**SUBMISSION TO THE**

**NUNAVUT WILDLIFE MANAGEMENT BOARD**

**FOR**

**Information: Decision: X**

**Issue:** Increase in Total Allowable Harvest of muskoxen on Devon Island as a result of new survey results and increase in population assessment (Muskox Management Unit MX-04)

**Background:**

Devon Island has been sporadically surveyed for Peary caribou and muskoxen since 1961, usually with a focus on the productive lowland areas where muskoxen congregate. We flew a survey of Devon Island, including Philpots Island, by Twin Otter in 58 hours between March 22 and 30, 2016, to update the population estimate for caribou and muskoxen in the study area.

Survey observers were from Resolute and Grise Fiord, with 2 observers on each side of the aircraft.

During the 2016 Devon Island survey, observers recorded 14 caribou, but previous surveys in 2008 and 2001 also recorded low numbers (17 in 2008 and 37 in 2002). Hunters in Grise Fiord have not noticed an increase or decrease, and it is likely that caribou persist at low densities on the island.

Muskoxen, however, appear to have increased dramatically in abundance since the previous survey (2008), which estimated 513 muskoxen (302-864, 95%CI). The March 2016 survey found the highest reported abundance estimate for muskoxen, 1963±SE343.

This survey indicates a large increase in muskoxen on Devon Island, with more observations in all lowland areas compared to 2008, and a particular increase on Philpots Island. This population trend is mirrored on neighboring Bathurst Island to the west, surveyed in 2013, and southern Ellesmere Island to the north, surveyed in 2015.

**Current Status:**

There is currently a Total Allowable Harvest of 15 muskoxen for Devon Island, with tags allocated to Grise Fiord (4), Arctic Bay (4), and Resolute Bay (7). Grise Fiord generally fills Devon Island tags, although the other communities have not been harvesting muskoxen on Devon Island recently.

A survey report is being finalized from the aerial survey of Devon Island completed in March 2016 for Peary caribou and muskoxen.

**Consultations:**

Consultations with the Iviq HTA (Grise Fiord) took place in the community on July 18, 2016. The results of the survey were discussed and options moving forward (removal of TAH or increasing the available tags) were presented for the Board to further consider. Although there was some concern that removing the TAH altogether could result in less coordination and control of the harvest, the Board will be meeting to provide guidance on the best way forward. The options were also sent by email to the manager of the Resolute Bay HTA in early July 2016, and in-person consultation is expected in late July/early August. We will also attempt to arrange an in-person meeting with Arctic Bay to discuss survey results and management options in mid/late August, 2016.

**Recommendations:**

*Option 1: Increase the TAH from 15 to 100, for an approximate 5% harvest rate on the estimated population. Maintaining the TAH would likely be the most reliable way to maintain harvest reporting and coordinate hunts among communities.*

*Option 2: Alternatively, the TAH could be removed altogether, provided the communities communicate and coordinate harvest activities on Devon Island. It is highly encouraged that harvest reporting be maintained to track the effect of changes in management actions and distribute harvest among productive lowland areas.*