SUBMISSION TO THE

NUNAVUT WILDLIFE MANAGEMENT BOARD

FOR

Information: **Decision: X**

Issue: Wildlife Management Advisory Council-Northwest Territories (WMAC-NWT) request for collaboration to address management and conservation concerns for the Dolphin-Union caribou herd

Background:

On July 27th 2011, the Wildlife Management Advisory Council (WMAC) wrote to the Nunavut Wildlife Management Board (NWMB or Board) identifying current management and conservation concerns (i.e. level of harvest) for the Dolphin-union caribou herd and requesting collaboration to address these concerns. The herd is shared between the communities of Kugluktuk, Cambridge Bay, Bathurst Inlet in Nunavut and Ulukhaktok and Paulatuk in the NWT.

The letter states that based on the best available information, the population estimate of the herd is 27,000. Nunavut subsistence harvest on the herd is estimated to be between 2,000 to 3,000 annually[1], which represents a level of harvest between 7% and 11% of the 2007 herd estimate. WMAC draws the conclusion that this harvest rate is not sustainable over the longer term as there is no evidence that the herd is increasing. In addition, WMAC-NWT recommends that the NWMB work with communities to get accurate harvest data for the herd to inform possible management or conservation actions.

The NWMB is a member of the Advisory Committee for Cooperation on Wildlife Management (ACCWM or Committee) in which the mandate of the Committee is to *"…exchange information, help develop cooperation and consensus and make recommendations regarding wildlife and wildlife habitat issues that cross land claim agreement and treaty area boundaries."* This concern from WMAC was not identified at the recent meeting nor through any communication with the WMAC's representative on the Committee.

Members should also be aware that the Dolphin-Union caribou herd was recently listed under the federal Species at Risk Act (SARA) as a species of "special concern". As per SARA (s. 65) "*If a wildlife species is listed as a species of special concern, the competent minister must prepare a management plan for the species and its habitat."*

[1] Based on the Harvest Study (1996-2001) the communities of Kugluktuk, Cambridge Bay, Umingmaktok, and Bathurst Inlet cumulatively reported a total of 1,515 "Island" caribou being harvested over the 5 years for an average of 303 annually. The annual estimated NWT harvest levels for the herd are less than 200 annually; the average based on the most reliable information over a five year period is 209 (based on harvest information from 2004/2005-2008/2009);

Recommendation:

It is recommended that the NWMB write to WMAC indicating the following:

1.) That NWMB recommends that in the future WMAC identifies inter-jurisdictional wildlife management issues to the ACCWM, as the ACCWM was created by the associated jurisdictions to consider and develop recommendations to such management issues;
2.) That representatives from the NWMB, Government of Nunavut, Nunavut Tunngavik Incorporated (NTI), WMAC and the Government of Northwest Territories meet to discuss the following:
    a. The current scientific and Traditional Ecological Knowledge (TEK) on the herd;
    b. Current management challenges and concerns (e.g. current harvest levels)[2];
    c. Interest in the development of a management plan and the possibility of a joint proposal for funding for the development of such a management plan as required by the SARA

Consultations: Rebecca Jeppesen, Wildlife Management Biologist, NWMB; Bruce Hanbidge, Resource Biologist, Wildlife Management Advisory Council (NWT)

Prepared By: Adam Schneidmiller, Director of Wildlife Management, NWMB

Date: August 16th, 2011

[2] In personal communication with Bruce Hanbidge of WMAC, it was indicated that there is a desire from WMAC to consider current harvest levels in the near future due to the time required to complete a management plan. Concern was expressed

Appendix 1: Range of the Dolphin Union Caribou Herd[3]

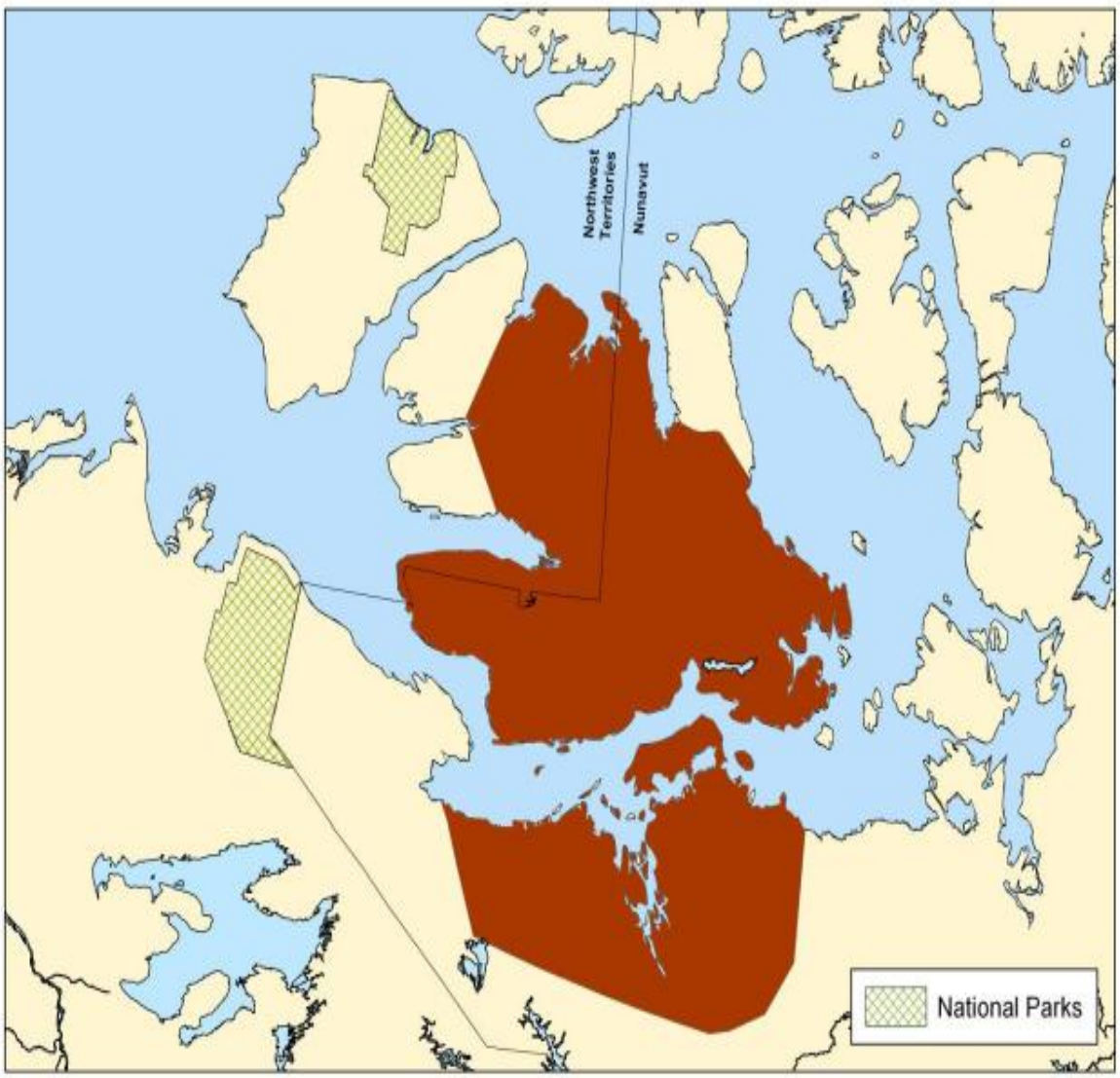


Figure 6 - Approximate range of Dolphin-Union Caribou (in red) in Canada.

[3] Obtained from the Government of Nunavut and Government of Northwest Territories joint response submission to the U.S Fish and Wildlife Service's 90-Day finding petition to list the Peary Caribou and the Dolphin and Union Populations as endangered or threatened under the Endangered Species Act. (May 3rd, 2011)

Appendix 2: Dolphin Union caribou herd migrations

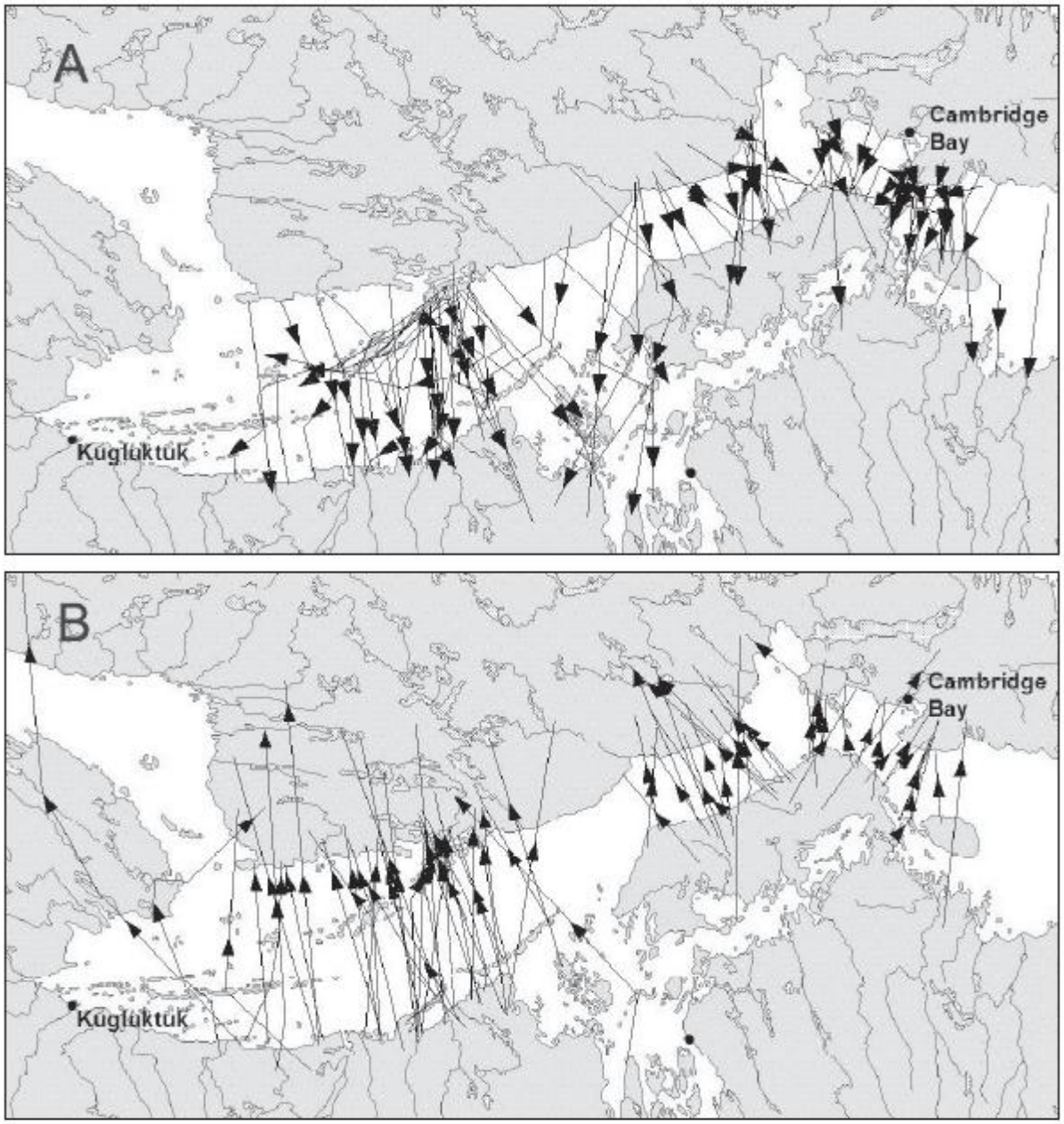


FIG. 7. Crossing locations of the Dolphin and Union caribou in (A) fall–early winter and (B) late winter–spring, 1987–2006. Arrows indicate direction of travel.

[4] [4] K.G. Poole et al. "Sea ice and migration of the dolphin and union caribou herd in the Canadian Arctic: An uncertain future". Arctic Vol. 63, No. 4 (December 2010). P. 414-428.

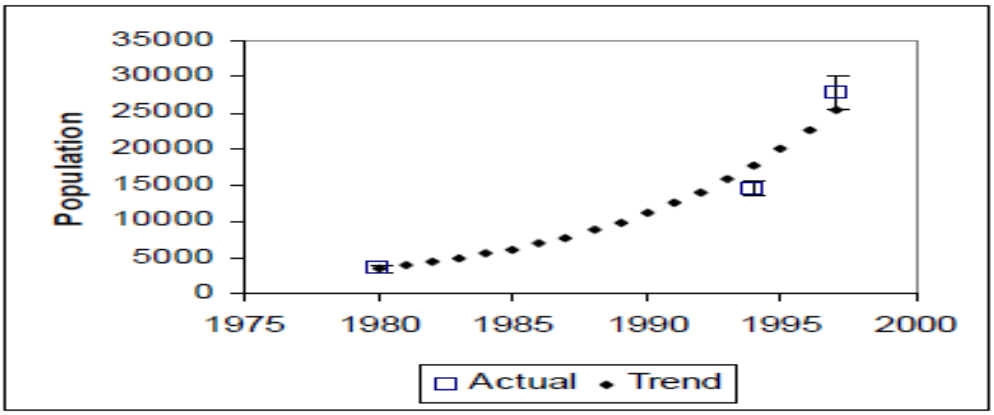
Appendix 3: Brief Summary of Information on the Dolphin-Union Caribou Herd

Listing Status:

- COSEWIC - Special Concern; SARA Status - Special Concern; Not listed under CITES or IUCN Red List

Population estimates:

- 1997 = 27,948 (±3363 SE)[5]; 2007 estimate for the herd suggests an estimate of 21, 753 (± 2520 SE); when correcting for the portion of the herd outside of the study area the estimate could increase to 27,739 (± 2343 SE)[6]
- Estimated rates of population increase lower than other herds
    - Overall maximum rate of increase = 30%
    - Dolphin and Union = 13% (based on an increase from 3,424 in 1980 to 27,786 in 1997)
- The below figure shows the population data with a fitted trend line for 1980 to 1997, an annual increase of about 13%.[7]



Trend:

- The current trend is uncertain but based on best available information the herd appears to be either stable or declining;[8]
- Documenting population trends within narrow limits of confidence is difficult because of the irregularity of surveys and the inconsistency of survey coverage and methods. Various authors have used different assumptions in extrapolating to the islands not covered in one survey to compare with populations estimated in another.

Environment:

- Growing trend toward later freeze-up of the sea ice (sea ice forms 8-10 days later than it did in 1982 between Victoria Island); this trend poses risks for the herd as increased mortality during sea-ice crossings could be expected to increase.[9]

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[5] Gunn, A. and J. Nishi. 1997. "An estimate of herd size for the migratory dolphin and union caribou herd during the rut (17-22 October 1997)" Government of the Northwest Territories. File Report No. 131.

[6] Dumond, GN, unpublished data. Obtained from K.G. Poole et al. "Sea ice and migration of the dolphin and union caribou herd in the Canadian Arctic: An uncertain future". Arctic Vol. 63, No. 4 (December 2010). P. 414-428.

[7] COSEWIC. 2004. "COSEWIC assessment and update status report on the Peary caribou and the barren-ground caribou (Dolphin and Union population) in Canada. p. 54.

[8] Dumond, GN, unpublished data. Obtained from K.G. Poole et al. 2010. "Sea ice and migration of the dolphin and union caribou herd in the Canadian Arctic: An uncertain future". Arctic Vol. 63, No. 4 (December 2010). P. 414-428.

[9] K.G. Poole et al. "Sea ice and migration of the dolphin and union caribou herd in the Canadian Arctic: An uncertain future". Arctic Vol. 63, No. 4 (December 2010). P. 414-428.