular staff meetings, whether it's with a formal agenda or over popcorn to casually discuss our current projects. I also believe that professional development is important. Education is continual and we can always learn how to improve ourselves. Since our last newsletter, our team has completed various training that you can read about in their individual updates. I took a refresher course "Reading and Understanding Financial Statements" in June 2017 and "Media Training" in July 2017.

To end the summer and to celebrate our hard work, we held a summer gathering at Cheryl's cabin on August 25. We will be holding our Christmas gathering in January 2018.

**Financial management** The major financial update is that the GRRB received an increase to its core operating budget. They used the increased funds to make the Species at Risk Biologist position permanent, make staff salaries more competitive, add more casual wages and to add funds for items we were unable to budget for in the past (such as computer hardware replacements, community consultations, youth engagement, management planning and communication needs).

The GRRB Finance Committee continues to meet quarterly to review financial details. The Committee, including members Burt

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Photo credit: C. Greenland, GRRB

Hunt, Doug Doan, Sarah Jerome, Amy Amos and Cheryl Greenland, provides advice to the GRRB at its quarterly teleconference.

As staff, we continue to seek outside funding to offset project and training costs. This reporting period, we were able to get outside funding to assist with summer wages, training costs, meeting attendance and wildlife management project expenses.

The Board has a small pot of funding called the Wildlife Studies Fund. This is funding for research projects, youth work experience and scholarships. The Board decided on the project allocations in February 2017 and funds were released in April 2017 for projects to be completed between April 1, 2017 to March 31, 2018.

**Board administration** The major update for this category is that the GRRB held a planning

Workshop on September 20 and 21, 2017 in Aklavik. The first day focused on the GRRB's Research Priorities and the second day on the Strategic Plan for the 2018-2023 period. We thank the

University of Alberta for funding a graduate student to help us with the research priority preparations and to Indigenous Services Canada (formerly Aboriginal Affairs and Northern Development Canada) for the supplemental funding to hire a facilitator for this Workshop. This newsletter highlights some of the outcomes from those meetings [see Page 7].

Since our last newsletter, the GRRB held three teleconferences (June 5, July 27 and October 31). Each of these were preceded by a Finance Committee call. Some of the major files discussed at these meetings were the *Fisheries Act* review, Species at Risk, process for commercial fishing activity and the action plans for Bluenose-West, Cape Bathurst and Bluenose-East caribou herds. We continue to be engaged on all topics that fall under the GRRB's mandate.

**Liaison and Communication** To do our work, we need to have strong working relationships internally

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Photo credit: Bobbie Jo Greenland Morgan



and externally with all of our co-management partners and with the public. Here are some of the highlights that I was involved in over the past year.

For communication with the RRCs, I have been in the communities quite a bit. In August, I did a round of public meetings, including RRCs, to apply the community relevance criteria to the GRRB's research priorities. I attended the grizzly bear consultations on the proposed *Species at Risk (NWT) Act* listing in September. I also try to attend the Nihtat RRC meetings, when time permits. I did a community tour in June, presenting at each of the schools to promote the GRRB's summer programs and encourage education in the science field.

For communication with the public, we use this newsletter, our Conservation Calendar, our Facebook page and our website to engage the public. I have been meeting with researchers more often to encourage meaningful engagement in their research projects and to work with communities to achieve their research interests. I presented on this topic at the University of Alberta on November 27, the University of Manitoba on November 29 and at the ArcticNet Conference on December 14. These presentations were planned in combination with existing travel plans as a method to engage researchers.

I also delivered a presentation at the Modern Treaty and Reconciliation Conference in Gatineau, Quebec on November 14-15. I was asked to be plenary speaker (as a young person managing an organization established under the land claim). I was asked to talk about how

we interpret the spirit and intent of the land claim for the GRRB's chapters. I spoke about how the land claim ensures the Board has good consultation methods and works with government and the community to carry out its mandate. I felt proud to talk about how the Board has strong relationships built with the communities.

I hope that you enjoy our newsletter. If you have questions or comments about what we do at the GRRB, call me or any of our staff any time. Our contact information can be found on the last page of this newsletter and on our website.



Photo: Elaine Alexie

## Research Priority Process in the Gwich'in Settlement Area

This presentation will focus on how the Gwich'in Renewable Resources Board works with Northern communities and its co-management partners to establish research priorities in the Gwich'in Settlement Area, which is located in the Northwest Territories. It will touch on what type(s) of support we can offer researchers who have projects related to our research priorities. It will also provide advice on best practices, including how to engage meaningfully with northern Indigenous communities such as the Gwich'in, and how to develop and establish projects that align with community research interests.



### Amy Amos

Executive Director

Gwich'in Renewable Resources Board

#### Speaker Bio

Amy is a Nihtat Gwich'in First Nation and participant of the Gwich'in Comprehensive Land Claim Agreement (GCLCA). She was born in Inuvik, NT and raised in Halifax, Nova Scotia. In Halifax, Amy completed a Bachelor of Science degree in Biology at Mount Saint Vincent University (2004) and researched shellfish for Fisheries and Oceans Canada (2000-2005). In January 2006, she moved back to Inuvik to work as a Biologist for the Gwich'in Renewable Resources Board (GRRB), the co-management board responsible for wildlife, fish and forest management in the Gwich'in Settlement Area. In March 2009, she accepted the position of Executive Director with the GRRB. She supervises 5-7 staff and implements Section 12 and 13 of the GCLCA.

**November 27th**  
**7 pm SAB 150**



UNIVERSITY OF ALBERTA  
FACULTY OF NATIVE STUDIES



ualbertanorth



## Eugene Pascal board chairperson

Drin Gwinzii (Good Day).

I have been the Chair of the GRRB since 2013. My current term is ending in November 2018.

I am really happy with the work the Board has been doing over the years and I think you will see that as you read through this newsletter. We have a really strong Board and we work together really well. There are members with a government background, members with a policy background, members with an enforcement background and some of our own people with strong cultural and traditional knowledge background.

We have a new member, Margaret Begg, that I want to personally welcome to the Board. Margaret is a Gwich'in Participant that spent most of her career working with government.

We also have a strong staff team. Staff members work hard in the communities, gathering information and getting it out to our people.

We have a strong group of people that work together in a respectful manner and it makes me really proud to be part of this team.

This past September, we held a Strategic Planning Workshop in Aklavik. It was great to see public come out and join into this discussion and for us all to sit together at the same table. The Workshop was filled with laughter and that helped set a good tone for the discussions we needed to have.

As the Chair, I am always in communication with Amy Amos, our Executive Director. Over this past year, we held four teleconference meetings (March, June, July and October) and held the Strategic Planning Workshop in September. I also chaired the Rat River Working Group Communications meeting in June.

I remain active on the following Committees and Working Groups:

- Wildlife Act Working Group (WAWG)
- Conference of Management Authorities (CMA)
- Advisory Committee for the Cooperation for Wildlife



Management (ACCWM)

- Rat River Working Group (RRWG - Chair)
- West Side Working Group (WSWG - Observer)
- Aboriginal and Northern Development Canada (AANDC)

I continue to work with Amy to give advice to the Board and staff when needed. Thank you Amy and staff for your work to support the Board and for supporting me in my role as Chairperson.



Photo credit: GRRB

## GRRB Winter Board Meeting February 6-8, 2018 - Inuvik

The GRRB will be accepting applications for:

- Wildlife Studies Fund, including youth work experience funding (section 6)
- Scholarships to be considered for 2018-19 funding

The deadline to submit an application is **January 10, 2018**. Funding decisions for the Wildlife Studies Fund require RRC support.



# GRRB Board

**Eugene Pascal**  
Chairperson (GRRB)



Order in Council  
appointments

Nominating  
Agency

Federal  
government

Territorial  
government

**Margaret Begg**  
Member (GTC)



**TBA**  
Member (GTC)

Vacant  
since  
Sept. 15,  
2016

**TBA**  
Member (GTC)

Vacant  
since  
June 15,  
2010

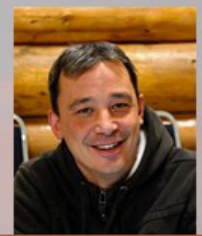
**Burt Hunt**  
Member (DFO)



**Doug Doan**  
Member (EC/CWS)



**Jozef Carnogursky**  
Member (GNWT)



**TBD**  
Alternate (GTC)

Vacant  
since  
Oct. 19,  
2016

**TBD**  
Alternate (GTC)

Vacant  
since  
Oct. 19,  
2016

**Sarah Jerome**  
Alternate (GTC)



**Ron Allen**  
Alternate (DFO)



**TBA**  
Alternate (EC/CWS)

Vacant  
since  
May 13,  
2013

**Tracy Davison**  
Alternate (GNWT)



Photos: GRRB

## board member updates

As always, our Board members have been active! Here is a summary of some of the committees they have been involved in, meetings they have attended and training courses they have undertaken:

### Committees/Working Groups:

- Advisory Committee for Cooperation on Wildlife Management
- Safety Policy Development Committee
- Integrated Fisheries Management Plan (IFMP) Steering Committee
- NWT Board Forum
- Species at Risk Committee
- Wildlife Studies Fund Committee
- Staff Recruitment Committee

### Meetings/Training:

- Review of Board orientation material (M. Begg)
- IFMP Steering Committee call (B. Hunt)
- June GRRB teleconference (all except M. Begg)
- Chair Rat River Working Group communication meetings (E. Pascal)
- Finance Committee call (D. Doan, B. Hunt, S. Jerome)
- *Fisheries Act* teleconference (R. Allen)
- July GRRB teleconference (all except J. Carnogursky)
- *Wildlife Act* Working Group teleconference (R. Allen, E. Pascal)
- CMA teleconference (E. Pascal, T. Davison)
- Joint Conference of Management Authorities (CMA)

- & Species at Risk Committee (SARC) Workshop, Yellowknife (T. Davison, D. Doan)
- GRRB September Board meeting and Workshops (M. Begg, T. Davison, D. Doan, B. Hunt, S. Jerome, E. Pascal)
- Wildlife Management Advisory Council tour meetings (E. Pascal)
- ENR Legislative Initiatives teleconference (E. Pascal)
- *Wildlife Act* (Section 15) meeting, Yellowknife (J. Carnogursky, E. Pascal)
- *Wildlife Act* Working Group meeting, Yellowknife (R. Allen, J. Carnogursky)

### Staffing Activities:

- Wildlife Biologist competition (R. Allen)





Photo credit: Natalie Labossière



Photo credit: Liz Wright





## Fall Planning Workshops

The GRRB held its fall planning workshops in Aklavik this past September. September 20, 2017 was our Priority Research and Management Needs Workshop. September 21, 2017 was our Strategic Planning Workshop. Both meetings were open to the public and everyone was welcome to attend.

### Priority Research and Management Needs Workshop

Every five years, the GRRB identifies research and management needs in consultation with its co-management partners to address community concerns and guide the GRRB's internal and external research agenda relating to the GRRB's mandate for wildlife management.

Establishing research and management priorities is part of the GRRB's strategic planning; the last planning cycle comes to term in 2018. The GRRB planned this single-day Workshop to set research and management priorities for the next five years, to collaborate directly with co-management partners and prioritize research and management needs and initiatives in the GSA. The



Photo credit: J. Boxwell, GRRB

goal of this Workshop was to work through the GRRB's list of Research Interests and identify priority research and management needs.

A total of 25 people participated in the Workshop. Participants included GRRB Board members and staff, representatives from all four RRCs and members of the public. Other co-management partners were consulted in a pre-engagement process that was executed by the GRRB to consult with as many stakeholders as possible. These included: Fisheries and Oceans Canada (DFO), the Aurora Research Institute (ARI), the Cumulative Impact Monitoring Program (CIMP) and Government of the Northwest Territories (GNWT) Department of Environment and Natural Resources

(ENR), the RRCs and the public. Pre-engagement enabled the GRRB to begin the priority-setting process.

The objectives of the Workshop were to: 1) review the GRRB's progress in research over the last five years; 2) review results of the pre-workshop consultation with communities on research interests; 3) apply priority-setting criteria to the list of research and management needs; 4) provide GRRB staff with direction on management plan priorities; 5) provide the GRRB and its staff with overarching direction on research activities and 6) obtain input on best practices for research activities in the GSA.

The start of the Workshop focused on establishing a common understanding of the current context for planning and set the stage to identify Research Priorities. First, the group reviewed the agenda and workshop objectives. This was followed by a Context-Setting Presentation by the GRRB's Executive Director, Amy Amos. Her presentation reviewed: the GRRB mandate; the Research Priority process (how Research Interests are processed before being ranked as priorities); a progress report on Research Priorities for 2013-2018; and introduced next steps.

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## What are Research Priorities and how are they used?

Research Priorities are linked to the GRRB's mandate and are used to determine what the GRRB spends time and money on, including:

- how staff time is allocated
- which projects receive funding
- which initiatives get letters of support, in-kind support and other forms of support from the GRRB

Research Priorities are not a judgment about what research is needed in the GSA or what research is important to communities and partners.

Research topics that are not retained as Research Priorities are not lost; the GRRB will continue to keep track of these interests, share them with other parties and look for opportunities to have them addressed in another way.



Although the Research Interest list was being pared down to identify priorities for the next five-year planning cycle, all Research

The image shows two handwritten tables on a grid background, likely for a resource management or conservation project. The tables are organized into columns for different criteria and a final 'Total' column. The top table lists various 'NEED' categories, and the bottom table lists other 'NEED' categories. Both tables have columns for 'Value of Resource', 'Level of Resource', 'Level of Urgency', 'Importance to partners', and 'Total'. The tables are filled with handwritten numbers, and some rows are highlighted in yellow.

**Top Table:**

NEED	Value of Resource	Level of Resource	Level of Urgency	Importance to partners	Total
1. Off	3	1	3	4	13
2. Grizzly bear	3	3	5	5	19
3. Wolf	4	5	3	4	19
4. Beaver	5	3	4	2	17
5. Muskrats	5	5	4	4	23

**Bottom Table:**

NEED	Value of Resource	Level of Resource	Level of Urgency	Importance to partners	Total
6. Smoother hare	5	4	1	1	16
7. Songbirds	5	3	3	2	16
8. Songbirds	2	2	3	2	11
9. Daily Varden	3	5	2	5	20
10. All fish	5	1	2	4	17
11. Coney	3	5	1	5	16

The 2018-2023 Strategic Plan is intended to guide the work of the GRRB over the next five years.







Photo credit: J. Boxwell, GRRB

interactive exercise, participants discussed the values that arose from their education, community and aspirations. The group made linkages and identified the higher values that were to be retained as the GRRB's values.

The following goals encompass the GRRB's strategic priorities and form our focus for the next five years. These priorities resulted from discussions and analysis of community visions, resource needs and the current operating environment. These six strategic goals will be the basis from which the GRRB will develop objectives and workplans:

- 1. Identify and prioritize needs and develop and implement renewable resources management plans and research**
- 2. Strengthen Gwich'in participation and use of traditional and scientific knowledge on matters that affect wildlife, fish, forest, habitat and environment**
- 3. Provide quality advice to governments on matters that affect wildlife, fish, forest, habitat and environment, in accordance with the GRRB's Consultation Policy**
- 4. Strengthen and maintain strong, positive and respectful working relationships with Gwich'in participants, co-management partners and stakeholders**
- 5. Maintain an effective, efficient, exemplary administration**
- 6. Maintain a healthy, positive and respectful working environment**

It sets out broad directions for the GRRB by listing our strategic priorities. It aims to help GRRB employees identify how their work fits into the bigger picture. It provides a means for community stakeholders to understand the direction that the GRRB is headed and how the organization is aligning its activities with the communities' larger planning. The Strategic Plan's purpose is to support the GRRB in continuing to achieve high levels of performance.

- approach to how resources are allocated and operational direction is provided
- communicate the GRRB's strategic direction within the organization and with partners and stakeholders
  - describe the opportunities and challenges arising in the GSA
  - provide overarching vision, mission and values to serve as guiding principles to the GRRB's activities

The Strategic Plan is an evolving, living document with annual reviews and updates. The Strategic Plan is intended to:

- support a more integrated

As part of its strategic planning, the GRRB needed to examine and find consensus on our values. We asked the question "In the decision-making process, what are the GRRB's guiding principles?" In an



Photo credit: J. Boxwell, GRRB





Photo credit: C. Greenland, GRRB

## Édouard Bélanger wildlife biologist since June 2017

I began working as the new Wildlife Biologist on June 19, 2017. I had the opportunity to overlap two weeks with Kristen Callaghan. I then took over most of Kristen's active projects. I spent a great amount of time reading and catching up on these ongoing projects.

Here is a small personal biography so you can learn about me! I grew up in Québec City and in Puvirnituq, an Inuit community in Nunavik. I spent my childhood playing in the tundra and boreal forest, going out on hunting, fishing and outdoor trips. I completed a Fish, Wildlife and Plants Technician degree in Québec City, followed by a bachelor's degree in Biology at Université de Sherbrooke. During those years, I was lucky enough to work across Canada on several research projects. I worked with various species such

as red squirrels, Canada lynx and hare in the Yukon, white-tailed deer, grouse and chipmunk in Québec and hoary marmot and mountain goats in Alberta.

I recently completed a master's degree at Université Laval, where I studied habitat selection, space use and demography of the Torngat mountains caribou in northern Québec and Labrador. I am looking forward to working together with the GRRB's partners and the Gwich'in people and working on the amazing wildlife in the GSA. I wish to thank the GRRB for entrusting me with this awesome position. I hope we will have a great time working together in the years to come.

**Management Planning Cape Bathurst, Bluenose West and Bluenose East Caribou Herds Management** I have taken over Kristen's place as a participant of the Advisory Committee for Cooperation on Wildlife Management (ACCWM) Working Group. This group is tasked with completing the management plan. The work is mainly to continue developing the Communication and Education materials for the annual monitoring table. This table is used to assess the status of the herds.

I participated in a teleconference and an in-person meeting in Yellowknife with the Working Group. The Working Group also finalized the draft terms of reference for the Education and Communication Working Group for the Member Board to review.

We completed a community engagement PowerPoint to be used in the various regions. This will be used in community meetings to get traditional knowledge on the herds to complete the annual monitoring table.

I held a community consultation to get information for completing the monitoring table. I worked mainly with the Nihtat RRC, as they are the main group interested in these caribou.

**Potential Changes to Moose Harvest Reporting** Our approved Moose Management Plan (December 2000) identifies a need to understand the effect of harvest on the moose population in the GSA. Wildlife Management Advisory Council (NWT), GRRB and ENR discussions in 2016 focused on the lack of reporting on harvested moose (both resident and aboriginal), specifically for resident hunters. Kristen Callaghan worked on a poster and brochure to a) engage resident hunters about a possible change from voluntary to mandatory resident reporting and b) to seek public input on a possible alteration of the resident hunting zone to open up new areas.

I finalized the poster and brochure and posted them in the four GSA communities, with the help of the RRCs and Renewable Resources Officers. I will collect brochures and comments during the fall. Resident hunters have already started contacting me for more information.

**Research Grizzly Bear Project: Reducing Negative Bear-Human Interactions on the Dempster Highway** I took over the project started in 2013 by Kristen Callaghan. This project was in response to growing concerns of grizzly bears along the highway. More grizzly bears were seen and were showing habituated behaviour toward human activities. Awareness and education posters were posted along the highway, along with brochures to collect information on the behaviour of bears that had

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Richardson mountains. The survey was completed in four days and I participated during the last day. Two community field assistants from Aklavik helped during the survey. Sheep (and any other wildlife spotted) were counted and recorded. Numbers went up from 496 in 2014 to 647 in 2017.

Following the survey, Tracy Davison (ENR) and I produced a technical report. The report was shared with ENR, the RRCs and the public. The GRRB decided to lift the voluntary closure of the beneficiaries harvest, as suggested in the action table of the draft management plan.

been seen. I reviewed and updated the poster and brochures and sent these to the four communities in the GSA. These were also passed to Mike Sutor of the Yukon Government (YG), who helped distribute them in the Yukon. Posters and brochures were set up in band offices, RRCs, post offices, gas stations, grocery stores and tourist centres. They have started to come back to my office with useful information.

### Small Mammal and Hare Research

Both projects have been going on for several years, led by ENR. I completed the hare pellets survey in July with the help of Jordan Norman-Goose (our technician trainee) and Janet Boxwell. Prior to fieldwork, bear safety and field safety were reviewed. Fieldwork took three days, where four transects were completed around Inuvik. This protocol has been the same every year. After fieldwork, I compiled the data.

Small mammal trapping was done in August. Jordan, two youths from Inuvik and I spent six days setting up traps and collecting species around Inuvik. Prior to fieldwork, I trained the youths in bear and fieldwork safety and in trapping,

as well as how to measure the specimens we collected. Every day, once the fieldwork was complete, the youth and the technician trainee took several measurements (species or genus, sex, length of the body, length of the tail, mass, reproductive status). This was done under my supervision.

**Dall's Sheep Survey** In June 2017, a Dall's sheep survey was conducted as a co-operative project between ENR, GRRB and YG in the Northern

Amy and I were interviewed by the Inuvik Drum. An article was published following this interview.

I produced a poster to inform Dall's sheep hunters and the public on the GRRB's decision to lift the voluntary closure of the beneficiary harvest. The poster was distributed in various places (Band offices, RRCs, post offices, gas stations) in the four communities.

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**Technical Advice** I provide advice and information to the Board and Executive Director when required.

**Wildlife Act Working Group** I advise the GRRB regarding new ticketable *Wildlife Act* offences and infractions. Renewable Resource Officers currently have limited ability to issue tickets for *Wildlife Act* offences because there are simply not enough ticketable offences listed in the Summary Convictions Procedures Regulations. GNWT proposed more ticketable offences. I reviewed the documents and letters relating to this project and prepared a briefing note for the GRRB. I then participated in the teleconference where the GRRB was invited to present comments and concerns on the new ticketable offence and infractions proposed by ENR.

#### **Cooperative Work on GRRB Tasks**

I assisted the Renewable Resources Manager by providing comments on the KBL Environmental Ltd. Inuvik Soil Treatment Facility and the Tuktoyaktuk Peninsula and Bluenose West caribou collaring program. I provided comments to the Executive Director concerning a letter of introduction from the

Association of Polar Early Career Scientists (APECS). I participated in the Inuvik community meetings on the federal and territorial status of the barren-ground caribou. I also organized the GRRB staff summer get-together.

**Liaison** As the new Wildlife Biologist, I have presented myself to all four RRCs (Nihtat, Gwichya Gwich'in, Tetlit and Ehdiitat) during meetings to start building strong connections. I contacted several of our partners and possible future collaborators. I introduced myself and suggested working together on management and research projects relevant to the GRRB. I believe that partnership and collaboration can greatly help my ability to conduct beneficial research, monitoring and management activities relevant to the GRRB. Some of my recent activities and communications are:

**Inuvik Bioblitz 2017** I participated in the Inuvik Bioblitz as the GRRB Wildlife Biologist. During this event, people collected and identified as many species as possible in Inuvik, mostly around Boot Lake.

*"It is organized to provide opportunities for local involvement, including specific people with local knowledge and traditional knowledge. Bioblitz Canada 150 projects are being coordinated by the Prince of Wales Northern Heritage Centre, Environment and Natural Resources, Aurora Research Institute, Canadian Heritage and Canadian Wildlife Federation for the Canada 150 celebration."* Bioblitz Canada

I helped participants identify species seen during the day. Several specialists were present, especially for insects. I focused more on wildlife, including birds. I also set up a table with various promotional items from the GRRB and lent tools to kids for catching insects.

**Training** Along with the GRRB staff, I received a two-day course on media training. This course gave us basic knowledge on how to behave and correctly respond to media.

I also completed a wildlife immobilization course. This knowledge will allow me to manipulate and immobilize wildlife using chemical restraint.



Photo credit: É. Bélanger, GRRB







Photo credit: N. Westover, GRRB

## Janet Boxwell renewable resources manager since August 2010

**Management Planning** I provide advice on the review of management plans, land use plans, policies and reports. I work with our webmaster to maintain a Public Registry so the public has online access to the activities of the GRRB.

**Research and Monitoring** I coordinate GRRB research priorities in consultation with staff, RRCs and co-management partners and maintain a research summary spreadsheet. Researchers use the research interests and priorities to guide the focus of their work in the GSA.

Through the summer I worked with Jared Gonet (University of Alberta) to update and organize the list of research interests in preparation for the Research and Management Needs Workshop held in September. The research and management needs and priorities for the 2018-2023 cycle will be approved at the Board meeting in February.

I enjoy getting out in the field when I can. This season, I assisted Kaytlin with installing the 'bat detector' in the Inuvik location and went out to 'listen' for bats with a crew in Aklavik. It was a cold night and a bit late in the season, so we had no success - but we certainly raised community interest!

**Liaison Communication** I consult with RRCs, government and co-management partners on a regular basis regarding research priorities, GRRB policies and harvest studies, as well as applications for research or development within the GSA.

**Community Consultation** In August, I coordinated community consultation meetings during which Jared Gonet developed 'community relevance' criteria for the four communities in preparation for our Research Priority Workshop. I also provided technical support for Species at Risk consultation around the barren-ground caribou and grizzly bear listings during some of Kaytlin's and Edouard's community consultations, reinforcing the importance of harvest reporting as a source of traditional and local knowledge used in Species At Risk assessments.

**Gwich'in Harvest Monitoring Program** Harvesters are the eyes and ears on the land! Harvest reporting empowers communities to manage their own resources by ensuring that traditional and local knowledge are considered along with scientific knowledge when making wildlife management decisions. Community interviewers will be going out again in November to interview harvesters for their information concerning species harvested and for their observations on the land. Please report your harvest and help the GRRB make sustainable wildlife management decisions!

**Education/Youth** I manage the GRRB Youth Work Experience Program, coordinating applications from researchers who hire youth for projects and connecting youth with GRRB biologist staff (ideally in the field). This year, Édouard hired youth for the hare pellet count and small mammal trapping projects. Sarah hired youth for equipment inventory.

In May, other staff and I attended 'Science Rendezvous', a public, family-oriented science outreach event. In June, Sarah joined me to  
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Science Rendezvous. Photo credit: J. Griffin (McGill)





Photo credit: Natalie Labossière

deliver Nature Day, a Grade 3/4 program, to 64 students in four schools in the GSA. I continue to receive requests for new programs and topics, including caribou and Species at Risk (bees, bats and insects). In July, I provided ideas for activities for our Canada 150 'BioBlitz' led by Édouard.

**Technical Advice Regulatory Review** I review regulatory and research applications in the GSA, assess possible impacts on renewable resources and coordinate responses incorporating comments received from staff and the RRCs. These can be single or multiyear proposals and range from land access permits to license renewals to wildlife research.

We have a positive working relationship with other organizations such as the Gwich'in Land and Water Board (GLWB), the Gwich'in Land Use Planning Board (GLUPB) and the Inuvialuit Water Board (IWB) on matters of common interest. Since our last newsletter, I coordinated staff advice during a technical session hosted by the GLWB concerning the Inuvik water licence renewal. Technical sessions provide an open forum where stakeholders can provide additional

information and insight into questions raised during the review process. On another occasion, at the request from technical staff of the GLWB, Édouard and I met with the staff of the GLUPB to discuss additional information needed to clarify and understand the potential implications of a proposal on the Porcupine caribou herd. These informal discussions are good examples of how we work collaboratively to pool our collective knowledge and provide well-rounded advice on proposals.

**Technical and Working Groups** I am a board member of the Arctic Borderlands Ecological Knowledge Society (ABEKS), which collects and uses community observations to monitor and assesses changes in the range of the Porcupine Caribou Herd and adjacent Mackenzie Delta area in NWT, Yukon and Alaska.

I attended the NWT Board Forum in Inuvik in late November with Board members Doug Doan and Jozef Carnogursky. This annual forum provides an opportunity for regulatory and review boards to update each other on activities of the past year and to discuss areas of common interest.

**Professional Development** I appreciate opportunities for professional development that help me refresh old skills or learn new ones. I attended online training in the foundations of ArcGIS. I look forward to receiving more GIS training and applying my skills to the creation of maps for the harvest data collection project and to map other research or development proposals in the GSA.

I have now completed four of eight courses toward an online certificate program in Management Skills for Environmental and Sustainability Professionals from ECO Canada and Royal Roads University.

With other staff members, I gained my pleasure craft licence, took bear monitor training and firearms practice in Inuvik in May and attended media training in Inuvik in July.

**Upcoming** I am preparing a presentation to deliver to the Arctic Net conference in December: 'Gwich'in Harvest Data Collection Project: Empowering communities to manage their resources through community-based monitoring'.







Photo credit: N. Westover, GRRB

## Kaytlin Cooper species at risk biologist since January 2015

In August, the Species at Risk Biologist became a permanent position at the GRRB! I would like to express huge thanks to Amy for all of her hard work and also to the Board members for their continued support.

**Management Planning** In my capacity as Species at Risk Biologist, since our last newsletter I have worked on the implementation of the action tables for the NWT Amphibian Management Plan and the NWT Boreal Caribou Recovery Strategy. These action tables outline what will be done to help recover these species, who is responsible for these actions and how they plan on doing it. I also reviewed the action plan for the federal Boreal Caribou Recovery Strategy.

I anticipate upcoming work on the NWT Grizzly Bear Management Plan and Barren-ground Caribou Recovery Strategy.

**Research Insect Traditional Knowledge** A verification session was held for this report and the

report was then distributed to all four RRCs and Workshop participants. The report was posted on our website, provided to our partners and will be included in the upcoming Species Assessment report of several bee species in the NWT.

Several informational Facebook posts on insects were published over the summer on the GRRB's page. Equipment such as dip nets, hand-held microscopes and identification books were purchased for Janet to use in her educational activities at the schools. We will also be receiving preserved specimens of insects from the entomologist (bug specialist) who participated in the Insect Workshop.

I will be presenting a poster on the role of indigenous communities and their traditional knowledge in federal and territorial *Species at Risk Act* processes at the December 2017 Arctic Net conference in Quebec City, using the Insect Workshop as an example.

**Bat Surveys** I submitted a NWT Species at Risk Stewardship Program application for funding for bat surveys in the GSA and was successful. Bat detectors were set up in Aklavik and near Inuvik. These bat detectors record the ultrasonic calls of bats (calls at a frequency we cannot hear) and translate them into sounds we can hear. Data from these detectors will be analyzed by a computer program with the assistance of ENR. I will conduct more bat surveys in the GSA next year, expanding the surveys to all four GSA communities.

I also spent a week in Sambaa K'e (Trout Lake) in the Dehcho this summer, assisting ENR with conducting bat surveys. I have received several reports of sightings of bats by members of the public in both Aklavik and Inuvik, and encourage people from all four communities to continue reporting sightings to me.

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Photo credit: K. Cooper, GRRB



**Technical Advice** Since our last newsletter, I have reviewed and provided comments on several drafts of the federal Peregrine Falcon Species Status report. I attended the Threats Calculator teleconference, organized by the Committee on the Status of Endangered Wildlife in Canada (COESWIC). Here, a group of experts discussed the potential threats to a species and the possible impacts of these on the population. The Peregrine Falcon has been listed as Special Concern for the past 10 years and is due to be reassessed at the end of November 2017.

Other species status reports I have reviewed include Olive-sided Flycatcher and Barren-ground Caribou (federal SARA) and Barren-ground Caribou, Grizzly Bear and several species of bats (NWT SARA). This fall, I held consultations in each community for the proposed listing of Grizzly Bear and Barren-ground Caribou (not including the Porcupine herd) onto the NWT List of Species at Risk and Barren-ground Caribou (including the Porcupine herd) onto the federal Schedule 1 of the *Species at Risk Act*.

**Liaison** I attend RRC meetings in the communities when possible, including the Regional RRC meeting.

I am involved in face-to-face meetings and teleconferences of the Conference of Management Authorities (CMA) and the Species at Risk Committee (SARC). The CMA is a group of wildlife co-management boards and governments that share management responsibility for the conservation and recovery of species at risk in the NWT. The SARC is a group of independent experts, nominated by the NWT Management Authorities, to assess the biological status of species that may be at risk in the NWT. Earlier this year, I was

nominated by the GRRB to be the alternate member to James Firth.

I participated in several teleconferences relating to the federal *Species at Risk Act*, including two COSEWIC teleconferences (one for several mammals and two for Threat Assessments on the Olive-sided Flycatcher and Peregrine Falcon), an Environment and Climate Change Canada teleconference and webinar discussing the federal Boreal Caribou Action Plan and a workshop with COSEWIC focusing on how to better engage Wildlife Management Boards into the federal Species at Risk assessment process.

I attended a teleconference and a face-to-face meeting with Hemerra, a consulting company interested in a potential wind

development project in Inuvik. I am in regular contact with Tas-tsi Catholique, lands analyst with GTC Lands Department, and with Allison Thompson, the wildlife biologist for Wildlife Management Advisory Council NWT who is responsible for species at risk in the Inuvialuit Settlement Region.

**Professional Development** This year has been busy for training! I gained my pleasure craft licence, took bear monitor training and firearms practice in Inuvik in May, amphibian survey training in Fort Smith in June and media training in Inuvik in July. I have taken on the Acting Executive Director role several times in Amy's absence. I will be participating in Geographic Information Systems (GIS) training in the New Year.



Photo credit: A. Amos, GRRB





Photo credit: Blackbird Photography

## Sarah Lord fisheries & forestry biologist January 2017

### Management Planning

**Fisheries Management** I gave public presentations at the Rat River Work Group communication meetings in Fort McPherson (June 14) and Aklavik (June 15).

I provided timely information to the contractor who is reviewing the Integrated Fisheries Management Plan for Dolly Varden. The northern form of Dolly Varden (*Salvelinus malma malma*) was listed as a Species of Special Concern on May 3, 2017.

**Forestry Management** In July, I met with the GTC and ENR to review the annual work plan for the Gwich'in Forest Management Plan. I anticipate meeting with the GTC and the new ENR Forestry Superintendent to determine whether to amend the Plan to clarify enforcement procedures on Gwich'in private lands.

**Research** I continue to have email and phone discussion

with researchers at DFO, GNWT, the Fisheries Joint Management Committee, McGill University, University of Alberta, Laurier University and others to familiarize myself with Fisheries and Forestry research files and to develop new partnerships that address GRRB research priorities.

**Rat River Fish Sampling** This July, I provided field and logistical assistance to Karen Dunmall (DFO) in environmental DNA sampling for fishes in the Rat River watershed. We completed the annual fall seine at the Rat River fish hole September 28-30, which provides an estimate of the Rat River Dolly Varden population.

**Permafrost** I accepted an offer from Parks Canada of experimental permafrost monitors, developed by Kryotek Inc. (Whitehorse) for use in the GSA at no cost to the GRRB. I provided field and logistical assistance for their installation in the GSA under an existing research permit (Steve Kokelj, GNWT) with Kryotek staff on July 31. If the (still-experimental) equipment runs successfully, it will become property of the GRRB after 12 months.

**Tracking Change** I provided logistical assistance to two fish camp projects supported by 'Tracking Change', an international research project that is gathering traditional knowledge on how rivers are responding to a changing climate. I am the GRRB project lead for the component run by M.Sc. student Tracey Proverbs (University of Victoria), who held 26 interviews of 29 individual participants (5 in Inuvik, 9 in and around Fort McPherson, 6 in Tsiigehtchic and 6 in and around Aklavik). The component led by Emma Hodgson (Simon Fraser University) and Rachel Hovel (University of Washington) was also successful. It aims to develop a community-based protocol for whitefish monitoring, similar to the char monitor program for Dolly Varden.

**Airport Lake Trout** I reviewed existing data and reports and developed a new research proposal to address the GRRB Research Priority on Lake Trout habitat quality in Airport Lake. My project proposal was fully funded by Tracking Change in July 2017. My 2017-18 fieldwork is scheduled

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Photo credit: C. Gallagher, DFO



to run for 12 months, one day per month. I plan to partner with the Aurora College National Resources Technology Program class to complete this work.

### Technical Advice & Liaison I

participate in GRRB Occupational Health & Safety Committee meetings, type up meeting minutes and complete various safety-related action items.

Since our last newsletter, I provided substantial written responses to requests for comment on permit applications for an Inuvik soil remediation facility, a proposed new highway maintenance camp at James Creek and hydrocarbon treatment guidelines in the NWT.

I drafted a formal written response to a federal Discussion Paper and DFO's review of the 2012 changes to the *Fisheries Act* in August. This involved reviewing many legal documents and previous GRRB and GTC responses, participating in multiple teleconferences and attending an in-person meeting with federal staff in Inuvik.

This summer, I supervised our Technician Trainee in leading a



Photo credit: F. Furlong (Aklavik)

major inventory and re-organization of GRRB equipment in Navy Road and DFO sea can storage units. The Trainee supervised two Youth Work Experience Program students who helped with this project.

On August 10, I participated in a workshop on developing a digital tour and encouraging public engagement with the ethnobotany garden being grown at the Aurora Research Institute.

I respond to media requests, as directed by the Executive Director. In May, I spoke with CBC Yellowknife about beavers in the Mackenzie delta and with News North on the Town of Inuvik Type 'A' water licence renewal.

I attended the Nihtat RRC meetings on June 7, September 14 and November 8; the Tetlit RRC meeting on October 18; and the Ehdiitat RRC meeting on November 1.

In August, I travelled to Paulatuk to assist DFO and Parks Canada with Oceans Day activities, celebrating the new Anguniaqvia Niquiyuam Marine Protected Area in Darnley Bay. Later in August, I attended a

meeting with the Vice President of Research at Laurier University to discuss possible partnerships in Arctic research.

I contacted Parks Canada and organized GRRB staff attendance in four days of bear safety training and practical firearms training, at no cost to the GRRB, on May 17-19 and 23. I also participated in this training.

I assisted in Science Rendezvous youth outreach activities on May 13 in Inuvik. I also assisted in Nature Day youth outreach activities on June 15 (Aklavik) and June 19 (Inuvik).

Spatial planning for protected areas and other activities was the major theme of the Beaufort Sea Partnership meetings I attended October 24-26.

**Professional Development** I took courses in minute-taking and media training in July with other staff members at Aurora College, Inuvik. I am looking forward to an introductory five-day GIS online training package in January through Esri.



Photo credit: Kyrotec Inc. (Whitehorse)





Photo credit: N. Weir, GRRB

## **Cheryl Greenland office administration and finances since February 2009**

I am a Nihtat Gwich'in Participant from Inuvik. I was born and raised here in Inuvik. I am responsible for file management, payroll, and all financial entries. I keep track of staff time records. I also cover our reception desk and maintain the front office area.

I assist with the development of the Conservation Calendar each year by providing community event dates. I also helped distribute the 2017 Conservation Calendar.

I am also involved in the Finance Committee Meeting and have helped Amy review the Terms of Reference.

In my safety role, I participate in Safety Committee meetings and offer advice on any safety concerns around the office.

Since our last newsletter, I spent time cleaning and setting up the office for our summer students. I



Photo credit: J. Boxwell, GRRB

set up our new Wildlife Biologist and summer students with all internal paperwork and payroll and completed final paperwork for payroll, RRSP and group insurance for our departing Wildlife Biologist. I also set up new group benefit plans for our staff with Sun Life.

I prepared for and participated in Finance Committee meetings on June 2 and July 25, 2017. I added the new 2017-18 budget into our accounting system in August, a task previously completed by Amy. I printed financial project reports for staff and Amy to review and helped

Amy with budgeting for the new 2017-2018 funding.

I took part in firearms training with the GRRB staff in Inuvik in May. In June, I trained in Reading Financial Statements, Writing and Editing, and Minute-Taking. I participated in media training with the rest of the staff in Inuvik in July.

This summer, I assisted with the inventory of our cold storage and sea can with our Technician Trainee. I supervised our Summer Student during her office administration activities.



Photo credit: J. Boxwell, GRRB





Photo credit: C. Greenland, GRRB

## Jordan Norman-Goose technician trainee summer 2017

I was born and raised in Inuvik. I am enrolled in the second year of the Environment and Natural Resources Technology Program at the Aurora College. This course has great opportunities and amazing out-on-the-land experiences with the class and instructors. The workload is nice because it keeps me busy.

My main priority this summer was to assist the staff with their projects and take on tasks they had given me. I participated in education projects and programs and helped maintain inventory of GRRB equipment and storage. I also assisted staff and biologists with fieldwork and other office work when I had time.

I was given tasks to complete in several different areas, including:

- office filing
- reception duties (answering phones, scanning papers, etc.)
- library data entry
- hare pellet count in Inuvik
- small mammal trapping in Inuvik
- maintenance around the office, storage units and sea can
- bear safety training (types of deterrents and how to use them)
- inventory of lab chemicals
- creation of GRRB truck checklists
- led a the Inventory of GRRB Storage Unit and Sea Can project
- office work, when there was free time (file management, library database, etc.)

I grew my computer skills by working with Microsoft Office programs, including Word, Excel and Outlook. I also gained experience leading a project and got to work with some good people.

My favorite part of this summer was leading the inventory project for the GRRB storage unit and sea can. I had two youth working to help me. The three of us got the job done in about



Photo credit: É. Bélanger, GRRB

7 or 8 days. We had fun while doing the project!

This summer was filled with awesome and exciting experiences. I am very thankful that the GRRB hired me and gave me the opportunity to experience this field of work.



Photo credit: É. Bélanger, GRRB



## Joelle Charlie summer student summer 2017

This year was my very first year working for the GRRB in the summer student position. I am very glad that I was given this wonderful chance to work for the GRRB this year. I have learned a lot during my short time here. My term started on July 4, 2017 and ended on August 25, 2017.

During the time I was here, I participated in multiple projects and tasks, including:

- harvest study database entry
- Bear Safety training
- field assistant for hare pellet counts
- library database entry
- file management
- office and reception duties
- GRRB Priorities Meetings

in three GSA communities  
(Inuvik, Tsiigehtchic and Fort  
McPherson)

I have accumulated so much experience while working at the GRRB. This job is such a great opportunity for students, like me, who are looking for direction regarding their future career paths.

I have had the chance to travel to three of the four GSA communities as a summer student, observing the processes and makings of community involvement and input regarding GRRB Priorities.

I have learned so many new things about how the GRRB works. I have acquired a new, unique interest in renewable resource management.

I would like to thank the GRRB for giving me this wonderful opportunity as a summer student. I really enjoyed working with all



*Photo credit: C. Greenland, GRRB*

of the GRRB staff. I am available throughout the school year if you ever need any more assistance with database entries!

Thank you, Joelle



*Photo credit: C. Greenland, GRRB*



## Porcupine Caribou Technical Committee Mike Sutor & Martin Kenzler

The Porcupine Caribou Herd (PCH) program is only possible because of significant partnerships. It takes direction from various co-management groups and governments and is funded from multiple sources.

**New Direction** A major change in the PCH program initiated in 2013 was a shift towards satellite GPS collars instead of the deployment of traditional VHF collars. With VHF collars, we would only get three locations a year for a caribou and we needed to fly overhead in airplanes to get them. Modern satellite GPS now provide us with that many each day, allowing for many important monitoring measures to be collected in an ongoing basis without having to fly.

### Collar Estimates of Calving

In 2017, our colleagues in Alaska started a two-year project to map the precise location where caribou calve. A graduate student in Alaska watches our collared caribou daily during the calving period, from a small plane. Her job is to see exactly when and where the calf is born. The plane flies in a manner that does not cause the caribou to run away and minimizes disturbance. These types of surveys have occurred for many years in Alaska, however this project will do this for a longer period.

Our current plan is to transition away from doing surveys on the calving ground each year. However we do not want to lose information that tells us where caribou calve on the landscape, as it is important information when considering development in the 1002 area. However, it is very likely that any information we collect will need to withstand the scrutiny of a court case, so we need to ensure that the quality of the data is excellent. In

other areas, many researchers have moved to using satellite GPS collars to estimate where animals calve. We want to do the same, however we need to show that our methods are sound and that we can predict the location of the calving sites with high accuracy. The data we are collecting with this project will do this.

The numbers indicate above-average calves being born and surviving. With the good condition of caribou this fall, it is likely that many calves have survived through fall. Barring poor conditions this winter, we should see excellent numbers of caribou coming into the population this year. This is in contrast to last year, when poor pregnancy rates resulted in fewer calves to start with - although those born appeared to survive reasonably and looked in excellent condition in March of this year.

Over the past few years, caribou appear to have returned to the patterns that were primarily observed from the 1970s through to 2000, before they switched to calving primarily in the Yukon and migrating into the mountains during post-calving aggregations. In 2017, the bulk of the herd remained on the coastal plain or foothills after calving until early to mid July. The bulk of the bulls remained in the Richardsons, gradually drifting south through summer.

**Digital Monitoring** This year marked the first year that we were able to use the new digital equipment purchased by Alaska to monitor caribou herds. In 2017, almost all large herds in Alaska, including the Porcupine were photographed (all North Slope herds were photographed). The new digital camera equipment is

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Photo credit: Peter Mather Photography



a dramatic improvement over the older WWII-era photos we used. It should improve the quality of the counts in addition to the frequency in which we are able to gather them. The newer technology will also make counting caribou on the photos easier and more statistically sound.

**Missing Collars** To look for missing collars, we fly at high elevation listening for any missing collars and prioritize areas we know the herd has been with the hopes we will find them. The fewer missing collars, the better the estimate will be. We will also listen carefully around known concentrations of caribou in case the collar is weakly transmitting. This year, about a half dozen were considered missing and another half a dozen collars partially failed (although we found a few of these). This will lead to an excellent estimate, as most collared caribou were located. We anticipate that we will have the estimate completed by the Annual Harvest Meeting. All indications so far for the year are for an increasing herd.

**Public Maps** In addition to the detailed maps created for immediate management needs and to help us document the herds movements through time, we have also, following several requests to the PCMB from HTC's and RRC's, created maps for public dissemination.



As directed by the International Porcupine Caribou Management Board, we create the maps from the previous weeks data and buffer this data by 15km. This allows hunters to know more positively where caribou are present without providing precise locations nor the number of caribou present. It is also an excellent communication tool to describe where the herd is located, how it moves/migrates, and which habitats are most important.

**Caribou Mortality** One of our other goals in recent years has been to get sufficient numbers of our collars switched to satellite GPS collars so we know when caribou die. This information is useful as

it allows us to detect die-offs in remote locations and to get a sense of the total survival of the herd. In particular we know that survival of adult females is key in determining whether the herd is increasing or declining. We are just rejigging our numbers to align with the June 1 start to the year used in the AHM, however estimates were in the mid 80% over the past few years. This level of survival usually indicates a stable or more likely an increasing herd. Particularly when we consider the number of calves entering into the population on a year like this one. Coupled with reports from hunters this fall of fat caribou we anticipate the herd is doing very well at this time.



Photo credit: Ian MacDonald Photography



# Fisheries & Oceans Canada (DFO) Science Update Dr. James D. Reist

## **Pacific Salmon Monitoring Program**

About 450 salmon samples from the western Arctic have been obtained to date in 2017, provided by fishers. About 65 of these were from the GSA (thanks to Sarah Lord for transferring fish to Inuvik). Salmon are being shipped to Winnipeg for processing: identification, morphological measures and counts, ageing structures, tissues for diet and genetic analyses, tissues for disease and parasites. In many cases (diet, genetic and disease), tissues are archived for future possible work (i.e. no follow-on analyses are presently being conducted). Initial results are developed (species, number and occurrences) and are provided to fishers and community members via facebook <https://www.facebook.com/arcticsalmon/>

**Migratory Patterns and Life History of Loche (Burbot) in the Mackenzie Delta** Otolith microchemistry results indicate

that most fish captured in Aklavik, Inuvik and Tsiigehtchic were migratory and that many used the outer Delta and estuarine areas. Inland, the proportion of migratory individuals decreased overall. All data are collected and analyzed. A manuscript is anticipated in 2018.

## **Thermal Habitats in Dolly Varden Rivers**

This project involves the placement of temperature recorders in key habitats where Dolly Varden spawn and eggs develop and where potential colonizing salmon (Chum and Pink) may spawn. Knowledge of thermal regimes allows for modeling the susceptibility of rivers to salmon colonizations and the vulnerabilities of Dolly Varden stocks. A site in the Rat River is being monitored, with data retrieved in March 2017. Additional rivers on the north slope are also monitored.

## **Dolly Varden Habitats and Ecological Thresholds**

This project involves monitoring juvenile recruitment and adapting existing adult Dolly Varden monitoring protocols to juveniles to assess susceptibility of this population component to perturbations. We have quantified the relative

abundance and occupancy of juveniles and adults in Fish Creek (Rat River basin, 2014-2016) using standardized stream sampling protocols.

In 2016-2017, we used a stream-sampling protocol to test detection efficacy using eDNA compared to electrofishing on a subset of sites in Fish Creek. Manuscripts are expected in 2018.

The upstream distribution of Dolly Varden in the Arctic Red River drainage was surveyed by Kris Maier with juvenile char samples identified morphologically and genetically as Dolly Varden. This manuscript is under development.

## **Environmental DNA (eDNA) tool development and field applications**

- This project involves:
- the determination of field-capable techniques for water filtration and eDNA sampling in remote areas with analyses done in laboratory (community-based eDNA sampling)
  - a mobile hand-held diagnostic eDNA tool for surveying targeted species in the field
  - developing and testing targeted eDNA assays for Dolly Varden
  - field detection for stream-dwelling Dolly Varden tested in Rat River, with the aim to develop effective field sampling designs and ongoing species-specific monitoring tools

Field sampling of eDNA is occurring in the Rat River and in Sho Creek. Freddie Furlong of Aklavik has been sampling near his subsistence nets (August to October, 2017) to assess the feasibility of eDNA community-based monitoring in large rivers (pictured in the photo to the left).



Photo credit: Pacific Salmon Monitoring Program



## Conservation and Protection (C&P) Activities in the GSA

Gerald Fillatre

*The following is an update on C&P activities during the 2017/18 fiscal year (to date)*

### Major Patrols and Activities

C&P participated in a community commercial fishery meeting in Tsiigehtchic.

C&P conducted three vehicle patrols along the Dempster Highway (Airport Lake, Campbell Creek, and Rengling River) – no occurrences or violations were detected.

C&P patrolled the Beaufort Sea for a total of 34 person days onboard the

CCG vessel Sir Wilfred Laurier and the Navy vessel H.M.C.S. Edmonton. The main purpose of these patrols was to monitor Marine Protected Areas.

C&P provided a field season review to the GRRB in November.

**Occurrences** Seven occurrences within the GSA were investigated by C&P; two of these files are still active. Of those files, four were investigated for illegal sales, two were for failing to comply with licence conditions and one was for fishing without a licence.

### Officer Time Spent on GSA

**Activities** A total of 45 Officer hours were spent working in the GSA. Over 100 Officer hours were spent working on GSA files, with two files still ongoing.

**Expectations for 2018** The planning cycle for the 2018-19 fiscal year is usually completed in February. We expect to provide 5-10 Officer days of coverage for the GSA in 2018. The focus of these activities will be patrolling the Big Fish River Dolly Varden fishery and the Dempster Highway for sport fishing.

C&P did not attend the Big Fish River fishery as it was cancelled in 2017. A high priority will be placed on ensuring attendance at this fishery for 2018.

As in past years, we look forward to any comments the GRRB may have on priorities. This will help us develop the 2018/19 planning cycle.



Photo credits this page: Fisheries & Oceans Canada





## BARREN-GROUND CARIBOU IN CANADA

### Proposed Listing as Threatened under the federal *Species at Risk Act*

Should Barren-ground caribou be added to the  
Federal List of Species at Risk as a Threatened  
species?

**Scientific Name:** *Rangifer tarandus*

#### Description:

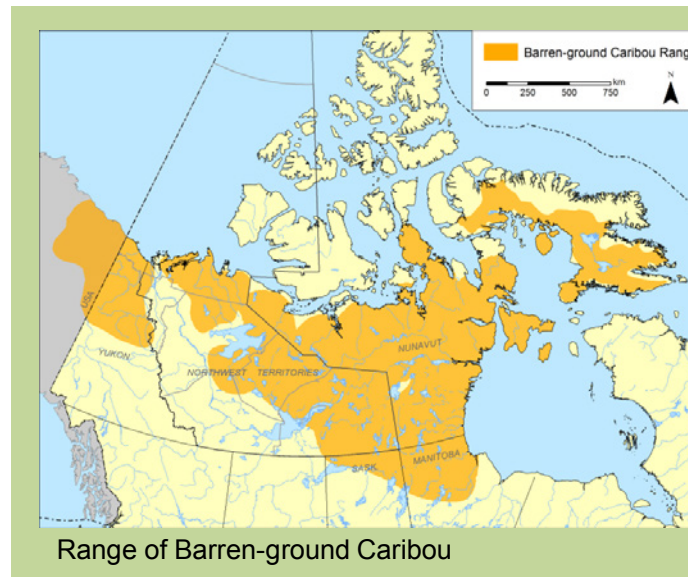
Barren-ground caribou are a medium sized caribou with dark brown legs, backs and antler velvet. They have a distinctive brown and white coat pattern in the fall. They are shorter than Boreal caribou and have longer legs than Peary caribou or Dolphin and Union caribou.



Photo © A. Gunn

Barren-ground caribou travel in huge groups and require large annual ranges to accommodate their long seasonal migrations.

Barren-ground caribou are widespread across northern Canada and into Alaska



#### Assessment:

The Committee on the Status of Endangered Wildlife in Canada (COSEWIC) assessed Barren-ground caribou as Threatened in November 2016. A Threatened species is a wildlife species that is likely to become endangered if limiting factors are not reversed.

Most of the Barren-ground caribou herds have declined dramatically. Overall, the decline is estimated at 56% over the past three generations. The Porcupine caribou herd is one of few exceptions to this trend and is increasing. There are currently around 800,000 Barren-ground caribou, down from over 2 million in the early 1990s.

Canada





The decline of Barren-ground caribou is so drastic that it could have been assessed as Endangered. However, COSEWIC recommended the Threatened status in recognition of the initiation of numerous management actions by governments, wildlife management boards and communities and because Barren-ground caribou do not appear to be facing imminent extinction at this time.

### Threats:

A number of threats are thought to be causing the decline of Barren-ground caribou:

- Climate and weather changes affecting forage availability, predation, parasites and diseases
- Industrial exploration and development
- Fragmentation of habitat in winter range from forest fires and increasing human presence
- Subsistence and sport harvest can be significant causes of mortality

### What Happens if Barren-ground Caribou are Listed as Threatened?

If Barren-ground caribou are listed under the federal *Species at Risk Act* a national recovery strategy will be written that identifies the threats to the species and its habitat, and sets population and distribution objectives for the survival and recovery of the species. The national recovery strategy will identify critical habitat to the extent possible. After critical habitat is identified, CWS will work with partners to find the best method to protect the habitat from activities that would destroy it. Prohibitions against killing or harming Barren-ground caribou will automatically come into force if the species is listed. In the NWT, these automatic prohibitions only apply on federal lands that are under the authority of the

Minister of the Environment or the Parks Canada Agency, such as National Parks and National Wildlife Areas. As well, these automatic prohibitions do not apply to people engaging in activities in accordance with conservation measures under a land claims agreement.

### We want to hear from you!

- Should Barren-ground caribou be added to the federal list of Species at Risk as a Threatened species? Why or why not?
- How do Barren-ground caribou benefit you or the environment? (this can include economic, cultural, spiritual, and environmental benefits)
- Do any of your current or planned activities have the potential to kill, harm or harass Barren-ground caribou?
- What are you currently doing or what could you do to avoid killing, harming or harassing Barren-ground caribou?
- What impact do you think that listing Barren-ground caribou as a wildlife species at risk would have on your activities?
- What impact do you think that listing Barren-ground caribou as a wildlife species at risk would have on the species?
- Do you have any other information or concerns that the federal Minister of the Environment should consider before making a decision on the listing of the species?

### To tell us your views or for more information, please contact:

Species at Risk  
Canadian Wildlife Service, Northern Region  
Environment and Climate Change Canada  
PO Box 2310  
Yellowknife, NT X1A 2P7  
Tel: 867-669-4710 Fax: 867-873-6776  
Email: [ec.sarnt-lepnt.ec@canada.ca](mailto:ec.sarnt-lepnt.ec@canada.ca)

### Cover photos:

Ross' Gull © Environment Canada, photo: Mark Mallroy  
Baikal Sedge © Environment Canada, photo: Syd Cannings  
Peary Caribou © Environment Canada, photo: Charles Francis

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## GET IN TOUCH!

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[kcooper@grrb.nt.ca](mailto:kcooper@grrb.nt.ca)

## upcoming events

**Final ArcticNet Conference**  
December 11-15 - Quebec City, QC

**Deadline for Wildlife Studies Fund, Youth Work Experience Fund and scholarship applications** January 10

**Deadline for RRCs to respond to proposed Species at Risk listings of Grizzly Bear and Barren-ground Caribou** January 31

**GRRB Face-to-Face Board Meeting**  
February 6-8 - Inuvik, NT

**Conference of Management Authorities**  
February 20-22 - Inuvik, NT

**Species at Risk Committee**  
April 3-5, Norman Wells or Tulita, NT



Photo credit: GRRB



### Please call your RRC for monthly meeting times:

Ehdiitat RRC (Aklavik)  
867-978-2336

Tetlit RRC (Fort McPherson)  
867-952-2330

Gwichya RRC (Tsiigehtchic)  
867-953-3608

Nihtat RRC (Inuvik)  
867-777-6650