

August 13th 2013

Honourable Leona Aglukkaq
Minister of Environment
Government of Canada

Honourable James Arreak
Minister of Environment
Government of Nunavut

Yves-François Blanchet
Minister of Sustainable
Development, Environment
Wildlife and Parks
Government of Quebec

Cathy Towtongie – President
Nunavut Tunngavik Incorporated

Ross Tatty – Chairperson
Kivalliq Wildlife Board

James Qillaq – Chairperson
Qikiqtaaluk Wildlife Board

Jobie Tukkiapik – President
Makivik Corporation

Robbie Tookalak – A/Chairperson
Nunavik Marine Region Wildlife
Board

Mikidjuk Kolola - Chairperson
Mayukalik Hunters and
Trappers Organization

Quvianaqtuliaq Tapaungai –
Chairperson
Aiviq Hunters and Trappers
Organization

Manasie Naullaq – Chairperson
Hall Beach Hunters and Trappers
Organization

David Irngaut – Chairperson
Igloodik Hunters and Trappers
Organization

Noah Kadlak – Chairperson
Coral Harbour Hunters and
Trappers Organization

Michel Akkuardjuk – Chairperson
Arviq Hunters and Trappers
Organization

Barney Aggark – Chairperson
Aqigiq Hunters and Trappers
Organization

David Lee/Marsha Branigan –
Chairperson
Polar Bear Technical Committee

Drikus Gissing – Chairperson
Polar Bear Administrative
Committee

Dag Vongraven – Chairperson
IUCN Polar Bear Specialist
Group

Monte Hummel – President
Emeritus
World Wildlife Fund Canada

Re: Late Written Response Submissions by the Coral Harbor Hunters and Trappers Organization, the Government of Quebec, Minister of Sustainable Development, Wildlife, Environment and Parks and the Government of Nunavut, Department of Environment for the Nunavut Wildlife Management Board's Public Hearing to consider Proposed Modifications to the Level of Total Allowable Harvest for the Foxe Basin Polar Bear Subpopulation in the Nunavut Settlement Area

Dear Colleagues:

The Nunavut Wildlife Management Board (NWMB or Board) wrote to all of the parties on June 28th, 2013 regarding the NWMB's public hearing on the proposed modifications to the total allowable harvest of the Foxe Basin polar bear subpopulation in the Nunavut Settlement Area.

scheduled to take place on September 10th and 11th at the Frobisher Inn's Koojesse Room, in Iqaluit. That correspondence invited written, translated submissions to be filed by no later than 5:00 p.m. on August 2nd. It also indicated that unless persuasive reasons were provided to the Board for late filing the NWMB would not consider materials during the hearing that were not filed on time.

On July 18th, we received a request for extension from the Coral Harbor Hunters and Trappers Organization, stating that an extension was required so that they could discuss their submission at their upcoming Hunters and Trappers Organization Board meeting. On August 8th, we received a late submission from the Coral Harbor Hunters and Trappers Organization (Appendix I).

On August 1st, The Government of Quebec filed a letter stating that due to internal government processes they would be unable to meet the submission deadline but could provide their submission during the week of August 5th. We received a late response submission from the Government of Quebec on August 8th (Appendix II).

On August 6th, staff received a written submission from the Government of Nunavut. On August 12th, staff received an email from the Manager of Wildlife stating that they were unable to meet the deadline due to administrative difficulties (Appendix III).

The delivery of written submissions within a particular time frame is an important requirement of the NWMB's process. Although it is clearly necessary from an administrative perspective – facilitating as it does the Board's efforts at making timely decisions – the primary value of meeting filing deadlines is to ensure fairness to all parties.

In order to meet the highest standards of procedural and substantive fairness in its hearing, the NWMB is of the view that other parties require an opportunity to consider whether the late filing of a submission is unfair to them, to be able to raise any objection and – if there are objections – to set out recommended measures to fairly address any resulting prejudice to them.

Accompanying this letter is a copy of the late submissions from Coral Harbor Hunters and Trappers Organization, the Government of Quebec, Minister of Sustainable Development, Wildlife, Environment and Parks and Government of Nunavut, Department of Environment and the corresponding letters explaining why the submissions were late. If you have any objections to this late filing, the Board requests that you provide a written response with reasons – in English and Inuktitut – as soon as possible, but no later than 5:00 p.m. (Iqaluit Time) on September 9th, 2013. The NWMB further request that your response set out recommended measures to fairly address any resulting prejudice to you.

Should the NWMB receive any responses, it will set aside a reasonable amount of time at the commencement of the hearing to hear the views of the parties. The Board will then make a decision and proceed with the hearing as scheduled.

Responses may be filed with the Board in person, by courier or by mail. They should be clearly marked as pertaining to the NWMB hearing on Foxe Basin Polar Bear. Delivery of the responses

may also be made through fax or electronic transmission, but only if you or your organization confirm by phone with NWMB by no later than 5:00 p.m. (Iqaluit time) on September 9th, 2013- that a complete and legible copy of the transmission has been received by the Board. Responses are deemed to have been filed on the actual day of receipt by the NWMB. The Board recommends that a copy of any response filed with the NWMB be delivered, at the same time, to the parties with late submissions.

Unless persuasive reasons are provided to the Board for late filing, the NWMB will not consider responses that are not filed on time.

To deliver responses, or if you have questions regarding this letter, or if you require further information concerning the NWMB hearing on Foxe Basin polar bear, the NWMB may be contacted at the following coordinates.

NUNAVUT WILDLIFE MANAGEMENT BOARD

P.O. Box 1379, Iqaluit, NU, X0A 0H0

Phone: (867) 975-7300

Fax: (888) 421- 9832

E-Mail: receptionist@nwmb.com

Yours sincerely,



Manasie Audlakiak
Acting Chairperson of the
Nunavut Wildlife Management Board

APPENDIX I

Fr: Aiviit Hunters and Trappers Organization

P.O Box 108

Coral Harbour, NU

X0C 0C0

Ph:867-925-8622

Fax: 867-925-8300

N.W.M.B

Coral Harbour Aiviit H.T.O is requesting an extension for a written submissions and support documentation hearing for foxe basin Polar Bear sub-population.

Aiviit H.T.O [T.A.H] have to inform the board and community of Coral Harbour it will take some time Noah has to travel on July 20th to Iqaluit for meetings.

Noah President of H.T.O request for Extension til August 15,2013

Thanks

Geraldine Stanley

Hi Sarah,

We will fully support increase of polar bear tags for the whole Foxe Basin only if it is not for individual communities.

Along with consideration sport hunt tag be separate from community quotas.

Thanks,

Noah Kadlak

President of Aiviit HTO behalf of Board of Directors

APPENDIX II

COURTESY TRANSLATION

Dear Mr. Audlaklak,

The Québec Ministère du Développement durable, de l'Environnement, de la Faune et des Parcs wishes to follow up on the letter that was addressed by the Nunavut Wildlife Management Board concerning the total allowable harvest (TAH) for the Foxe Basin polar bear sub-population. We appreciate your consideration of our point of view, as well as the one of different stakeholders involved in the management process of this subpopulation.

Polar bear is part of the traditions and culture of the Nunavik Inuit who have harvested it for subsistence for many generations. Also, given the high value of the fur, this species is a major source of income for communities that harvest it. Among the three sub-populations of polar bears who frequent Nunavik, the Foxe Basin is one that is subjected of the lowest harvest level. In fact, only four Nunavik communities harvest this sub-population: Puvirnituq, Ivujivik, Salluit and Akulivik.

The data collected by the Government of Quebec since 1986 indicate a level of annual harvest varying between 1 and 17 bears for this sub-population. Based on this historical variability, and following discussions with our partners, we believe that the TAH, provided it is sustainable, should include a minimum of 10 bears taken by the Nunavik Inuit communities. Moreover, in accordance with the traditions of these communities, a proportion of 10% of the TAH level for this sub-population should be allocated to them, which corresponds to 10 bears on a total of 106 bears.

The Ministry wishes to continue its collaboration with the different stakeholders involved in the current and future interjurisdictional management and conservation processes related to polar bear sub-populations, including Foxe Basin. In this regard, we consider that particular efforts should continue to be made in order to reach a reliable harvest and biological monitoring system for the polar bears sub-populations. For these reasons, the Ministry considers advantageous to maintain, or even increase its involvement with the Inuit representatives so that the available information is shared and also to establish common goals related to the management and the conservation of the species.

Best regards,

ORIGINAL SIGNED BY

Clément D'Astous

Appendix III

Hi Sarah,

Due to administrative difficulties, we were unable to submit the Foxe Basin Polar Bear Information along with the translation until the following working day. We will, however, be present at the Hearing and available to speak to the issue and/or present further information related to the submission, should the public or the NWMB wish. Biologist, Paul Frame will be attending the Public Hearing.

Thank you, Sarah,

Lynda



SUBMISSION TO THE
NUNAVUT WILDLIFE MANAGEMENT BOARD
FOR

Information: X

Decision:

Issue: 2013-2014 Polar Bear TAH Recommendations for the Foxe Basin (FB) population.

Background:

- The boundaries of the FB subpopulation encompass the northern part of Hudson Bay, the western end of Hudson Strait and Foxe Basin proper (Figure 1). This region is seasonally ice-free, spanning some 1.1 million km² across Nunavut and Nunavik in northern Quebec. Seven communities in Nunavut (Cape Dorset, Chesterfield Inlet, Coral Harbour, Hall Beach, Igloodik, Kimmirut, and Repulse Bay) and four communities in Quebec (Akulivik, Ivujivik, Puvimituq, and Salluit) lie within the FB bounds.
- A subpopulation estimate of $2,197 \pm 260$ (S.E.) bears was completed in 1996 from analysis of mark-recapture data collected between 1989 and 1994 (Taylor et al. 2006). In response to the findings of this study which suggested harvest was unsustainable, the permitted harvest from FB underwent a phased reduction (in Nunavut) between 1993 and 1996 to permit slow recovery of the subpopulation. During this period, Total Allowable Harvest went from 137 to 96¹ bears/year. The TAH remained at 96 until 2004².
- Local knowledge suggested the abundance of polar bears in FB had increased since 1996 (McDonald et al. 1997; GN community consultations 2004-2009). After community consultations in 2005, resulting in a new Memorandum of Understanding (MOU) for management of FB, the Total Allowable Harvest was increased to a level consistent with a subpopulation size of approximately 2,300 bears (106 bears/year; Table 1).
- Harvesting from FB by residents of Nunavik is unregulated and has averaged approximately 2.5 bears per year over the last 10 years. Note however that the 2005 MOU allocates 7 bears for Quebec for a total potential combined FB harvest of 113 bears.

Current Status:

- In 2009 and 2010, the GN conducted comprehensive aerial surveys of FB (see attached report). The surveys estimated overall abundance at about 2,580 bears, with a 95% confidence interval of 2,093 to 3,180 (CV: 10.7%). Observed litter sizes were comparable to those documented in other subpopulations with robust annual growth rates, suggesting that recruitment is currently indicative of a healthy subpopulation. Anecdotally, polar bears observed during the aerial surveys generally appeared to be in good body condition further supporting the notion that FB is a healthy subpopulation.

¹ Excludes Nunavik (Quebec) harvest

² In some years TAH was less than 96 to compensate for over harvest the year prior, as per the flexible quota system.

- Although the aerial survey provides important insights into the abundance and distribution of bears in FB, unlike mark-recapture surveys it does not provide estimates of survival and recruitment that are needed to determine population growth rate (i.e. trend) and calculate long-term sustainable harvest³. However, estimates of abundance from the 1989-1994 (mark-recapture) and 2009-2010 (aerial survey) studies are not statistically different. Although the comparability of these two studies is uncertain due to potential biases in one or both methods, this finding suggests that the current harvest management regimen has allowed FB to remain relatively stable since the early 1990s.
- The Foxe Basin communities have seen an increase in polar bears near communities which has resulted in high levels of defense of life and property kills (DLPK), among them many family groups.
- Additional research is in progress examining the movement patterns, range size and habitat use of FB polar bears. These studies based on satellite tracking of bears in FB and surrounding subpopulations as well as the collection of IQ from local communities will support status assessment and permit the re-evaluation of boundaries for FB.

Consultations:

Meetings with HTO representatives in each of the Nunavut Foxe Basin communities (Igloolik, Hall Beach, Coral Harbour, Chesterfield Inlet, Repulse Bay, and Cape Dorset) with the exception of Kimmirut were conducted between June 25th and July 26th, 2012. The meeting with the Kimmirut HTO was postponed due to board member availability; however it has been added to the agenda for their next HTO meeting. The purpose of these meetings was to present research findings and to generate discussion on management implications for the subpopulation. (See consultation summary document, attached).

The Nunavik Marine Regional Wildlife Board and the Ministère des Ressources Naturelles et de la Faune Quebec received a copy of the Foxe Basin report and have been asked to provide input or feedback.

Recommendations:

The FB Polar Bear MOU (Section 5.7.1) states that when new research information becomes available the TAH will be adjusted. In the absence of estimates of survival, recruitment and population growth rate, the impact of differing levels of harvest on the FB population is somewhat uncertain at this time. However, given the recent population estimate and the information that was garnered during the research project, the GN Department of Environment is in support of a moderate total increase of the FB harvest from 113 to 123.

Rationale: A combined annual removal rate of up to 123 bears can be supported based on the recent aerial survey population estimate of 2,580, and RISKMAN modeling. As there are no current vital rates for the FB population that can be used directly, past Baffin Bay mean survival and recruitment rates were applied for the modeling exercise. Modeling the population over 7 years indicates that at a total removal rate of 130 bears annually the FB subpopulation would likely remain near current levels. However, this modeling approach includes uncertainty with respect to the predicted population size, especially in a changing environment. Recognizing the limitations of the modeling, but also acknowledging traditional local knowledge that indicates that

³ Population trend could be established in future by conducting a series of aerial surveys at intervals (e.g. every 5 years).

the population is abundant and appears to be healthy, and noting that the current population estimate is greater than the population target number of 2,300 (as per the MOU), a moderate increase in the total FB removal rate of to up to 123 bears is very unlikely to cause any conservation concern over the short-term (i.e., 5-7 years).

A recommended total FB harvest of 123 bears, which is more conservative than the modeled 130, takes into consideration the 7 bears allotted to Quebec as per the 2005 MOU, potentially leaving Nunavut a TAH of 116 bears [Note that the Quebec communities harvested an average of approximately 2.5 bears per year over a 10-year period].

Information to consider when evaluating options:

Unlike physical mark-recapture methods, aerial surveys do not generate estimates of survival and recruitment that are needed in-order to model the impacts of differing levels of harvest. Current harvest levels appear to have allowed the subpopulation to remain relatively stable. Assuming subpopulation growth rate remains unchanged in the future and the management objective is to keep abundance at or near its current level, the slightly increased harvest management regimen carries little risk in terms of over-harvest.

Additional information relevant to harvest management will become available as a result of the recent (2008-2010) research in FB. Amongst other things, the satellite telemetry data collected will be pooled with similar data from surrounding subpopulations to reassess the boundaries of polar bear sub-populations in the Hudson Bay region. This process may result in new TAH recommendations.

Future monitoring of FB should focus on determining the trend in abundance with adjustments in TAH being made accordingly. This monitoring can be achieved by conducting a series of aerial survey counts at regular intervals or by means of a mark-recapture study that generates estimates of survival and recruitment⁴. Monitoring of sea-ice conditions may also inform future harvest management decisions by providing insights into changes in habitat quality resulting from climatic conditions and/or local industrial activity.

References:

- McDonald, M, L. Arragutainaq and Z. Novalinga (eds.). 1997. *Voices from the Bay: Traditional ecological knowledge of Inuit and Cree in the Hudson Bay Bioregion*. Canadian Arctic Resources Committee and the Environmental Committee of the Municipality of Sanikiluaq, Ottawa, ON.
- Sahanatien, V. and A.E. Derocher (2012). Monitoring sea-ice habitat fragmentation for polar bear conservation. *Animal Conservation*: In press.
- Taylor, M., J. Lee, J. Laake and P. McLoughlin. 2006. Estimating population size of polar bears in Foxe Basin using tetracycline biomarkers. Government of Nunavut, Department of Environment, Final Wildlife Report. 13 pp.

Date: 29 July, 2013

⁴ Analyses are currently in progress to determine the appropriate time interval between successive aerial surveys.

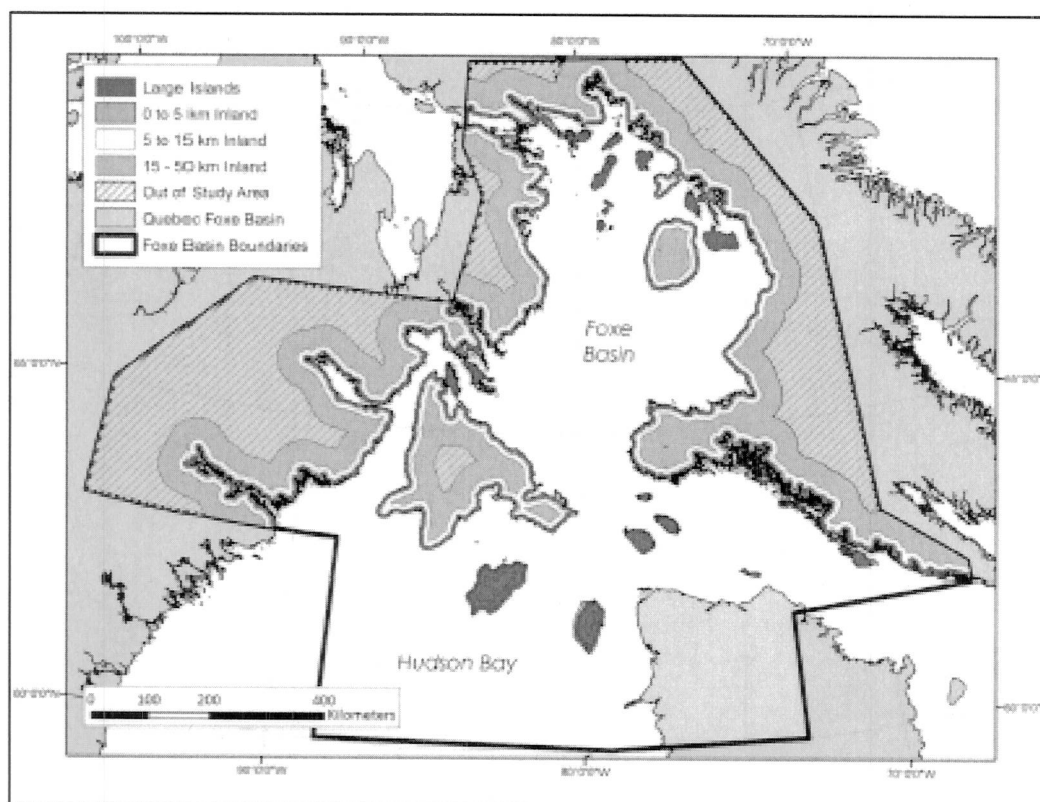


Figure 1. The FB polar bear subpopulation spans more than 1 million km² in Nunavut and northern Quebec. Multiple strata were delineated for the FB aerial surveys.

Table 1. Total Allowable Harvest (TAH) base allocations for Nunavut communities hunting in the Foxe Basin polar bear population. (Source: Polar Bear Management Memorandum of Understanding for the Management of the Foxe Basin Polar Bear Population, 2005)

NUNAVUT	TOTAL
Cape Dorset	10
Chesterfield Inlet	8
Coral Harbour	40
Hall Beach	8
Igloolik	10
Kimmirut	10
Repulse Bay	12
Kivalliq Wildlife Board	4
Qikiqtaaluk Wildlife Board	4
Subtotal	106