



GWICH'IN RENEWABLE RESOURCES BOARD

news

Fall 2018



Photo credit: S. Lord, GRRB

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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

Personal Mission Statement: 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.

I am a Nihtat Gwich'in participant who was born in Inuvik and grew up in Halifax with my father, Wallace Thompson. My mother is Susie Thompson (Linklater/Kaye) from Aklavik. I am related to the Kaye and Stewart families.

I moved back to Inuvik in January 2006 to work at the GRRB and to reconnect with my roots. I was hired as a biologist and then 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.

This is a progress report for work activities since our spring newsletter in May. The biggest update is that the term of the GRRB Chair, Eugene Pascal, expired on November 6, 2018. Eugene has been a strong leader. He is respectful, has a calm, professional approach and is always very supportive of me and of the staff. Working with him has taught me patience and leadership. We wish him all the best in his future endeavours.

On November 14, 2018 the Board announced Jozef Carnogursky as the new GRRB Chairperson. Jozef has been an active member of the Board as GNWT alternate and then full Member. We are excited to have him in this leadership role.

Personnel management We hired a Summer Student, Lynsey Krutko. She entered Grade 12 this year in Inuvik. You can read her end-of-term report on [page 21](#).

Jordan Norman-Goose has returned for the third summer. We initially hired him as a Technician Trainee, but I was able to secure additional outside funding to (1) promote him to a Technician - he qualifies for this position as a recent graduate of the Environment & Natural Resources Technology Program (ENRTP) and (2) extend his term until March 31, 2019. Jordan's progress report can be read on [page 18](#).

We continue to have staff sessions and enjoy popcorn Wednesdays whenever possible. We held our staff summer party in early August 2018 at Édouard's house, enjoying games and a barbecue. We will be doing a Secret Santa and holding a Christmas gathering early in the new year.

Kristen Callaghan, the GRRB's

previous Wildlife Biologist, offered remote assistance for another small communication project and to help us with the defining commercial use consultations. Nick Westover was hired to develop the 2019 Conservation Calendar. We maintain a remote contract with Chelsea Hermus for website maintenance and small administrative and communication tasks. We are looking at hiring a casual Harvest Survey Coordinator in the future. For now, we will utilize Jordan in his role as Technician.

At the February GRRB face-to-face meeting, we hired two youth to sit as non-voting delegates with the Board. I worked with the Principal of Chief Julius School to find a youth (Rayna Vittrekwa) to serve in this role at our September Board meeting in Fort McPherson. Édouard worked with her, ensuring that she was informed and felt welcomed. This is an ongoing effort to give youth direct exposure to the work the Board is involved in and hopefully inspire them to come into this field. The funding comes from the Youth Work Experience Program.

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Financial management Finances continue to be managed effectively. Over this reporting period, we held three Finance Committee meetings (May 15, July 24 and November 1, 2018). The Finance Committee consists of three Board members (Burt Hunt, Doug Doan and Sarah Jerome), our Office Manager (Cheryl Greenland) and myself. The goal is to review the finances in detail and make recommendations to the full Board on their next call. These meetings are held quarterly and report at the quarterly GRRB teleconference. On July 31, the Board met and approved the audited financial statements. On November 1, the Board met and approved the mid-year report, which included a variance report recommended by the Finance Committee.

Staff serve as project leads with my oversight. They help confirm project accounting and we work together to ensure that this is presented properly. So far this year, we have 20 projects that we are managing separately from the Board's core operating funding. In addition, our travel to meetings and conferences is often covered.

Board administration

The Board held three teleconferences between the February and September face-to-face meetings. Minutes for these teleconferences were approved at the September meeting. Minutes for the November teleconference have not yet been approved.

March 13 Special Teleconference:

Direction on format of minutes; in-camera discussion regarding the GRRB Chair nomination; support for Rat River Working Group (RRWG) recommendations; update on the review of the Integrated Fisheries Management Plan for Dolly Varden Char; administrative matters.

June 7 Teleconference:

Reviewed past minutes (deferred approval); support for *Wildlife Act* administrative changes and upcoming amendment process; support for process changes to how action plans are developed for the "taking care of caribou" management plan, including management objectives for Bluenose-west, Bluenose-east and Cape Bathurst herds; discussed concerns for involvement in the drafting process for the new *Forest Management Act*; support to respond to permitting current commercial fishing activity in the GSA, based on community input; support for Transverse beetle and Harris' sparrow listing (species of special concern under the federal *Species at Risk Act*); support for territorial species assessment schedule; update on boreal caribou Section 11 agreement, planning under the federal *Species at Risk Act*; administrative matters.

July 31 Teleconference:

Reviewed past minutes (deferred approval); approved audited financial statements; approved

annual activity report; support for changes to the annual harvest meeting for the Advisory Committee for Cooperation on Wildlife Management (ACCWM); responded to ENR clarification questions on the GRRB's moose regulation letter (focused on resident moose harvest reporting); support for helping with porcupine caribou management messaging; update and direction on plans for consultations to define commercial use of wildlife; direction on plans for DFO annual meeting; direction on territorial species at risk stewardship funding; support for new Wek'èezhii Renewable Resources Board (WRRB) appointee to the Species at Risk Committee (SARC); administrative matters.

November 1 Teleconference:

Reviewed early draft of fall meeting minutes, variance report, finance committee terms of reference and lease renewals; upcoming meeting plans; received updates on defining commercial use consultations and the boreal caribou Section 11 agreement process; SARC appointment; administrative matters.



T. Proverbs and A. Amos presenting in Halifax at international Communities, Conservation and Livelihoods Conference, May 2018





The biggest file right now is planning consultations for defining commercial sale of wildlife. We were asked to undertake this task by the 2017 Regional Renewable Resource Council (RRC). Defining commercial use requires us to understand traditional use. This is a sensitive topic, so we are putting a lot of time into planning and ensuring that all of our partners are included in our plans.

We are working closely with the RRCs and looking for innovative ways to get more people out to these meetings. We have outside funds through GNWT that will cover one round of community consultations, including hiring Kristen Callaghan to prepare the consultation package, attend the meetings to record notes and prepare a “what we heard” document.

A survey has been created and will be distributed soon to get more input. Meetings were held during the first week of December:

- Tsiigehtchic – December 3**
- Aklavik – December 4**
- Inuvik – December 5**
- Fort McPherson – December 6**

We will present what we heard at the January 2019 Regional RRC. At the GRRB Board meeting in February 2019, we will receive direction for next steps.

The Safety Policy (2016) continues to be followed. Staff reviewed and approved the associated operational document (job risk analysis), which has specific details on risks each job may pose and identifies mitigation measures to reduce them. This document is now approved and operational. Before traveling or undertaking any new task, especially fieldwork, staff review this document and fill out a field plan describing how they will minimize and manage those risks.

Liaison and Communication

Some of the highlights under this category include receiving recognition for the Board’s role in the review of the draft legislation for the *NWT Forest Management Act* and working towards stronger working relationships with DFO, using our annual meeting as a platform.

I accepted a mentorship role with the GTC under their Lands Advisor, Peter Greenland. We had a few meetings to discuss career planning. I also met with and presented career planning to the Trail Valley class in Aklavik.

A few staff and I attended the ENRTP final technical report presentations. I continue to work with researchers and universities to promote best practices for their research, including aligning their research with our priorities or community interests.

We released a spring newsletter in May 2018 and continue to use our facebook page and website as methods for communication. Our 2019 Conservation Calendar is complete and ready for distribution - stop by the office to pick one up!

Our staff team continues to work hard. This is evident in their individual reports.



Jordan Norman-Goose presenting his final technical report for his diploma in the Environmental and Natural Resources Technical Program. Photo credit: A. Amos, GRRB



Photo credit: N. Westover, GRRB

Eugene Pascal outgoing board chair

Drin Gwinzii (Good Day).

I have been the Chair of the GRRB since 2013. My term ended on November 6, 2018.

As always, it has been a busy year for me. I want to thank the Board members who attended the meetings that I could not.

I think the GRRB team is very professional. I enjoyed working with and for them. I feel the work that the GRRB does is very important.

Thank you for your time and your support during my tenure as Board Chair. I hope that you enjoy this issue of our newsletter. I am proud of the work that the staff and the Board members of the GRRB do and I think it shows in these pages.

Mahsi Cho,

Eugene

Farewell, Eugene!

November 6, 2018 marked the end of Eugene Pascal's five-year term as GRRB Chairperson. To congratulate him and commemorate his leadership, GRRB staff and Board members presented him with a vest handmade by Karen Wright-Fraser (pictured on the next page), a framed picture signed by all staff and Board members and some GRRB swag.

Welcome, Jozef!

Jozef Carnogursky is the new Chairperson for the GRRB. He is Gwich'in, born and raised in Inuvik. He has a diploma in natural resource management and is very familiar with the issues in the GSA. He served on the Nihtat RRC from 2006 to 2012. Prior to his appointment as Chair, Jozef served as the GNWT alternate member and then the full member for the GRRB.

Jozef believes strongly in the co-management system in the GSA and looks forward to serving as Board Chairperson, a role he wanted to be in since he worked as a Technician at the GRRB! With hard work, you can achieve your dreams.

Email Jozef: chair@grrb.nt.ca



Photo credit: L. Semmler





Photo credit: GRRB

GRRB Board

Jozef Carnogursky
Chairperson (GRRB)



Order in Council
appointments

Nominating
Agency

Federal
government

Territorial
government

Margaret Begg
Member (GTC)



Sam Bullock
Member (GTC)



TBA
Member (GTC)



Burt Hunt
Member (DFO)



Doug Doan
Member (EC/CWS)



TBA
Member (GNWT)



Charlie Snowshoe
Alternate (GTC)



TBD
Alternate (GTC)



Sarah Jerome
Alternate (GTC)



Ron Allen
Alternate (DFO)



TBA
Alternate (EC/CWS)



Tracy Davison
Alternate (GNWT)



Photos: GRRB

board member updates

Committees/Working Groups:

- Advisory Committee for Cooperation on Wildlife Management (ACCWM)
- Integrated Fisheries Management Plan (IFMP) Steering Committee
- NWT Board Forum
- Conference of Management Authorities (CMA)

Meetings/Training:

- Review of Board Orientation materials (C. Snowshoe)
- June 5-6 IFMP Steering Committee call (B. Hunt)
- June 7 Board teleconference (S. Bullock, J. Carnogursky, D. Doan, B. Hunt, E. Pascal, C. Snowshoe)
- NWT Board Forum Meeting planning (D. Doan)

- June 29 Mackenzie Valley Environmental Impact Review Board Workshop, Yellowknife (D. Doan)
- July 24 Finance Committee call (D. Doan, B. Hunt)
- July 31 Board teleconference (M. Begg, S. Bullock, J. Carnogursky, D. Doan, B. Hunt, C. Snowshoe)
- September 11-12 CMA teleconference (S. Bullock, J. Carnogursky, C. Snowshoe)
- September 25-26 Board meeting, Fort McPherson (R. Allen, M. Begg, S. Bullock, J. Carnogursky, D. Doan, C. Snowshoe)
- October 23-24 *Wildlife Act* Section 15 meeting, Yellowknife (J. Carnogursky)
- October 25-26 *Wildlife Act* Working Group meeting, Yellowknife (R. Allen, J. Carnogursky)
- November 1 Board teleconference (R. Allen, S. Bullock, J. Carnogursky, D. Doan, B. Hunt, S. Jerome, E. Pascal)



Doug Doan attending Environmental Assessment workshop, Yellowknife

Photo credit: A. Amos, GRRB



September Board Meeting

The GRRB held its fall face-to-face Board meeting in Fort McPherson on September 25, 2018. We hired a youth (Rayna Vittrekwa, pictured below) from the Youth Work Experience funding to attend, to try to engage youth in the decision-making process of the Board and hopefully promote their interest in this field.

Topics covered included updates from the Executive Director (page 1), Chair (page 4), Board members (page 6) and staff (starting on page 10), wildlife decisions, research results and discussions on forest legislation and harvest reporting and the RRC and Public Session. The meeting continued with a review and discussion of GRRB priorities and administrative reporting.

The next face-to-face meeting will be held in Inuvik on February 5-7, 2019. September's meeting minutes will be approved at that winter meeting.



Photos this page: GRRB



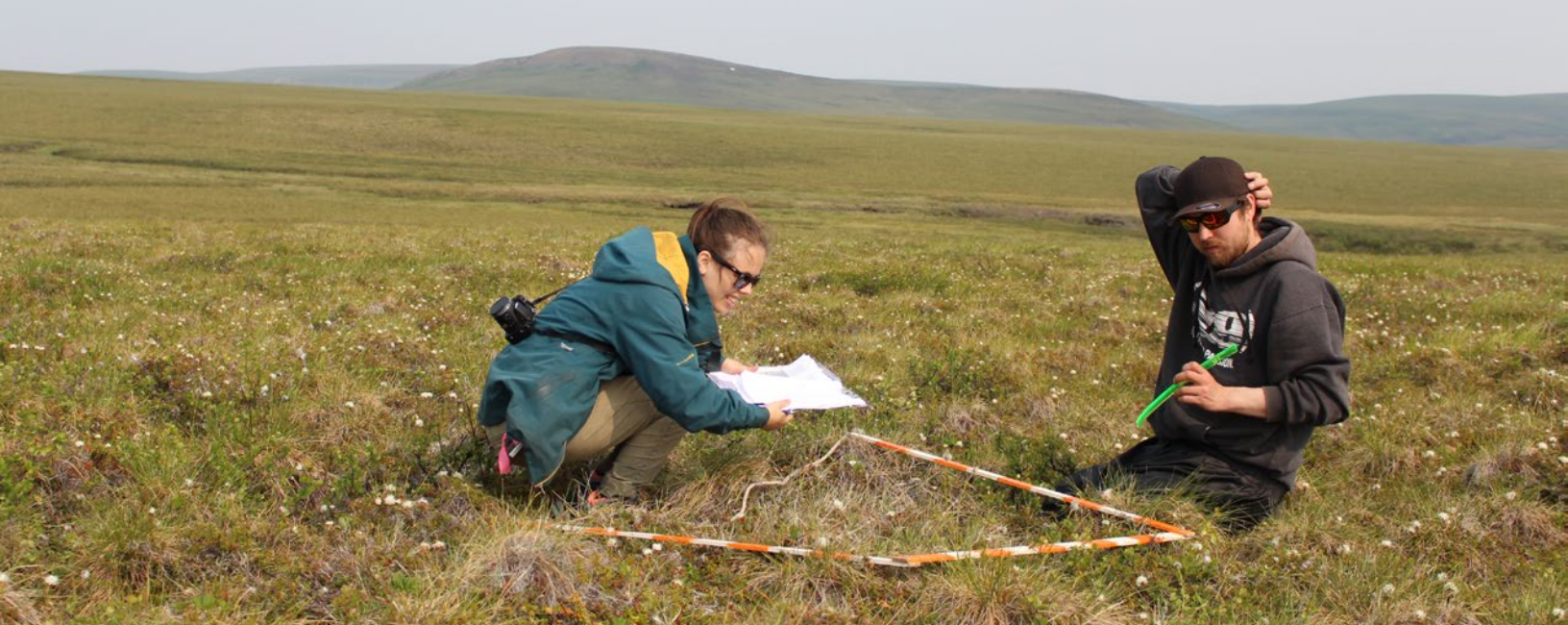


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For more information, visit us at <http://grrb.nt.ca>



Photo credit: S. Lord, GRRB

Édouard Bélanger wildlife biologist since June 2017

Management Planning Cape Bathurst, Bluenose West and Bluenose East Caribou Herds Management As a member of the working group, my work is mainly to continue developing the Communication and Education materials and the annual monitoring table. This table is then used to assess the status of the herds.

Grizzly Bears in Inuvik In the past few years, there have been several concerns about the number of grizzly bears at the landfill (dump) in Inuvik. This year, the Town of Inuvik had to renew their municipal water licence, which included fencing the landfill. I reviewed and participated in discussions on the licence. Most likely, the landfill will not be fenced before 2020-2021. ENR, GRRB, Inuvialuit Game Council, the Town of Inuvik and possibly others will work to ensure that the transition

from unfenced to fenced goes as smoothly as possible. Once fenced, some bears might come into town looking for food. This is a safety concern and may result in some bears being killed. The GRRB has a management plan which includes tags for harvested bears or those killed in the defense of property. All organizations want this to happen in the safest way while limiting the number of bear kills.

Muskox Outfitting Last winter, the Tetlit RRC requested six tags for sport harvesting of muskox in the GSA. I gathered information on the response process and looked at what was done for a similar request in 2013. Amy and I discussed with ENR what technical information is available and would be needed to make a decision on this matter and we shared this information with the GTC. Marsha Branigan (ENR) and I will work on gathering all the information needed to provide technical advice to the Board.

Porcupine Caribou Technical Committee In May, I participated in a three-day meeting with the Porcupine Caribou Technical Committee (PCTC) in Whitehorse. This was solely a scientific meeting. Researchers and managers from across Canada and the USA participated. I shared with the GTC all information discussed.

Research Muskox The muskox monitoring and research program started by the Yukon Government (YG) includes collaring and classification of muskoxen and observation of muskox-caribou interactions in the ISR and the GSA. The project has expanded in various ways (i.e. more collars, classifications, surveys, a muskox-caribou interaction research project). The GRRB purchased

three muskox collars last winter and deployed them in the Northern Richardson mountains this winter. In total, 12 collars were deployed this year during two days of collaring. I helped capture and collar muskox with the YG and a veterinarian from Saskatchewan.

Laurence Carter, a master's student from McGill University (Montreal), is working on a project on muskox-caribou interaction in collaboration with YG, Parks Canada, Aklavik Hunters and Trappers Committee (AHTC) and the GRRB. I helped Laurence hire community members through the Ehdiiat RRC. Freddie Furlong helped as a bear monitor and with the data gathering, which was appreciated! Jordan Norman-Goose (our Technician Trainee) and I took turns helping Laurence on her project in the Northern Richardsons for a few days.

Dall's Sheep Research Project Last winter, GRRB approved the Dall's sheep Research Project (DSRP) in the Northern Richardsons and helped fund the project. Tracy Davison (ENR) and I facilitated a Workshop in Aklavik in May. The Ehdiiat RRC and the AHTC were invited to share their knowledge



Photo credit: GRRB





used some of our data for her project. Prior to fieldwork, I trained the youth in bear and field safety and in trapping and measuring. Every day, once the fieldwork was complete, the youth and Jordan took several measurements of collected individuals.

Dempster Highway Grizzly Bear Monitoring

For the sixth consecutive year, posters and brochures were distributed and installed in communities along the Dempster highway. This project was started by Kristen Callaghan, the previous GRRB Wildlife Biologist, in collaboration with YG and ENR. The goal is to monitor bear behaviour on and around the highway, especially during hunting season.

Technical Advice ACCWM and Moose

I provided GRRB advice concerning the WMAC (NWT) letter on ACCWM. I also provided advice to respond to a letter from ENR concerning clarification on the resident moose hunting regulations.

General I reviewed several proposed projects in the GSA as part of my usual duties. I also helped Amy with the definition of commercial use venture. I will likely help her quite a bit regarding that file in the future.

Other Parks Canada invited me to a Wilderness First Responder course, the highest first aid training (80+ hours). This invitation was well received because there will be extended field work next summer, including the possibility of a camp in the Northern Richardsons for more than a week involving community members and youth. This also provided me with the tools to upgrade our safety procedures when doing field work, which I did with the help of Sarah Lord.

of the Dall's Sheep around Black Mountain (Chiwaazraii). A first survey of Dall's sheep trails was conducted in July and three cameras were installed. Two community members, Freddie Furlong and Dale Sample, helped during the survey, providing valuable knowledge.

A second trip was conducted in collaboration with Parks Canada. I went to Ivvavik National Park and helped Parks Canada maintain their remote cameras for two days. We then went to the Northern Richardsons and installed the remaining 10 remote cameras for the DSRP. During the second trip, we visited the three cameras previously installed. Within two weeks, these three cameras took several pictures. One camera had a grizzly bear, one had a lamb and a ewe and one had a lynx, a wolf and several Dall's sheep. In early September, I helped Sarah with fish field work. This gave me the opportunity to go check two cameras. One camera had grizzly bear pictures and one had sheep and grizzly bears. It is still early, but these preliminary results are encouraging.

The GRRB renewed a collaboration with Dr. Laura Prugh from the

University of Washington. She has used collar data from Dall's sheep, wolves and grizzly bears in the Northern Richardsons (from when Catherine Lambert Koizumi was the GRRB's Wildlife Biologist) to produce scientific papers relevant to Dall's sheep management. She will continue using our dataset and I will likely help her gather snow measurement data in the Northern Richardsons. I set up one snow measurement station in front of one of our cameras from the DSRP as a test this year.

Small Mammals & Hares The hare pellets survey was completed in July by Jordan, our Summer Student (Lynsey Krutko) and a youth, Janine Bonnetplume. Prior to fieldwork, bear and field safety were reviewed. Fieldwork took three days to complete four transects around Inuvik and then data was compiled.

Small mammal trapping was done in August. Jordan, two youth from Inuvik (Janine Bonnetplume, Nuhamin Gebeyehu) and I spent six days setting up traps and collecting species around Inuvik. Demi Gagnon, a master's student from the University of Winnipeg, joined us for this fieldwork. She

Janet Boxwell renewable resources manager since August 2010

Research and Monitoring

I coordinate GRRB research and management priorities in consultation with staff, RRCs and co-management partners and maintain a record of the research interests of the communities. The research and management priorities and community research interests are also shared with external organizations and researchers who use them to guide the focus of their work in the GSA.

Interest in conducting research in the GSA has increased dramatically in the past few years. In 2018, 45 research projects in the GSA applied for scientific research licences through the Aurora Research Institute, compared to 26 in 2017. I have already received 17 applications for renewals for research to be continued in 2019.

I also coordinate the review of research projects and requests for Letters of Support (LOS) from the GRRB. The GRRB provided 10 letters for research projects in 2018, compared to five in 2017. These letters are provided by the researcher to their funders to show that their projects are supported by organizations and communities. To receive an LOS from the GRRB, the proposed project must meet the board mandate and other criteria including meeting a board research priority or community research interest and the degree of community engagement. I am working on creating a new LOS template for researchers to complete that will make this process more efficient for staff.

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

Gwich'in Harvest Monitoring Program

We are grateful to ENR for providing three years of funding for this program. Multi-year funding allows us to plan and deliver programs that meet our mandate and to make program adjustments as needed. In Year 1, some communications products were produced, including a brochure, hunting targets and 'report your harvest' fridge magnets and stickers with messages in English and Gwich'in. The magnets and stickers feature caribou, Dall's sheep, moose, and muskox and have proven to be popular!

We are currently in Year 2 of the funding cycle and are continuing to promote harvester participation. Harvesters are asked to complete a 10-minute survey in November and June by community interviewers. Participating harvesters are eligible for a draw prize for a gas card. Your harvest information helps provide an accurate picture of Gwich'in use of resources and helps us plan for future generations. Thank you for reporting your harvest!

Traditional Practices Education

Media Project GRRB Board and staff heard from the Gwich'in communities that there is strong interest in documenting traditional management practices. This project is a partnership between GRRB and the GTC Department of Cultural Heritage to document traditional practices in a way that meaningfully engages both elders and youth.



Photo credit: N. Westover, GRRB

This year, Arlyn Charlie and Danika Peterson from Fort McPherson are documenting community elders sharing their knowledge of traditional practices through video, audio and photographs. The recordings and information will be used as education tools through popular media, such as the GRRB newsletter, Facebook and YouTube. We are looking forward to posting the first videos in the spring!

Education/Youth

I manage the GRRB Youth Work Experience Program, coordinating applications and connecting youth with GRRB staff. Youth have assisted staff in such diverse projects as environmental DNA sampling on the Arctic Red River, small mammal trapping, the annual hare pellet count along established transects, installation of bat echolocation detectors and environmental education activities in GSA schools. I also coordinate GRRB staff participation in career fairs, education and public outreach programs. In June, I led Nature Days for Grade 3s in all four schools in the GSA (69 students in six different classes). I also delivered a Species at Risk program on bats to Grade 5 students in Aklavik. I helped coordinate staff discussions with



youth at the schools during recent community consultations regarding commercial and traditional use of wildlife. Youth were actively engaged in these discussions and appreciated being consulted for their viewpoint.

Technical Advice Technical and Working Groups I am a board member of the Arctic Borderlands Ecological Knowledge Society (ABEKS), which collects observations about animals, plants and the land from active land users to monitor and assess changes in the range of the Porcupine Caribou Herd. Since the last newsletter, I participated in the ABEKS Annual General Meeting and in teleconference meetings.

Aklavik will be hosting the ABEKS Community Gathering in Aklavik February 8-10, 2019. The Gathering is an opportunity to bring people from all ABEKS communities together to learn and share information. This year, the focus is on community-based monitoring (CBM) programs. There has been much discussion in the past few

years about how CBM programs can work together to improve efficiency, strengthen access to information and avoid duplication. More recently, questions are being asked about how CBM programs can make a meaningful contribution to decision-making in the absence of decision-making frameworks that include local, Indigenous and Traditional knowledge. For more info on ABEKS, check their website at: www.arcticborderlands.org.

I work closely with the Porcupine Caribou Technical Committee to generate the GRRB Porcupine caribou harvest report and map data for the Porcupine Caribou Management Board (PCMB). The PCMB Annual Harvest Meeting will be in Inuvik. The public are invited to attend on February 12, 2019 to learn more about PCMB and the status of the Porcupine caribou herd. For more information on PCMB, check their website at <http://www.pcmb.ca> or look for them on Facebook.

Regulatory Review I coordinate and review diverse regulatory

and research applications in the GSA to assess possible impacts on renewable resources, incorporating comments received from staff and the RRCs. As reviewers who comment on regulatory applications, the GRRB has a positive working relationship with regulatory boards such as the Gwich'in Land and Water Board (GLWB), the Mackenzie Valley Land and Water Board (MVLWB) and others on matters of common interest. GRRB and the RRCs have been invited to attend a *Mackenzie Valley Resource Management Act* Workshop in Inuvik on February 26-28, 2019. The workshop will cover the integrated system of land use planning, environmental assessment, water, land and wildlife management, cumulative impact monitoring and auditing as established through the Gwich'in Comprehensive Land Claim Agreement (GCLCA) and the *Mackenzie Valley Resource Management Act*.

Professional Development I attended the Cumulative Impact Monitoring Program results workshop in Yellowknife, where researchers report back the results of their research in the NWT. It was particularly interesting to see how the level of community engagement has increased over the years of this program. Several community-based monitoring programs were featured where the research questions and methods were designed by the community and field assistance and support was provided by the researcher. This community-driven approach to research is a step in the right direction!



Nature Day (Aklavik) Photo credit: J. Boxwell, GRRB



Photo credit: N. Westover, GRRB

Kaytlin Cooper species at risk biologist since January 2015

As Species at Risk Biologist, I work with local communities, Renewable Resource Councils (RRCs) and governments (both Federal and Territorial), assisting with species assessments and listings, developing management plans and recovery strategies and administering species at risk programs and research projects (science and Traditional Knowledge) in the Gwich'in Settlement Area (GSA).

Management Planning Since our last newsletter, I have attended two workshops in Yellowknife. Representatives from all NWT wildlife management boards, land use planning boards, land and water boards and indigenous governments met to develop a framework for boreal caribou range planning in the NWT. The range plan framework will broadly outline how each region can manage disturbances, such as development and fire, to ensure that boreal caribou continue to be

self-sustaining. To do this, critical habitat (the habitat needed for a species to survive, which for boreal caribou is 65% undisturbed habitat) must be protected. A detailed range plan for the GSA will be created in a few years.

I reviewed Section 11 agreements between the federal government, the government of Yukon, Gwich'in Tribal Council (GTC) and the First Nation of Na-Cho Nyak Dun and another between the federal and territorial governments. These agreements outline how this critical habitat will be protected on federally-administered and public lands. They include approaches developed collaboratively with wildlife management boards, indigenous governments and other indigenous organizations, such as the recovery strategy for boreal caribou in the NWT, the consensus agreement for implementing the recovery strategy and the draft range plan framework.

I participated in teleconferences on the bank and barn swallow recovery strategies and the collared pika management plan. For the Porcupine Caribou Management Board, I gathered traditional knowledge (TK) documents on barren-ground caribou to be incorporated into the federal recovery strategy. I also reviewed the draft NWT bats management plan approach and outline.

Research Bat Surveys Over the past few years, community members have reported several bat sightings in all four GSA communities. To confirm that bats are present, we need a photograph, a recording of their echolocation, a live capture, a dead specimen or a guano (poop) specimen. The GRRB has installed bat detectors over the

last two summer and fall seasons, in suitable roosting (sleeping and resting) and foraging (hunting) habitat: trails, ponds, streams, forested areas, rock crevices and buildings. These detectors record the ultrasonic echolocation calls of bats and produce a graph that can be analyzed for bat calls. A handheld detector converts the echolocation sounds into a frequency that humans can hear. Every type of bat has a different ultrasonic call, so analysis of audio and data files can often distinguish between bat species. Collected data will be analyzed by Environment and Natural Resources.

To collect more data, to know where to do surveys next year and to help manage bats appropriately, we are hoping to work with community members who have seen bats. Please continue to report bat sightings to me! Several bat species are listed as Species at Risk.

NWT Species at Risk (SAR) Stewardship Program Funding from the NWT SAR Stewardship Program was provided for the bat surveys project.

This program is also funding the GRRB and the GTC Department of Natural Heritage to take video footage, audio recordings and photographs of species at risk and scientific research fieldwork being carried out by GRRB biologists and use the pictures and recordings to produce a variety of social media products: podcasts, videos, photo posts, etc. These posts and podcasts will educate GRRB and GTC audiences about the species in question and the research carried out to conserve and manage them. The project will have direction from Gwich'in youth and GRRB biologists. The educational materials will be



shared through the GRRB's YouTube channel and via other social media, including Facebook.

Technical Advice Since our last newsletter, I have reviewed and provided comments to the federal government on the species status report for the olive-sided flycatcher. I reviewed and provided comments to the territorial government on the GNWT Moose TK Status Report and am now reviewing the NWT status report for bumble bees. After consultations with RRCs and the public, I provided advice to the Board on the proposed listings for barren-ground caribou (federal and NWT), grizzly bear (NWT, not listed/not at risk), transverse lady beetle (federal) and Harris's sparrow (federal).

As GRRB alternate member to the Species at Risk Committee (SARC), I helped draft a letter to the Conference of Management Authorities (CMA) from the SARC regarding inclusion of Threat Assessments in species assessments. A threat assessment determines the credibility and seriousness of a potential threat, as well as the probability that the threat will become a reality. I was also involved in the SARC appointment of the Wek'eezhii Renewable Resources Board alternate.

As a member of the NWT Wildlife Care Committee, I provide technical advice on wildlife handling applications, wildlife handling reports and other documents, including standard operating procedures (such as those for the

capture, handling and release of wolves). I also review research and development licensing applications on behalf of the GRRB, from the perspective of impacts on species at risk.

Liaison I attend RRC meetings in the communities when possible, including the Regional RRC meeting every January. I am involved in face-to-face meetings and teleconferences of the CMA and the SARC. I have been involved in discussions on various topics, including the development of bat educational material, caribou offsetting (actions taken to provide habitat compensation for adverse effects of industry) and wind energy development.

In June and September, I participated in teleconferences for the Convention on International Trade in Endangered Species, an international agreement between governments with the aim to ensure that the survival of wild animals and plants is not threatened by international trade.

I have been in regular contact with Allison Thompson, the wildlife biologist for the Wildlife Management Advisory Council (WMAC) NWT who is responsible for species at risk in the Inuvialuit Settlement Region. She has recently moved to Whitehorse to work with the WMAC North Slope, so I look forward to working with her replacement.

Professional Development

I participated in two webinar training sessions in September: Nature-Based Solutions in Climate Change Adaptation and Mitigation and Ecological and Sociological Considerations for the Management of Bats in Buildings.

I attended all but one Aurora Research Institute Summer Speaker Series presentation, to learn about research happening in the GSA and ISR.

This summer, in Amy's absence, I was acting Executive Director for three weeks in August and September.

Species at Risk Update Source: Canadian Wildlife Service

SARA Status	Taxon	Common Name	Last COSEWIC Assessment Date and Change	SARA Listing Date	Recovery Document Type	Recovery Document Status	Comment
Endangered	Mammals (terrestrial)	Little Brown Myotis	2013 (No Change) - Endangered	2014-11-26	Recovery Strategy	Proposed on registry (Public Consultation period complete)	Not known to be present in GSA, but keep GRRB informed.
Threatened	Mammals (terrestrial)	Boreal Caribou	2014 (No Change) - Threatened	2003-06-05	Recovery Strategy	Final	
Threatened	Birds	Olive-sided Flycatcher	2018 (Downlisted) - Special Concern	2010-02-23	Recovery Strategy	Final (Posted 2016-03-04)	
Special Concern	Mammals (terrestrial)	Collared Pika	2011 (New) - Special Concern	2017-02-22	Management Plan	In Development	Listed on February 22, 2017 as special concern
Special Concern	Mammals (terrestrial)	Northern Mountain Caribou	2014 (Reassigned) - Special Concern	2005-01-12	Management Plan	Final	
Special Concern	Birds	Horned Grebe (Western population)	2009 (New) - Special Concern	2017-02-22	Management Plan	In Development	Listed on February 22, 2017 as special concern
Special Concern	Birds	Peregrine Falcon anatum/tundrius	2017 (Downlisted) - Not at Risk	2003-06-05	Management Plan	Final on registry (Posted 2017-Oct-12)	
Special Concern	Birds	Rusty Blackbird	2017 (No Change) - Special Concern	2009-03-05	Management Plan	Final (Posted 2015-07-31)	
Special Concern	Birds	Short-eared Owl	2008 (No Change) - Special Concern	2012-06-20	Management Plan	Proposed on registry (Public Consultation period complete)	
Special Concern	Mammals (terrestrial)	Grizzly Bear (Western population)	2012 (Reassigned) - Special Concern	2018-06-13	Management Plan	In Development	Listed on June 13, 2018 as Special Concern
Special Concern	Mammals (terrestrial)	Wolverine	2014 (Reassigned) - Special Concern	2018-06-13	Management Plan	In Development	Listed on June 13, 2018 as Special Concern
Threatened	Birds	Bank Swallow	2013 (New) - Threatened	2017-11-15	Recovery Strategy	In Development	Listed on November 15, 2017 as Threatened
Threatened	Birds	Barn Swallow	2011 (New) - Threatened	2017-11-15	Recovery Strategy	In Development	Listed on November 15, 2017 as Threatened
Not Listed	Birds	Red-necked Phalarope	2014 (New) - Special Concern				Expect to be listed on Canada Gazette 1 in 2018
Endangered	Insects	Gypsy Cuckoo Bumble Bee	2014 (New) - Endangered	2018-06-13	Recovery Strategy	In Development	Listed on June 13, 2018
Special Concern	Insects	Yellow-banded Bumble Bee	2014 (New) - Special Concern	2018-06-13	Management Plan	In Development	Listed on June 13, 2018. Some indication from GRRB that may be present in GSA.
Not Listed	Mammals (terrestrial)	Barren-ground caribou	2016 (New) - Threatened				
Not Listed	Insects	Transverse Lady Beetle	Special Concern				
Not Listed	Birds	Harris's Sparrow	Special Concern				

Sarah Lord fisheries & forestry biologist January 2017

Management Planning

Fisheries Management The Integrated Fisheries Management Plan (IFMP) for Dolly Varden (western Arctic form) is being updated for 2018-2022. I have reviewed multiple drafts and am in frequent communication with the author, Red Clarke. The final draft should be completed this fall.

This fall, I worked on incorporating revisions and finalizing the Terms of Reference for the Rat River Working Group for inclusion in the updated IFMP, following directions from the Working Group. In June, I drafted a response to DFO regarding commercial fishing authorizations in the GSA.

I am an observer for the Imaryuk Steering Committee, the group responsible for implementing the community fishing plan for the Inuvik-Tuktoyaktuk Highway (ITH) corridor.

I continue to participate in the ongoing Airport Lake Recreation Management Plan process.

Research I offer my support to researchers at many different organizations for projects that address GRRB research priorities.

Airport Lake Trout For a few years now, the GRRB has been concerned about habitat quality for the fish living in Airport Lake. Past research indicated that oxygen levels in the water might be low. I completed field work on the Airport Lake water monitoring project on August 8 and September 18 and reported my results to the Nihtat RRC.

Spruce Budworm In June, I participated in pheromone trapping for spruce budworms with ENR Forestry.

Community-Based Whitefish Monitoring In July, I participated in fieldwork in Fort McPherson and Tsiigehtchic for the community-based whitefish monitoring program, with Emma Hodgson (Simon Fraser University - SFU), Rachel Hovel (University of Maine) and Tracey Proverbs (University of Victoria). Data gathered by this project is used to learn about population trends and movement patterns of broad whitefish in the Peel River. I also conducted interviews with elders and youth and collected additional video



Photo credit: Blackbird Photography

footage for use in the *Traditional Management Practices* media project.

Dolly Varden In August, I participated in fieldwork in the Rat River. I retrieved water temperature loggers in Dolly Varden habitat with Neil Mochnacz (DFO) and did environmental DNA sampling for Dolly Varden with Karen Dunmall (DFO).

With Karen's guidance I developed a sampling plan and led fieldwork in the headwaters of the Arctic Red River and the Vittrekwa River in September. We collected environmental DNA samples to try to map Dolly Varden habitat use in these areas and installed permanent water temperature loggers to monitor conditions in what we think might be over-wintering habitat. Later in September, I assisted DFO in the fall seine program at the Rat River fish hole that provides a population estimate for the Rat River stock of Dolly Varden using mark-recapture of tagged fish.

Anticipated Work In addition to analysis and reporting on these



Photo credit: GRRB



projects, I am discussing the future direction of the community-based water monitoring program with ENR Waters Division this winter, hoping we can move towards a more truly community-based approach. On the Forestry side, there is potential to re-sample Permanent Monitoring Plots for post-fire forest regeneration rates with ENR Forestry next summer. Lastly, I have been working with researchers at the Geological Survey of Canada to develop a proposal to use paleontology techniques to reconstruct water levels and environmental conditions in the Delta over the past 4,000 years – a very exciting concept, so I’m hoping it gets funded!

Technical Advice & Liaison

I am still involved in an ongoing review of changes to the *Fisheries Act*. I reviewed the draft Bill C-68 and related materials and wrote a briefing note for Board members. In June, I drafted the GRRB response to revised Bill C-68, the second report from the Standing Committee on Fisheries and Oceans and all engagement to date and submitted it to DFO. In September, I reviewed DFO’s consultation paper on Authorizations and drafted the GRRB response. I will continue to review proposed regulations and policies stemming from proposed changes to the *Fisheries Act*, as needed. DFO expects royal assent on the bill by June 2019.

I am also involved in an ongoing review of ENR’s ‘Legislative Initiative’ to update NWT’s environmental legislation. In July, I drafted a response to the Framework Document on the updated *Forest Management & Protection Act* and *Protected Areas Act*. I also drafted a letter to the Assistant Deputy Minister regarding



Photo credit: K. Dunmall, DFO

the lack of GRRB involvement in the legislative review process to date. GRRB has now been invited to the Technical Working Group table and I am providing technical support to our Board members who are participating in those meetings.

I provide written and verbal responses to RRC requests for information as requested. In late July/early August, I investigated concerns raised by Tsiigehtchic and Fort McPherson community members about ‘orange scum’ in the Peel and Arctic Red Rivers.

I inform researchers about research and management needs in our region and connect them with resources in the GSA. My main collaborations right now are:

- Karen Dunmall, Colin Gallagher, Peter Rodger (DFO) work on Dolly Varden population, habitat, biology and movement patterns
- Emma Hodgson (SFU), Rachel Hovel (U Maine), Tracey Proverbs (U Vic) work on whitefish population, biology and movement patterns
- Brenda Parlee (U of Alberta) work on whitefish and youth engagement, under the

‘Tracking Change’ funding umbrella

- Phil Marsh (Laurier U) work on hydrology and permafrost melt along the ITH corridor
- Jennifer Galloway, Thomas Hadlari (Geological Survey of Canada) have proposed a paleoreconstruction of (pre-) historic water levels in the Mackenzie Delta region

I also remain active in the GRRB Occupational Health & Safety Committee.

Youth Mentorship From December 2017 to September 2018, I supervised Jordan Norman-Goose. I assisted with developing his Technician independent project, planning and preparing for his field work, carrying out the water sampling and advised on data analysis and visualization. I continued water sampling with Jordan in the summer and fall and trained Summer Student Lyndsey Krutko in performing the water sampling too.

This fall, I trained and supervised a youth from Tsiigehtchic (Amanda Andre-Niditchie) on how to collect eDNA samples, in the field working out of Norman Wells.



Photo credit: J. Norman-Goose, GRRB

Jordan Norman-Goose technician to March 2019

I was born and raised in Inuvik. I enjoy being active and being outdoors. I find myself diligent about the work I take on and am well determined to finish something once I have started it. I graduated from the East Three Secondary School at Inuvik in May 2016.

The following fall, I enrolled in the Environment & Natural Resources Technology Program (ENRTP) here in Inuvik, a two-year diploma program offered at Aurora College. I graduated from that course in May 2018. Through ENRTP, I have enhanced my personal knowledge of not only the land, animals and plants but also my traditional knowledge of travelling, hunting and fishing. This course allowed me to combine both Traditional and Scientific Knowledge together and allowed me to exercise the way I see and know the way things work in life, both traditionally and scientifically.

My main priorities this summer were to assist the rest of the GRRB staff with their projects and take on tasks they assigned to me. I participated in education projects and programs. I ran a few projects, which allowed me to exercise my leadership skills, I coordinated youth to assist me in the small mammal survey and hare pellet count. Throughout the summer, I assisted staff and biologists with fieldwork and did other office work in my free time.

While working with the GRRB this summer, I had different tasks to complete:

- Muskox survey and vegetation sampling (Richardson Mountains)
- Small mammal trapping and hare pellet count (Inuvik)
- Fieldwork preparation (before each fieldtrip)
- Led projects (Small Mammal Trapping, Hare Pellet Surveys)
- Dall's sheep trail observations and wildlife camera setup in the Richardson Mountains
- Bear safety training (types of deterrents, how to use them)
- Water sampling in Dolomite Lake (Airport Lake)
- Maintenance around the office, storage units and Sea Can
- Maintenance of GRRB motorized equipment (boat, snowmobile, etc.)
- Reception duties (answering phones, scanning papers, etc.)
- Office work, when there was free time (file management, library database, etc.)
- Library data entry
- Maintain inventory of GRRB equipment
- Create surplus list for the RRCs



Photo credit: GRRB



I have worked with the GRRB for three consecutive summers as the Technician Trainee. I have expanded my knowledge of computer skills from working with Microsoft Office programs such as Word, Excel and Outlook. I gained experience leading projects and coordinating youth.

This summer was filled with amazing and exciting experiences, especially travelling to the mountains and outside of Inuvik. I am very thankful that the GRRB hired me as Technician Trainee once again this summer and gave me the opportunity to enhance my experience in this field of work. I have been recently promoted from Technician Trainee to Technician and I will be working with the GRRB until the end of March 2019!

My favorite part of this summer was that I got to stay out and camp in the Richardson Mountains for five days. While out there, I performed muskox surveys and vegetation sampling. I learned lots about the mountains, about muskoxen and about vegetation in the area.

I would like to thank the staff at the GRRB for hiring me again this summer and for the work I have experienced during my time here!



Photo credit: J. Norman-Goose, GRRB

Photo credit: S. Lord, GRRB



Photo credit: C. Greenland 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.

Our audit went well. The auditors did a lot of the preparations in Calgary, then spent a few days with us here in the office.

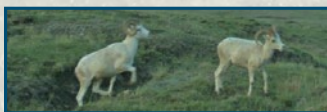
I assist with the development of the Conservation Calendar each year by providing community event dates. I also helped distribute the 2018 Conservation Calendar.

I continue to be involved in the Finance Committee. I ensure that the reports are ready for the meeting dates. We try to have them one week before the meeting.

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

Over the summer months, I helped supervise our Summer Student - giving her experience in reception, file management and financial entries.

I recently attended an Emotional Intelligence Workshop on November 27 and 28, 2018 in Yellowknife. Janet Boxwell and Jordon Norman Goose joined me for this interesting training.



Why Should You Care?

The GRRB is beginning consultations to make this determination. **The Board wants to hear input from Gwich'in Participants and traditional aboriginal Trading Partners** on the difference between traditional sharing and commercial use of wildlife meat*.

The GRRB's determination of commercial use may change how Gwich'in participants can use wildlife as new regulations may be the result of the GRRB's final decision. This consultation is a first step.

When do you think traditional sharing crosses a line into commercial use? Tell the GRRB what you think!

How Can You Give Your Opinion and Input?

- **Come to a GRRB consultation meeting** in your community this fall to learn more and to tell the GRRB what you think.
- **Fill out this survey** and return it to the GRRB by December 14, 2018.
- **Contact the GRRB** directly by mail, email, fax or phone.

**Note that fish are dealt with separately under existing regulations for commercial use. This consultation is about use of wildlife other than fish.*



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Inuvik, NT
X0E 0T0

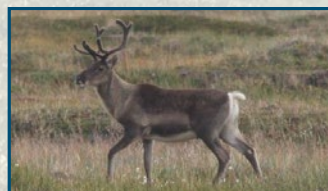
Phone: 867-777-6600
Fax: 867-777-6601
www.grrb.nt.ca

For more information contact:

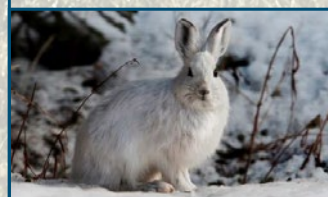
Amy Amos
Executive Director, GRRB
aamos@grrb.nt.ca
Phone 867-777-6600, ext: 1

For details on your community consultation meeting, watch for posters this fall and contact the GRRB or your local Gwich'in Renewable Resources Council:

Ehdiitat RRC, Aklavik: 867-978-2336
Tetlit RRC, Fort McPherson: 867-952-2330
Nihtat RRC, Inuvik: 867-777-6652
Gwichya Gwich'in RRC, Tsiigehtchic:
867-953-3608



How is Gwich'in Traditional Sharing different than Commercial Use of Wildlife?



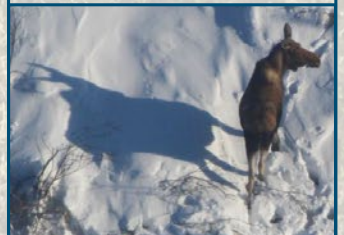
What is this about?

Concerns have been raised by the Gwich'in Renewable Resources Councils that there are **commercial sales of wildlife meat happening** in the Gwich'in Settlement Area (GSA).

The Gwich'in Comprehensive Land Claim Agreement (GCLCA) provides for traditional sharing by Gwich'in participants for personal consumption (section 12.4.16), but **this is not to be done in a way that is considered to be commercial.**

The NWT Wildlife Act requires the commercial use of wildlife to be defined before enforcement of a new regulation can take place in the GSA.

The Gwich'in Renewable Resources Board (GRRB) is the main instrument of wildlife, fish, and forest management in the Gwich'in Settlement Area. **The GCLCA gives the GRRB the power to determine what is commercial use of wildlife.**



Lynsey Krutko summer student 2018

I was born and raised in Inuvik. I'm Gwich'in. I started Grade 12 this fall at East Three Secondary School. It was a great experience to be able to work for the GRRB. My term began on July 4 and ended on August 17, 2018.

This job enabled me to learn many things about working and being out on the land. I have travelled to Tsiigehtchic and Fort McPherson to attend meetings, which were very interesting to be a part of. I also participated in some fieldwork trips and I really enjoyed spending time on the land. I learned how to file documents, enter Gwich'in Harvest Study data, complete invoices, and several other tasks:

- Field assistant for hare pellet count and small mammal survey
- Library database entry
- File management
- Reception duties
- Attended community meetings



Photo credit: GRRB



Photo credit: S. Lord, GRRB

The summer student position enabled me to gain a lot of experience that will continue to help me throughout future careers. I'm glad that I was given the opportunity to be a part of the GRRB and I'm very thankful to have worked here. The Summer Student position is an amazing job that can help youth choose their career paths, gain work experience, and learn many different work skills.

This was my very first job and I'm glad that the GRRB was a part of it. I'd like to thank the GRRB, Amy Amos and the staff for giving me this great opportunity.

North Yukon Regional Office Update

Department of Environment, Yukon Government (YG)

Porcupine Caribou Herd (PCH)

This year, we continued our usual PCH work that we undertake each year. We also started working on data analysis through various contracts, relationships with academic organizations or our own work. Much of this is in preparation for the release of the Environmental Impact Statement which is expected for the oil and gas developments in the 1002 lands of the Arctic National Wildlife Refuge (ANWR).

The updated population estimate in July 2017 showed that the PCH has continued to increase from previous estimates in 2013 and 2010. It was estimated using modern means like the Rivest Estimator, used since 2010 with Porcupine Caribou. As a result of the successful census in 2017, no effort was made to collect a new estimate in 2018.

We did monitor pregnancy rates and survival of calves this year. Pregnancy was about average, while calf survival after one month was high. We were a bit surprised by this, as the herd encountered more than a foot of snow on the North Slope prior to calving. However, most of the herd pulled back into the hills of the Babbage and calved there - apparently with good results!

One of the major projects our office has worked on over the past few years has been summarizing all of the movement data for the herd by season with observations we have collected from various sources, including communities. This information will soon be available

in a report that YG plans to publish. We expect this to occur very soon! Data will be summarized from 1991 to 2017 for every season we have data. It is a lot of information and the final product is several hundred pages, but it will be an excellent chronicle of what the herd has been up to over the years. This product is a companion to work completed between 1970-1990 by Don Russell and others.

Using this information, we were able to update the Sensitive Habitats of the PCH document that was last updated in 1993. This overlays the data for each year within a season to see how frequently the herd uses an area. This information was provided to the US Bureau of Land Management (BLM), along with recommendations on use for planning. It will be one of the primary tools used to determine where oil and gas should and should not go. Of course, we would prefer it go nowhere. However, we want to ensure that areas that are critically used do not have oil and gas as the herd will encounter development more frequently.

We are also working on identifying some of the most important habitats for the herd. The first part

of the project has focused on the Yukon North Slope, but this work will expand out to include the whole range of the herd. We are also examining the factors that seem to be driving preference or avoidance. This includes vegetation, but will also allow us to examine factors like historical seismic lines and their influence on herd movements and use of habitats.

We have spent a lot of time preparing for the ANWR 1002 oil and gas Environmental Impact Statement (EIS). A major step that we took this year was to host an expert technical meeting on development impacts on barren-ground caribou with a focus on what we need to examine for PCH. This included experts in caribou and industrial management from Alaska, Yukon and NWT, including most members of the Porcupine Caribou Technical Committee and those responsible for dealing with development in their areas. We also included specialists from other jurisdictions that have dealt with similar issues in their own areas (e.g., mule deer and major development in Wyoming, measuring zones of influence from diamond mining) and consultants that work in Alaska on similar issues around Prudhoe Bay.



The work itself is extremely complex and is based on a lifetime of work completed by an expert team of barren-ground caribou managers and researchers. It is being led by Don Russell and a broad team of experts. The intent is to provide an objective technical assessment that is totally defensible and based on technical facts and data.

We recently worked with the Porcupine Caribou Management Board to help further its TK study on Porcupine Caribou. Kelly Milner, the project manager, is working with the Parties and communities to identify what information is available and how people wish to be engaged.

Muskox Muskox work was another significant project this past winter. We started this year's activities by deploying the remaining 12 collars on muskox in the study area. Three of these were deployed in the Richardson Mountains to supplement some existing collars that had been deployed there. One collared muskox was harvested a week after the deployment. Please note that muskox had been captured in a previous year, so there was no issue with eating the meat. The harvester immediately contacted ENR, who let us know and we were able to pass along the info.

At the same time as the collaring project, we were able to conduct another count of all known groups. We believe there weren't too many uncollared muskox groups in the project area at the time, although of course we can't guarantee that. In total, we counted 344. This is an increase from the 287 muskox counted in 2016, however the community of Aklavik was certain that we missed a group of around 25-30 muskox in that count.



Conditions in the study area have been productive recently. Our other monitors show that an increase has likely occurred due to these conditions.

Some of that other monitoring is the summer composition survey work we have completed over the last few years. In the previous two years, we saw very high calf productivity. This year, we saw a return to more normal values, although there appeared to be some variability from west to east, with higher calf numbers in the Richardsons than further west. The survival of last year's calves also appeared to be okay, so we did have higher recruitment, explaining the increase in population noted in March 2018. Generally, the population appears to be relatively young, suggesting that there may be higher adult mortality. As productivity drops off, it will be interesting to see if the population cycles lower again, which may indicate what adult mortality is actually doing.

In addition to fieldwork that we are carrying out in collaboration with the GRRB, GNWT and Parks Canada, our group entered into a project relationship with Laurence Carter from McGill University in 2018. Laurence spent most of July

in the field between the Richardson Mountains and Ivvavik National Park. Most of her work was in collaboration with the community of Aklavik, with the assistance of several research partners including Jordan Norman Goose and Thomas Gordon. Both were excellent help in the field!

The work that Laurence is carrying out is based on many meetings with the community of Aklavik and various partners, in particular the Wildlife Management Advisory Council North Slope. She will be looking at habitats that muskox prefer and use, along with the influence of muskox on habitat in the region.

We continue to collaborate with other researchers that work on muskox within North America. YG is leading efforts to collect fecal samples to better understand muskox diet and is sharing samples collected from muskox that were captured the last few years and qiviut collected near groups this year with the University of Calgary. Dr. Jesper Mosbacher will be examining our data to check on the health of muskox and to determine if there are any potential challenges in the population's future.

Regional Update Environment & Natural Resources (ENR)

Staffing and Operations Shawn Vanloon was hired for the Patrolman position in Tsiigehtchic. Steve Baryluk accepted the Regional Biologist position. ENR has hired Alice Wilson in our Geospatial Analyst position with the Wildlife section.

Forest Management Update Three fire crews were trained between mid-May and mid-June. The crews were based in Fort McPherson, Inuvik and Tsiigehtchic. Emergency Fire Fighter (EFF) training was completed in Fort McPherson and Inuvik. A total of 25 EFFs were trained. EFF Fitness testing was completed in Aklavik.

The Inuvik Region had four naturally-caused fires. Three were monitored. EV-003 was located 22km southeast of Inuvik and was initially attacked. It was suppressed by one Type-1 fire crew, an EFF fire crew and two helicopters until out.

Officer Ernie Francis went on export to Ontario as an Agency Representative. The Inuvik 1 crew was also exported to Ontario. Joining them was Material Management Officer Chris Larocque.

This year, we have noticed a northward expansion of the Spruce budworm (SBW) infestation. In addition, we have observed infestations from the Northern tent caterpillar.

Spruce budworm is a native species to the NWT and has been present for many years. SBW larvae feed on current-year growth, starting with unopened spruce buds. Once they are bigger, they feed on older

branch needles, causing defoliation. Half-chewed needles are caught in webbing spun by the larvae, which dries out and turns red. Repeated years of moderate to severe defoliation can cause branch, top and eventual tree mortality.

Forest Management Division (FMD) has been monitoring the extent and severity of SBW outbreaks across the NWT, including the current expansion in the Inuvik Region. The majority of defoliation has been observed along the Peel River near Fort McPherson and along the Arctic Red River.

A pheromone trapping program continued in 2018. In addition, FMD has continued aerial forest health surveys with assistance from the Canadian Forest Service. A total of 25,753 hectares of SBW defoliation was recorded in the Inuvik Region in 2017. The 2018 results will be available this month. ENR will continue the trapping program and aerial surveys to monitor the ongoing infestation.

Field Operations Officers did patrols on the Inuvik-Tuktoyaktuk Highway (ITH) and Husky Lakes. We are planning a Patrol Schedule for the region.

Renewable Resource Officer (RRO) Voudrach traveled to Aklavik on September 17 to present a bear safety presentation to the students at the Moose Kerr School.

There are concerns coming from Aklavik. RRO Ian McLeod has been patrolling there during the night.

ENR has concerns that the solid waste site does not have controlled access, so the public continues to watch the bears that are lingering and feeding.

Water Inspections will be done on the ITH as per the water license. Source 312 was inspected and cleanup completed. Erosion by Zed Creek bridge has been addressed by the Department of Infrastructure (DoI). Silt fences were reinstalled by DoI to address the erosion problems at Trail Valley creek.

We are planning to conduct final inspections with the Lands Department (Lands) of three sumps and the Bar C solid waste site.

We participated in Tuk Tour on September 6 with the Inuvialuit Water Board for their water license renewal.

Repsol Remediation at Prince Patrick Island was cancelled this year due to weather.

The Source 174 sinkhole is being monitored by Lands and Inuvialuit Land Administration. According to them, the sinkhole doesn't seem to be getting bigger, but has collapsed on itself. If any water forms in this sinkhole, then it will become a water issue.

Environmental Assessment Ten spills have been reported in 2018. Most of these spills occurred in Inuvik; seven of the ten spills were under 100L (the reportable quantity). The largest spill was 300L inside Inuvik's Power Plant. Environmental Protection Service continues to monitor and direct remediation on spills in the region. The Cumulative Impacts Monitoring Program (CIMP) team will include input and concerns for the Inuvik Region.

Our Regional Environmental Assessment Coordinator (REAC), Alicia McRae, received her *Wildlife Act* and *Waters Act* appointments



in August of 2018. She is now able to enforce under these legislations and is waiting for her appointments under the *Environmental Protection Act*. The REAC continues to submit comments and recommendations to land and water boards. Staff members provide comments, recommendations and logistical support if required.

ENR has been working with the Hamlet of Fort McPherson on their ongoing non-compliance issues at the municipal landfill. We observed and received complaints about oil spillage at the landfill this summer. We are working with the Hamlet to provide comments and recommendations if required.

Environmental staff continue to monitor other agency-led spill responses in the region.

Research and Monitoring Barren-Ground Caribou The photo survey was conducted in late June and early July for the Tuk Peninsula (TP), Cape Bathurst (CB) and Bluenose-West (BW) caribou herds.

Body condition sampling continues with a \$50 payment for all samples. There has been an increase in the number of samples submitted.

During September, a strip transect survey was conducted on the TP and CB herds. These results will be compared to the post-calving photo survey results.

ENR continues to be involved with the working group for the action plans for the Bluenose-East, BW and CB herds led by the Advisory Committee for Cooperation on Wildlife Management (ACCWM). Action plans are being completed by the Working Group.

Muskox in Richardson Mountains ENR continues to support Yukon Government and Parks Canada to monitor muskox west of Aklavik.

Wolf Harvest Monitoring The program continued this year with sample payment still at \$200 for the entire Inuvik Region. Full carcasses are no longer being accepted. Kits request skull, fat, hair/skin, femur, and baculum (if male). This will allow us to continue to monitor the harvest. Samples are sent out for various analyses.

Wolverine Harvest Monitoring This program began in earnest in 2004/5 and switched to skulls only in the 2014/15 season. Payment is \$50 per skull. Samples are sent out for various analyses.

Muskrats and Otters ENR is collaborating with the GRRB and Jeremy Brammer to look at muskrat and predators. We have collected a sample of muskrats, foxes, mink and otters. This program will continue for the next couple of years, however carcass collection is now complete.

Porcupine Caribou The 2017 photo survey estimate was 218,000. This is higher than the 2013 result that estimated a population size of 197,000 animals.

Timely harvest data collections are needed to meet the requirements under the Implementation Plan for the Harvest Management Plan. Work is still needed to estimate total harvest based on the Circumpolar Biodiversity Monitoring Program results. The Annual Harvest Meeting will be held February 2019 in Inuvik.

ITH Wildlife Effects Monitoring Program The ITH Corridor working group meeting is held annually in June and November. Genny Michiel, who was working on the ITH file, has moved. Starting April 1, 2019 ENR will be hiring a Biologist for a three-year term.

NWT Department of Infrastructure and ENR supported the final version of the Wildlife and Wildlife Habitat Protection Plan (WWHPP) for operations. ENR participated in the May ITH Corridor Working Group meeting. At that time, the group thought the fall meeting would be a good time for the annual review agreed to in the WWHPP. ENR has secured funding for the updated version of the Wildlife Effects Monitoring Program, with new timelines and budget. This includes repeating the DNA hair snagging project in 2019 and 2020.



Photo credit:
É. Belanger, GRRB

GET IN TOUCH!

Gwich'in Renewable Resources Board

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upcoming events

GRRB Winter Board Meeting

February 5-7
Inuvik, NT

Arctic Borderlands Ecological Knowledge Society (ABEKS)

Community Gathering
February 8-10
Aklavik, NT

Porcupine Caribou Management Board (PCMB) Annual Harvest Meeting

February 12
Inuvik, NT

Conference of Management Authorities (CMA) Meeting

February 19-21
Inuvik, NT

Mackenzie Valley Resource Management Act Workshop

Inuvik, NT
February 26-28



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