

LEGISLATIVE ASSEMBLY OF THE
NORTHWEST TERRITORIES
7TH COUNCIL, 53RD SESSION

RECOMMENDATION TO COUNCIL

NO. 1-53

TABLED ON JUNE 18, 1974



Not for release before
tabling during the
53rd Session of Council

COUNCIL OF THE NORTHWEST TERRITORIES
CANADA

RECOMMENDATION TO COUNCIL 1-53

Belcher Islands Caribou Transfer

DISPOSITION

Tabled	To Committee	Accepted as Read	Accepted as Amended	Deferred (to Session)	Rejected	Noted not Considered
<i>June 18</i>	<i>June 19</i>	<i>June 19</i>				

BELCHER ISLANDS CARIBOU TRANSFER

The transfer of caribou to the Belcher Islands. No commencing date has been assigned.

The project proposes to re-introduce a wild ungulate to an island where none have existed for approximately 100 years. It was requested by the Council of the Northwest Territories at the 51st session to provide meat for the people of the Belcher Islands.

In June of 1967, 50 live caribou were transported from Coats Island to Southampton Island in the Northwest Territories. This transplant rejuvenated interest in a similar transplant to the Belcher Islands and has undoubtedly lead to the present interest in a re-introduction of caribou to the Belcher Islands.

The Belcher Islands, situated in the lower Hudson Bay, are typically sub-arctic but are more arctic than the surrounding mainland. Plant life consists mainly of lichens and mosses, stunted willows, dwarf birch and flowering plants (Flaherty, 1918; Manning, 1971²). Animal life consists of foxes, polar bears, seals, walrus and whales. Bird life consists of several species of ducks, gulls, shore birds, some geese and ptarmigan. The population of the Belcher Islands is recorded to be 254 (Department of Local Government, Northwest Territories, Community Information Chart, January, 1974).

In 1918, Flaherty reported that "till within the last thirty-five years or so there grazed on the islands large herds of barren ground caribou". He further explained that their disappearance may have resulted from two possibilities. Firstly, the natives believed that heavy rains followed by a cold wave froze the moss and lichens into a vast ice sheet that made food inaccessible to the caribou and they starved. Secondly, Flaherty pointed out that the mainland herds changed their migration routes about that time and did not migrate into the vicinity of the Belcher Islands again. Caribou could easily traverse the ice between the mainland and the Belcher Islands and therefore, Flaherty suggested

1. Flaherty, R.J. 1918. The Belcher Islands of Hudson Bay. The Geographical Review Vol. 5(6): 453-456.
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that the shifting of the mainland migration is the more probable explanation for the disappearance of caribou from the islands.

In 1971 Manning wrote some notes relative to the re-introduction of caribou to the Belcher Islands. These were based on a brief visit to the islands and a superficial examination of vegetation. He estimated the maximum herd level, that could be sustained on the Belcher Islands, to be 500 animals. He also pointed out two unknowns: (1) the effects of the straits and long inlets dissecting the Belcher Islands which may isolate herds at least in the summer and prevent the best use of the range; (2) the likelihood of a reoccurrence of icing conditions similar to those that are generally believed to have exterminated the original herd. The recommendations resulting from this study and correspondence with Dr. C. Jonkel and Mr. G. R. Parker of the Canadian Wildlife Service are as follows:

- (1) non-migratory caribou from a similar or worse environment be used (i.e. caribou from Coats Island);
- (2) any caribou introduced should be treated for warble larvae;
- (3) that a more detailed range study be conducted prior to any transplant to allow more accurate predictions of optimum population levels, which in part determines the feasibility of a transplant and to determine whether the (Belcher Islands will support caribou on a sustained basis).

Alternative Transplants

In an attempt to foresee the various possibilities that will confront the game management division in terms of a transplant to the Belcher Islands the following animals have been considered: caribou, musk-ox and reindeer. The merits and demerits of each transplant can not be discussed without (a) a survey of the desires and opinions of the people to be affected; (b) a detailed range study to determine the feasibility; (c) an economic analysis. However, the costs of various proposals are presented for consideration. Each transplant would require the presence of a Canadian Wildlife Service veterinarian, a Northwest Territories biologist, two Northwest Territories game officers and some local people employed as casuals on contract.

A. Caribou Transplant from Coats Island

The Northwest Territories has some experience in the capture of caribou on Coats Island. These animals are non-migratory and from a similar environment to that found on the Belchers. Capture would involve collecting animals with a tranquilizer gun, shooting out of a helicopter. Approximately 50 animals would be held in pens, then transported to pens in the Belchers by Twin Otter. Costs are as follows:

(1)	Aircraft cost	\$46,500
(2)	Fuel costs	12,000
(3)	Equipment costs	8,500
(4)	Misc. Expenses	<u>6,000</u>
	Minimum Total	\$73,000
	Maximum Total	\$93,000

B. Caribou Transplant from Aberdeen Lake

Caribou from the Beverly herd are tagged annually at Box-crossing and could readily be captured. These animals live in a somewhat better environment and are migratory. Approximately 50 animals would be held in pens at the crossing site then moved by Twin Otter to the Belchers via Churchill. Costs are as follows:

(1)	Aircraft cost	\$27,000
(2)	Fuel costs	8,500
(3)	Equipment costs	8,500
(4)	Misc. Expenses	<u>6,000</u>
	Minimum Total	\$50,000
	Maximum Total	\$65,000

C. Caribou Transplant from Quebec Mainland

The Quebec government has been involved in some captures near Fort Chimo on the Koksoak River. The method that they have found to be efficient is collecting with a tranquilizer gun from a helicopter. Transfer of 50 caribou from Fort Chimo to the Belcher Islands would be by Twin Otter. These animals are a species of woodland caribou. They are big animals and relatively migratory. If a helicopter is based at Fort Chimo, the costs are as follows:

(1)	Aircraft cost	\$37,000
(2)	Fuel costs	7,000
(3)	Equipment costs	8,500
(4)	Misc. Expenses	<u>5,000</u>
	Minimum Total	\$57,500
	Maximum Total	\$77,500

D. Reindeer Transplant from the Reindeer Reserve

Approximately 50 reindeer would be purchased from the present owner of the herd. They would be flown to Churchill in a Hercules aircraft then transported by Twin Otter to the Belcher Islands. The consideration of this exotic species in lieu of the native species would cause major concerns among biologists, ecologists and the general public, particularly on the surrounding mainland of Quebec. Such a move would have to proceed with great caution and detailed studies especially since attempts to develop reindeer husbandry in Canada have not met with much success. This is in part one of the resolutions of the Caribou Technical Committee to which we are presently committed. Costs are as follows:

(1) Animal purchase	\$10,000
(2) Aircraft costs	35,000
(3) Fuel costs	14,000
(4) Misc. Expenses	5,000
Minimum Total	<u>\$64,000</u>
Maximum Total	\$80,000

E. Musk-ox Transplant from Banks Island

Some musk-ox captures are to be made this year on Banks Island and a better idea of what is involved will be obtained at that time. The present proposal would involve the capture of 30 musk-ox of varying age classes, using a tranquilizer gun and collecting from a helicopter. These animals would be transported from Sachs Harbour to Churchill in a Hercules aircraft, then by Twin Otter to the Belcher Islands. Costs are as follows:

(1) Aircraft costs	\$ 66,500
(2) Fuel costs	19,000
(3) Equipment costs	8,500
(4) Misc. Expenses	8,000
Minimum Total	<u>\$102,000</u>
Maximum Total	\$132,000

F. Musk-ox Transplant from Thelon Game Sanctuary

The present proposal would entail the capture of 30 animals using a tranquilizer gun shooting from a helicopter. Animals would be transported in a Twin Otter to the Belcher Islands via Churchill. Costs are as follows:

(1)	Aircraft costs	\$ 85,000
(2)	Fuel costs	17,000
(3)	Equipment costs	8,500
(4)	Misc. Expenses	5,000
	Minimum Total	<u>\$115,500</u>
	Maximum Total	\$145,500

Other Considerations

No other Northwest Territories Government Departments will be involved in the transplant. The Belcher Islands Hunters and Trappers Association should have direct input. The Canadian Wildlife Service will be contacted on techniques and will be requested to provide a veterinary. If the animals are to come from Quebec, a request for the animals as well as for some field assistance will have to be made through the proper government channels.

Costing

Cost estimates for each transplant have been provided after the discussion on each proposal under the Alternatives section.

Operating costs after the transplant which entails sending a game officer into the Belcher Islands on patrols and possibly on animal census would be approximately \$3,000 per year.

Yardstick

This project would be considered successful once the animals are established and the population (size to be determined from the range study) is being sustained on an annual basis.

Recommendations

Possibilities exist for the transplant of three different species onto the Belcher Islands. All of these are costly and none can be assured of success with present knowledge. The transplant of musk-ox and reindeer comes under the heading of the introduction of an exotic and is not recommended. In his book, *The Alien Animals*, Laycock (1966) pointed out that:

"The history of wildlife management and manipulation is replete with case histories that emphasize the harm such projects can cause. Release of wildlife into territory foreign to it involves not a calculated risk, but a risk too great to calculate."³

3. Laycock, G. 1966. *The Alien Animals - The story of Imported Wildlife*. The Natural History Press. Garden City, New York.

The transplant of caribou is a re-introduction and priority should be given to caribou from Coats Island. Those animals have the prerequisites suggested by the Canadian Wildlife Service after their preliminary study, they are non-migratory and come from an environment which is similar or worse than found on the Belcher Islands.

The administration supports the recommendations of the game management division specific to this transplant as follows:

- (1) that, if a transplant is favored, a detailed range study be conducted on the Belcher Islands. This study would attempt to determine whether the animals could be supported on a sustained basis and what the optimum population would be. The study would be done by contract and would cost between \$30,000 and \$60,000. It would require approximately 18 months for completion.
- (2) that, if the range study suggests a transplant is feasible, a survey be conducted to obtain the desires and opinions of the people to be affected. There are several possibilities to be considered in this transplant including: its esthetic value, its usefulness for subsistence hunting, its potential for domestication and its utilization through tourism. The attendance of game personnel to the various meetings would cost approximately \$5,000.

The final decision for a transplant to the Belcher Islands should be made only after favourable results have been obtained from these two recommended studies.

COUNCIL DOCUMENT

APPROVED

FOR _____ SESSION

6.6.74
DATE

[Signature]
COMMISSIONER

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