



Report on the 5th Biannual Environment and Natural Resources South Slave Regional Wildlife Workshop

November 15-16, 2017

Roaring Rapids Hall, Fort Smith, NT

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Introduction

The 5th Biannual Environment and Natural Resources (ENR) South Slave Regional Wildlife Workshop was held November 15 – 16, 2017 at Roaring Rapids Hall in Fort Smith. The workshop has been held every two years since 2009. The overall objectives of the workshop are to ensure that representatives of First Nations organizations in the South Slave Region, as well as local residents, are updated on current and upcoming wildlife research and monitoring programs, to provide an open forum for discussion of regional wildlife concerns and priorities, and to provide an opportunity for other agencies, researchers, and ENR departments to present on research findings or policy initiatives.

Due to an unfortunate death in the Fort Smith community, the start of the workshop was postponed by 1 day out of respect for the family and community. Overall, approximately 50 people attended the revised 2-day workshop including delegates from Salt River First Nation, Smith Landing First Nation, Deninu K'ue First Nation, Fort Resolution Métis Council, Deh Gah Got'ie Dene Council, Fort Providence Métis Council, K'atl'odeeche First Nation, Hay River Métis Government Council, West Point First Nation, and the NWT Métis Nation. We also welcomed participation from the Fort Smith Conservation Association, Parks Canada, Aurora College (Environment and Natural Resource Technology Program, ENRTP), ENR staff and officers, researchers from southern universities, and local residents and hunters. The workshop opened with some welcoming remarks from the Deputy Minister of ENR, Dr. Joe Dragon.

The workshop included 17 presentations and 3 breakout discussions. Presenters are listed below and copies of presentations are included as an Appendix to this report. Posters were also on display during the workshop and provided general information and details on additional wildlife research and monitoring programs occurring in South Slave region (listed below).

An evening session was held on November 15th allowing those that were unavailable during the day to still participate in the workshop and learn about ENR's wildlife programs

in South Slave. A limited number of people came to the evening session, lending more to informal discussions rather than formal presentations. Due to the limited attendance at evening sessions held this year and in 2015, despite previous recommendations for such sessions, further thought will have to be given to the feasibility of holding evening sessions in the future or the focus of evening sessions will have to be revised.

Youth Involvement

Workshop Creativity Contest

Similarly to the workshop in 2015, a contest was run in conjunction with the 2017 workshop to encourage people from South Slave, particularly youth and children, to submit their stories, photos, drawings, and/or songs about wildlife.



The grand prize of ENR promotional gear, wildlife books, and games was awarded to Sanis and Thaxiu Villeneuve for their submissions on owls and ducks.



(workshop contest prizes shown)

Local School Presentations and Activities

During the afternoon of November 16th, ENR staff went to Joseph B. Tyrell Elementary School in Fort Smith to teach grade 5 students interesting facts about birds and mammals, their movements and migration, and what tracking collars are and how they help ENR

monitor wildlife in South Slave. This involved various hands-on demonstrations and group activities. Further, Louie Beaulieu, a local, experienced trapper came in to the school to speak to a grade 3 class about trapping, how furs are used, and his stories from being on the land. These classroom visits were met with enthusiasm and lots of questions from the students. Given the positive feedback that was received from teachers and students, similar school visits will be considered for future regional wildlife workshops.



(Dr. Heather Fenton, ENR Wildlife Vet, with wildlife specimens and skulls to show students)



(Ashley McLaren, ENR South Slave, Regional Biologist, showing caribou, wolf, and bison collars, and telemetry gear used to locate collars)

2017 Workshop Presentations and Posters

List of Presentations: (Copies of individual presentations available on request: allicia_kelly@gov.nt.ca)

1. Boreal Caribou Monitoring Program in South Slave- Ashley McLaren, Regional Biologist (ENR)
2. Moose Population Surveys in South Slave- Ashley McLaren, Regional Biologist (ENR)
3. Moose Harvest Sample Collection and Results- Madison Hurst, Wildlife Technician (ENR)
4. Barren-Ground Caribou Update- Heather Sayine-Crawford, Manager, Wildlife Research and Management (ENR)
5. Wolf Monitoring Program in South Slave- Ashley McLaren, Regional Biologist (ENR)
6. South Slave Wolf Diet Research- Sean O'Donovan, M.Sc. graduate (University of Alberta)
7. Aquatic Insects in the Hay and Slave Rivers- Chris Cunada and Annie Levasseur, Water Resources (ENR)

8. Whooping Cranes- Sharon Irwin, Resource Management Officer (Wood Buffalo National Park)
9. Wildlife Disease Surveillance- Heather Fenton, Wildlife Veterinarian (ENR)
10. Bat Research in South Slave- Cori Lausen, Bat Research Biologist (Wildlife Conservation Society Canada)
11. Bison Program and Bison Control Area (BCA) Review- Terry Armstrong, Bison Ecologist (ENR)
12. Sight in Your Rifle Community Events, ENR Compliance Model, and Take a Kid Trapping- Tony Vermillion, Manager, Wildlife and Environment (ENR) [presentation not available]
13. NWT Muskox and Moose Management Strategies- Terry Armstrong, Bison Ecologist (ENR)
14. Online Tools for Wildlife Observation Reporting- Stephanie Yuill, Public Education (ENR)
15. Updates on the 2017 Fire Season- Daniel Allaire, Manager, Forests (ENR)
16. Black Bear Sample Collection- Madison Hurst, Wildlife Technician (ENR)

Indigenous groups were also invited to present on any of their community-based wildlife monitoring programs. K'atl'odeeche First Nation expressed interest in wanting to present on their community-based harvest monitoring and reporting program. Regretfully, the presenter was unable to attend the workshop, but provided written details of the program that were then shared to the workshop participants. Opportunities for groups to present on their community-based programs will continue to be provided at future wildlife workshops.

List of Posters (ENR South Slave programs unless otherwise stated):

- Moose Population Surveys Overview
- NWT small mammal and hare monitoring
- Mills Lake Duck Banding Program (United States Fish and Wildlife Service)
- Body condition of boreal caribou in the southern NWT (in collaboration with National Council for Air and Stream Improvement)

- 2016 Wood Buffalo National Park Bison Survey (Wood Buffalo National Park)
- Bison collision awareness and reporting
- Maps of the South Slave Region
- Fire History Maps for South Slave Region

Review of the 2015 South Slave Regional Wildlife Workshop

At the beginning of the workshop, a review of the main wildlife concerns and comments from participants at the 2015 workshop was provided along with a summary of how ENR has worked to address these concerns. The following table summarizes this information:

Key Wildlife Concerns/Comments	How ENR is Addressing Concern
Should include the following in a moose management plan: habitat protection, harvest reporting and harvest limits, bulls-only harvest, commitments to continue population surveys, trapper incentives	Comments were included in the 2015 workshop report (public document) and are being reviewed during the drafting of the NWT Moose Management Strategy (in progress)
Collecting harvest data is critical	<p>ENR will continue to collect big and small game harvest information from resident hunters as part of the NWT Resident Hunter Harvest Survey. Data are collected annually and results (for big game) are provided in the hunting regulations book, which is updated annually.</p> <p>Starting in 2017, <i>Wildlife Act</i> implementation funding was available to Indigenous groups for development of community-based harvest monitoring programs. One group in South Slave Region submitted a proposal outlining their harvest monitoring and reporting plan and received funding to initiate their program. Other groups interested in developing their own harvest monitoring program are encouraged to contact ENR.</p>
Collar bull boreal caribou to learn about their movements and habitat use	In 2017, 5 GPS collars were deployed on bull boreal caribou in South Slave. Five bull boreal caribou were also collared in 2017 in Dehcho Region. With community support, maintaining collars on bulls will continue.

Key Wildlife Concerns/Comments	How ENR is Addressing Concern
Concerned about impacts of logging in the Forest Management Agreement (FMA) areas on wildlife and hunter access	ENR works with FMA holders (and other industries) to address road access concerns and mitigation measures to minimize impacts on wildlife through: participation on the Road Access Planning Working Group, requiring industries to develop and adhere to Wildlife Management and Monitoring Plans (WMMPs), and providing comments on development proposals and operations plans during environmental assessment (EA) public review processes.
Should learn more about use of burned areas by boreal caribou	ENR is collaborating with Forest Management Division and external partners to conduct analyses on habitat use by boreal caribou, including how caribou use unburned patches within fire perimeters. Collar data will be used in the analyses.
Key considerations to include in a Slave River Lowlands bison management plan should be: monitor habitat, predators, movement, and disease	A draft of the Bison Management Plan for the Slave River Lowlands has been completed by the working group and will be distributed for consultation in 2018. Some of the key objectives included in the plan relate to harvest monitoring, response to disease outbreaks, monitoring predators, and habitat protection.

2017 BREAKOUT GROUP DISCUSSIONS

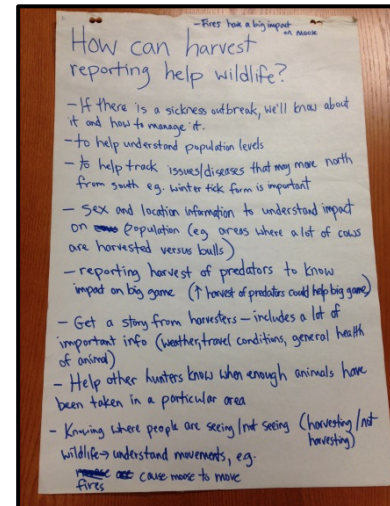
For each breakout discussion, a question(s) was posed to the workshop participants and then individuals were divided into small groups and given 15 – 20 minutes to discuss and provide comments to the question(s). After reconvening, each group shared their comments to the audience. Breakout discussions were an excellent opportunity for individuals to work together, discuss common concerns for wildlife, and share stories and observations from the land. Below are the breakout group questions and summaries of the flip chart notes made by each group.

Breakout Discussion 1: Harvest Reporting

Question: How can harvest reporting help a wildlife population?

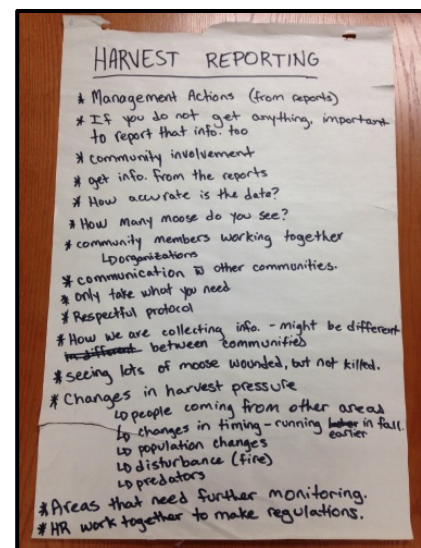
Group 1

1. If there is a sickness outbreak, we'll know about it and how to manage it
2. To help understand population levels
3. To help track issues/diseases that may move north from south (e.g. winter tick form is important)
4. Sex and location information to understand impact on population (e.g. areas where a lot of cows are harvested versus bulls)
5. Reporting harvest of predators to know impact on big game (increased harvest of predators could help big game)
6. Get a story from hunters- includes a lot of important information (weather, travel conditions, general health of animal)
7. Help other hunters know when enough animals have been taken in a particular area
8. Knowing where people are seeing/not seeing (harvesting/not harvesting) wildlife- understand movements (e.g. fires cause moose to move)



Group 2

1. Management actions (from reports)
2. If you do not get anything, important to report that information too
3. Community involvement
4. Get information from the reports
5. How accurate is the data?
6. How many moose do you see?
7. Community members (organizations) working together
8. Communication with other communities
9. Only take what you need
10. Respectful protocol
11. How we are collecting information- might be different between communities
12. Seeing lots of moose wounded, but not killed
13. Changes in harvest pressure: people coming from other areas, changes in timing- running earlier in fall, population changes, disturbance (fire), predators
14. Areas that need further monitoring
15. HR (harvest reporting): work together to make regulations



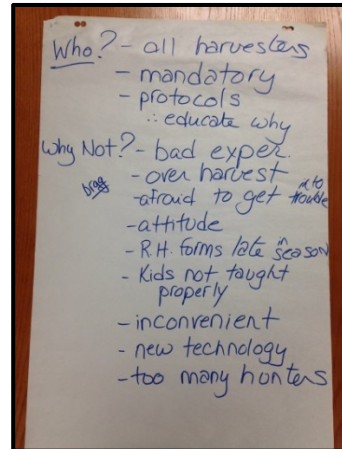
Group 3 (this group also discussed who should report their harvest)

Who?

1. All harvesters
2. Mandatory
3. Protocols- educate why

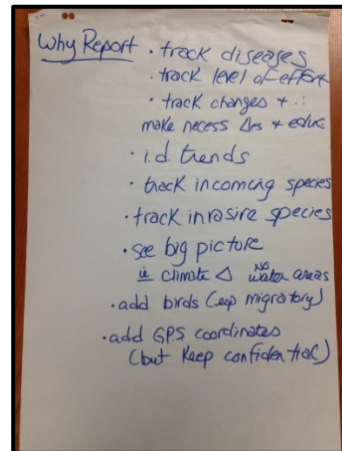
Why not (i.e. why some people may not want to report their harvest)?

1. Bad experience
2. Over harvest
3. Afraid to get into trouble
4. Attitude
5. R.H. (Resident Hunter) forms late in season
6. Kids not taught properly
7. Inconvenient
8. New technology
9. Too many hunters



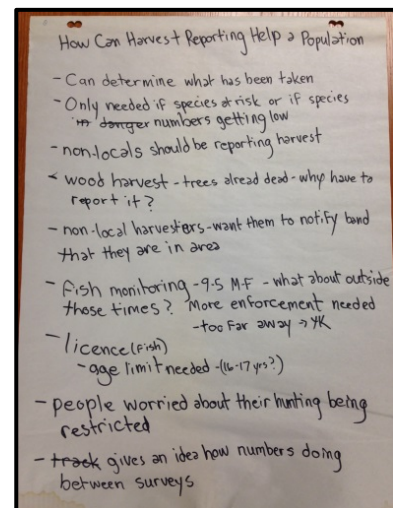
Why report?

1. Track diseases
2. Track level of effort
3. Track changes and make necessary changes and education
4. ID trends
5. Track incoming species
6. Track invasive species
7. See big picture (i.e. climate change, no water areas)
8. Add birds (especially migratory)
9. Add GPS coordinates (but keep confidential)



Group 4

1. Can determine what has been taken
2. Only needed if species at risk or if species numbers getting low
3. Non-locals should be reporting harvest
4. Wood harvest- trees already dead- why have to report it?
5. Non-local harvesters- want them to notify band that they are in area
6. Fish monitoring: 9-5, M-F (Monday-Friday)- what about outside those times? More enforcement needed, too far away- YK (Yellowknife) [Note: concerns related to fishing in the Mackenzie River near Fort Providence and not necessarily this discussion topic]
7. License (fish)- age limit needed (16-17 years?)
8. People worried about their hunting being restricted
9. Gives an idea how numbers doing between surveys



Summary of harvest reporting breakout discussion

A variety of ideas were brought forward for how harvest reporting could help wildlife populations. Groups suggested that harvest reporting could assist in documenting how many animals are harvested/harvest pressure, changes in population size, occurrences of disease and new species and could promote collaboration and communication among communities. One group suggested that harvest reporting should be mandatory and that all harvesters should report their harvest, while another group recommended that harvest reporting was only needed for species at risk or when population levels are low.

Breakout Discussion 2: Wildlife Health and Disease

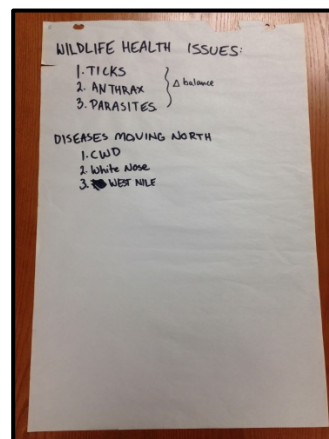
Question (2 parts): What are the top 3 wildlife health issues you are concerned about in wildlife in South Slave? What health issues are you worried about moving north to the southern Northwest Territories?

Group 1

1. Ticks
2. Anthrax (change in balance)
3. Parasites

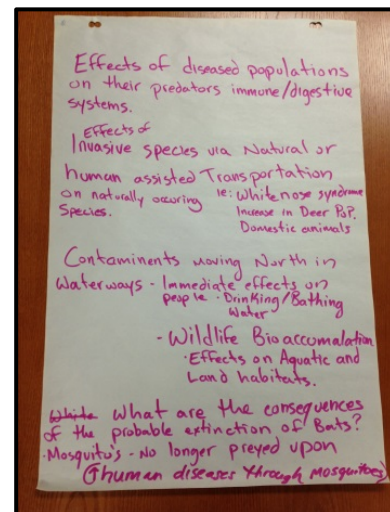
Diseases moving north:

1. Chronic Wasting Disease (CWD)
2. White Nose Syndrome
3. West Nile Virus



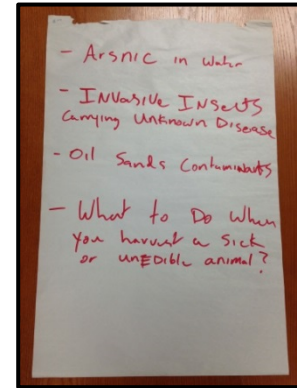
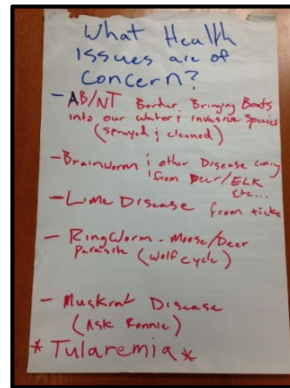
Group 2

1. Effects of diseased populations on their predators' immune/digestive systems
2. Effects of invasive species via natural or human assisted transportation on naturally occurring species (i.e. white nose syndrome, increase in deer population, domestic animals)
3. Contaminants moving north in waterways- immediate effects on people (drinking/bathing water), wildlife bioaccumulation, effects on aquatic and land habitats
4. What are the consequences of the probable extinction of bats? – mosquitoes no longer preyed upon (increase in human disease through mosquitoes)



Group 3

1. AB/NT border bringing boats into our water and invasive species (sprayed and cleaned)
2. Brain worm and other disease coming from deer/elk, etc.
3. Lyme disease from ticks
4. Ring worm- moose/deer parasite (wolf cycle)
5. Muskrat disease
6. Tularemia
7. Arsenic in water
8. Invasive insects carry unknown disease
9. Oil sands contaminants
10. What to do when you harvest a sick or non-edible animal?



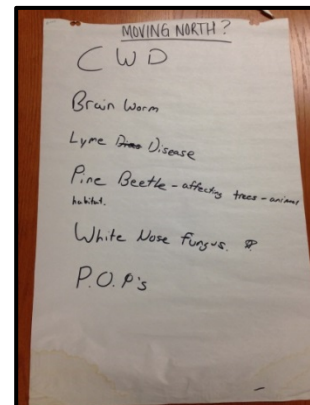
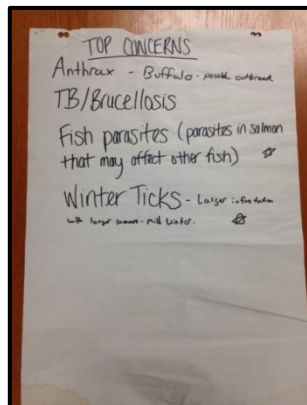
Group 4

Top Concerns:

1. Anthrax- buffalo- possible outbreak
2. TB (Tuberculosis)/Brucellosis
3. Fish parasites (parasites in salmon that may affect other fish)
4. Winter ticks- larger infestations with longer summers, mild winters

Moving North?

1. CWD (Chronic Wasting Disease)
2. Brain worm
3. Lyme Disease
4. Pine beetle- affecting trees, animal habitat
5. White nose fungus
6. P.O.Ps (Persistent Organic Pollutants)



Summary of wildlife health breakout discussions

From the discussions, it was evident that groups thought wildlife health was an important monitoring priority. The occurrence of anthrax, tuberculosis, brucellosis, and ticks in the region were key concerns. When asked which wildlife-related or wildlife-mediated diseases would be of most concern if they were to move north, chronic wasting disease,

white nose syndrome, and Lyme disease were frequently mentioned. Groups also commented on the potential for invasive species to transmit parasites and disease.

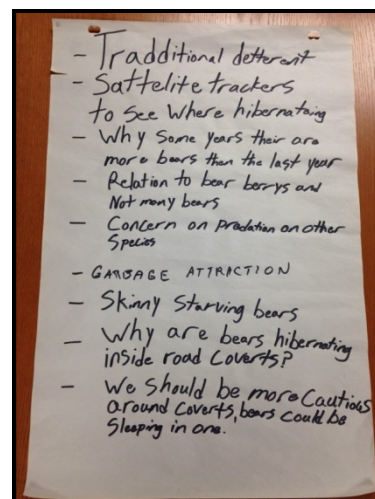
Note: Monitoring programs are already in place to monitor some of these wildlife health concerns including: hanta virus (small mammal trapping), West Nile Virus (insect trapping), white nose syndrome (opportunistic testing of bats), chronic wasting disease (testing of hunter-submitted samples and caribou samples from the ENRTP program). None of these diseases have been detected in the Northwest Territories so far, but monitoring is ongoing to detect changes. Other monitoring programs exist for concerns expressed at the workshop (e.g. anthrax, mountain pine beetle (monitored by Forest Management Division), and ENR will continue to work on public education on these issues. Workshop participants and the public are always encouraged to submit samples of anything unusual (e.g. a tick, something abnormal seen on a harvested animal) to ENR staff who will follow up with information and testing if needed.

Breakout Discussion 3: Black Bear Monitoring

Question: What are the top things South Slave Region should learn about black bears in the next 5 years?

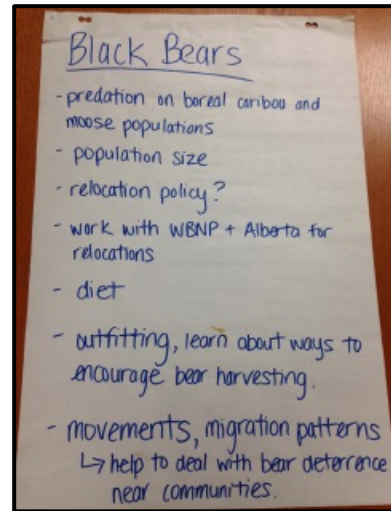
Group 1

1. Traditional deterrents
2. Satellite trackers to see where they are hibernating
3. Why some year there are more bears than the last year
4. Relation to bearberries and not many bears
5. Concern on predation on other species
6. Garbage attraction
7. Skinny starving bears
8. Why are bears hibernating inside road culverts?
9. We should be more cautious around culverts, bears could be sleeping in one



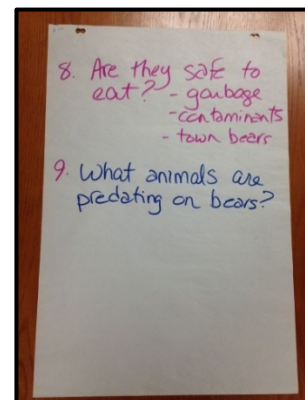
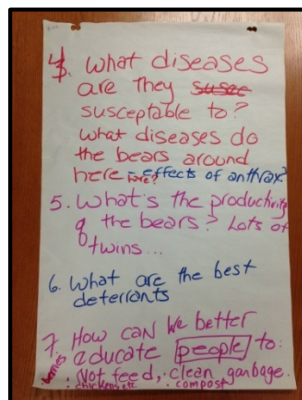
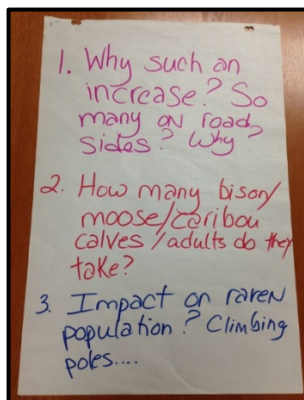
Group 2

1. Predation on boreal caribou and moose populations
2. Population size
3. Relocation policy?
4. Work with Wood Buffalo National Park (WBNP) and Alberta for relocations
5. Diet
6. Outfitting, learn about ways to encourage bear harvesting
7. Movements, migration patterns- help to deal with deterrence near communities



Group 3

1. Why such an increase? So many on roadsides? Why?
2. How many bison/moose/caribou calves/adults do they take?
3. Impact on raven population? Climbing poles.
4. What diseases are they susceptible to? What diseases do the bears around here have? Effects of anthrax?
5. What's the productivity of bears? Lots of twins.
6. What are the best deterrents?
7. How can we better educate people to not feed (berries, chicken, etc.), clean garbage, compost?
8. Are they safe to eat? (garbage, contaminants, town bears)
9. What animals are preying on bears?

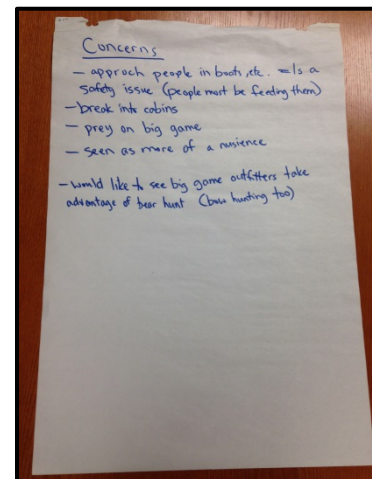
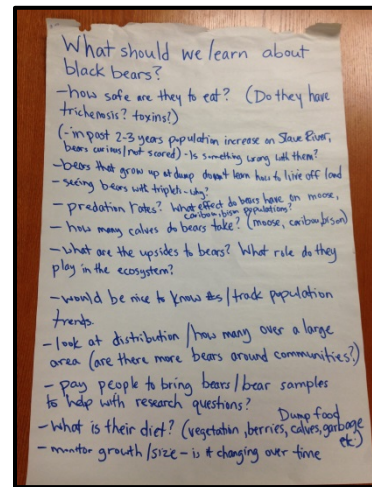


Group 4

1. How safe are they to eat? (Do they have trichinosis? Toxins?)
2. In the past 2-3 years, population increase in Slave River, bears curious/not scared- is something wrong with them?
3. Bears that grow up at dump don't learn how to live off land
4. Seeing bears with triplets- why?
5. Predation rates? What effect do bears have on moose, caribou, bison populations?
6. How many calves do bears take? (moose, caribou, bison)
7. What are the upsides to bears? What role do they play in the ecosystem?
8. Would be nice to know numbers/track population trends
9. Look at distribution/ how many over a large area (are there more bears around communities?)
10. Pay people to bring bears/bear samples to help with research questions?
11. What is their diet? (vegetation, berries, dump food, calves, garbage, etc.)
12. Monitor growth/size- is it changing over time

Concerns:

1. Approach people in boats, etc. = safety issue (people must be feeding them)
2. Break into cabins
3. Prey on big game
4. Seen as more of a nuisance
5. Would like to see big game outfitters take advantage of bear hunt (bow hunting too)



Summary of black bear monitoring breakout group discussion

This breakout group question generated a great deal of interesting discussion and questions on black bear ecology, behaviour, and human-bear conflicts. Groups highlighted a number of key components to include as part of a future black bear monitoring program in South Slave Region, such as:

- Population abundance and trends
- Diet
- Predation on big game species (caribou, moose, bison)
- Movement patterns and hibernation areas

- Public education (to learn more about bear ecology as well as reduce human-bear conflicts; e.g. use of deterrents, wise garbage disposal/storage)

A few groups also mentioned the need to encourage more black bear harvest in the region, both through outfitting and traditional practices.

Additional Comments and Suggestions

In addition to the breakout group discussions, participants were encouraged to ask questions and share their thoughts and wildlife concerns throughout the workshop. This resulted in group discussions during workshop presentations. To accommodate anyone who felt more at ease providing feedback in written form, there was a comments box in the room to allow people to freely express their opinions. On the last day of the workshop, a round table discussion was held so that participants could share any final thoughts on ENR South Slave's wildlife programs and to comment on the workshop successes and propose constructive ideas for the next wildlife workshop. The following summarizes the feedback received.

Common Concerns and Important Messages from Participants

Moose

- A lot of movement due to fires, including some long-range movements. Are fires pushing moose to the barren-lands and mountains?
- When moose numbers are low, people need to let them recover and respect local community's decision to not harvest moose by also restricting their harvest—need to all work together
- Should consider bulls-only harvest to let cows recover
- More information on cadmium levels in moose should be provided to the public
- Important to get bull-cow ratios from population surveys
- Believe that moose are generally healthy here compared to other areas (e.g. Alberta)

Caribou

- See a lot of ski-doo tracks in boreal caribou country—people chasing caribou
- Ecosystem should be considered a value-at-risk for boreal caribou range planning
- ENR should stop fires when they are small and put them out

Predators

- Supportive of wolf monitoring program in South Slave Region

- ENR should do a wolf census in the Slave River Lowlands and also report densities in smaller areas than 5000km² where wolf packs are/areas people are familiar with (e.g. Hook Lake)
- Wolf payment program helps encourage people to get out on the land and trap which is an important benefit of the program
- ENR should consider a similar payment program for bears as is in place for wolves (to encourage harvest of bears)
- ENR should have a bounty on predators (wolves and bears), because they kill calves

Other comments

- Would like copies of presentations- consider distributing on USB sticks
- Appreciate work ENR is doing
- Supportive of the hunter education program to teach youth about respectful hunting
- Nice to see students (ENRTP) learning and sitting in on workshop
- Always learn something when you get people together

Next Steps

ENR

- Distribute workshop summary report to delegates and organization representatives
- Make workshop summary report available online
- Review recommendations and suggestions from 2017 workshop to help inform priorities for wildlife research and monitoring programs in South Slave region
- Secure funding to host next Regional Wildlife Workshop in 2019

Delegates and Organization Representatives

- Ensure additional copies of report are available for distribution as requested from community members

Concluding Remarks

This was the 5th Regional Wildlife Workshop held in the South Slave and many participants have become familiar with the biannual gathering and expressed appreciation to ENR for providing information on wildlife research and monitoring programs. There was a lot of interest in the presentations, including animations of collared wolf movements and a recently completed wolf diet study. Furthermore, people seemed pleased about the way the workshop was organized and did not offer suggestions for improvement. However, ENR would welcome any comments and ideas that people may have at any point in the future.

It is important to acknowledge that without the support from the Indigenous groups to work on their traditional lands, ENR-South Slave Region would not be able to conduct the wildlife research and monitoring programs that they do. There is immense appreciation for this support. Workshops like the Regional Wildlife Workshop are a way for ENR to share information learned through such programs, but more importantly, to hear the feedback and information from workshop participants. A common theme heard during many of the South Slave Regional Wildlife Workshops is the need to work together. Information sharing is a one way to achieve that and continued conversations through workshops, meetings, and informal discussions will be of great benefit. Thank you for a successful 2017 ENR South Slave Regional Wildlife Workshop!

PHOTOS FROM 2017 WORKSHOP





Photo credits: Allicia Kelly, Madison Hurst, Ashley McLaren