# THE DEVELOPMENT OF REINDEER HUSBANDRY IN CANADA

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#### CONTENTS

Early attempts at establishment	15	Reindeer husbandry under	: private	
The Mackenzie River Delta experiment	16	management	· .	13
		Selected bibliography		13

#### Early attempts at establishment

The first reindeer were introduced into Canada for humanitarian rather than commercial reasons. Encouraged by the success achieved in Alaska, where 1280 reindeer imported by Dr Sheldon Jackson from Siberia between 1892 and 1902 had increased in a few years to several times that number, the missionary physician of Labrador, Wilfred Grenfell, hoped to develop a reindeer meat-and-dairy industry in his region, where tuberculosis was common and infant mortality high. In 1908, with financial support from the *Boston Transcript* and the Canadian Department of Agriculture, he bought 300 reindeer in Norway and brought them to St Anthony, Newfoundland. Under the supervision of four Lapp herders, the animals quickly adjusted to their new environment.

In 1911, the Canadian Department of the Interior bought fifty reindeer from Grenfell and sent them by ship and rail to Fort Smith, Northwest Territories. This experiment met early failure owing to insufficient fodder during the first winter, heat and flies during the summer, and disease.

Grenfell's herd, however, prospered for a time and, by 1913, had increased to 1500. Then the Lapps returned to Norway discouraged by the low wages they received, and the herd declined. Complete collapse came when Grenfell himself left the country during the First World War, and the Newfoundland Government failed to protect the herd against poaching. In 1918, at Grenfell's request, the surviving 126 reindeer were transferred by the Department of Indian Affairs to the vicinity of St Augustin, on the north shore of the St Lawrence River, where only untrained Indians were available as herders. In 1923, the herd, which had increased slightly to 145, was transferred to Anticosti Island, where the deer were liberated. Within a few years most of them died, probably from malnutrition and disease, and by 1940 only eleven were seen.

In 1919 the Canadian Government established a Royal Commission to investigate the possibilities of reindeer and musk-ox husbandry in northern Canada. This Commission was set up at the suggestion of Vilhjalmur Stefansson, recently returned from the Canadian Arctic Expedition, 1913–18, and brimming with enthusiasm for "the friendly Arctic". He was convinced that a meat and wool

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industry could be developed in northern Canada and could contribute greatly to the national economy. The flourishing state of the reindeer industry in Alaska at that time lent support to his view.

Before the Royal Commission had finished its deliberations, Stefansson resigned his seat on it. He wanted to put his ideas into immediate practice and rented from the government an area of 295000 sq km in southern Baffin Island. His colleague in Arctic exploration, Storker Storkerson, examined the area for him and reported favourably on its grazing prospects. Encouraged by this report, Stefansson formed the Hudson's Bay Reindeer Company and bought 627 reindeer in Norway. Seventy-seven animals died during their passage to Baffin Island but, in early November 1921, the remaining 550 were landed at Amadjuak Bay with six Lapp herders and their families. Unfortunately, the pasture did not match Storkerson's optimistic report, and Storkerson himself had resigned from the project. The herd had to be split up and scattered over a wide area. Lack of proper herding was more than enough to make this experiment fail; most of the reindeer escaped to join herds of caribou, and others died from malnutrition.

The Royal Commission presented its report in 1922. It recommended the establishment of small herds in areas demonstrated by scientific examination to be suitable for the purpose. Stefansson's idea of a large-scale commercial enterprise that would supply meat to the whole of Canada was abandoned; the plan now was to establish native-owned herds to supply meat and hides for local use. The economic position of the Eskimos was a cause of concern to government, trapping was unreliable, caribou were scarce, and imported foods expensive; through the reindeer industry, the government hoped to put the economy of both Eskimos and northern Indians on a new basis.

From 1926 to 1928, the government employed two young Danes, A. E. and R. Porsild, to survey the area of Great Bear Lake, between the Alaska-Yukon border and the Coppermine River, after having spent six months in Alaska studying the industry there. They concluded that the north-east half of this area could by itself support well over 500000 reindeer.

In 1929, A. E. Porsild returned to Alaska to inspect stocks of reindeer, supervise the selection of a herd to be bought by the Canadian Government, and finally to scout out a route by which a herd from Alaska might be driven to the Mackenzie River Delta. The government then bought 3515 reindeer from herds owned by the Lomen brothers near Kotzebue Sound.

## The Mackenzie River Delta experiment

At Christmas 1929 the great trek began. The journey, which has been described many times, lasted five years and covered about 2000 km. In March 1935, the six Lapp herders and their Eskimo assistants reached the eastern side of the Mackenzie River Delta with 2370 animals. Less than 20 per cent of the original herd remained; the rest had been born along the way. The government had set aside an area of 15 500 sq km as a reindeer reserve, built the village of Reindeer Station, and a corral near Kittigazuit. When 815 calves were born, a few months after the herd's arrival, the first step toward success seemed to have been taken.

The government's plan was based on the maintenance of a federally owned herd of about 4000 animals within the reserve; from this main herd, smaller herds were to be formed from natural increase and passed to Eskimo ownership. The main herd was expected, at the same time, to supply meat for regional use. Natural increase was estimated to be sufficient for the removal of 700 to 900 head every two years. Owners of new herds were expected to return, after a certain time, the number of reindeer given them and these animals would go to the formation of new herds.

In December 1938, a new herd of 950 deer were transferred to two Eskimos, father and son, who had been trained by the Lapps and who were now located near Anderson River, about 220 km east of the reserve. In December 1940, a second new herd of 825 deer was given to two Eskimos living near Horton River. The practicability of the government's scheme was now demonstrated, but unfortunately there were not many Eskimos interested in the project's advantages. The enterprise suffered a serious reverse in 1944 when the owners of the two new herds, and their adviser, were killed in a boating accident. The remains of the two herds were later amalgamated and continued under government supervision as the Anderson River herd.

In December 1948, the establishment of native-owned herds was renewed with the separation from the main herd of 878 deer, known as Herd No 1, which were turned over to two Eskimos. Herd No 2, 1099 animals, was formed in February 1950 from the Anderson River herd, Herd No 3, 827 animals, was formed in February 1952, and Herd No 4, 1302 animals, in March 1954. The reserve had, meantime, been enlarged to about 46300 sq km. The Eskimos, according to their agreement, were supposed to return to the main herd, after three years, half the number of reindeer that had been given. Only from Herd No 2 was the return forthcoming. In this herd, if for but a short time, Canada saw its one completely successful Eskimo-owned herd of reindeer. Hope of promoting the industry either among the northern Indians or further among the Eskimos quickly faded. By 1953, 950 deer had to be taken from the main herd to save from complete collapse Herd No 1, which had shrunk to 400 animals. Even so, Herds No 1 and No 2 diminished so rapidly that they had to be amalgamated in December 1955. In 1957, the Eskimo owners returned what was left of the amalgamated herd to the government. Herd No 3 was returned in 1958. Herd No 4 remained independent until July 1964, when relations between the two Eskimo managers broke down and both decided to earn their living by wages. The government's attempt to provide the Eskimos of the Mackenzie River Delta with a stable economy through reindeer husbandry had finally and completely failed.

This failure was for a variety of reasons: insufficient herding, over-exploitation of the herds, over-grazing near the settlements, and losses through disease, predation, and poaching. Basic to these reasons was the impossibility of making responsible herders out of traditional hunters; as long as the Eskimos' situation was not desperate enough to force them to abandon their traditional way of life, they would not deliberately do it. Although fur prices fell during the 'fifties, opportunities for paid labour increased, chiefly owing to the construction of

2

radar stations along the Arctic coast and, not surprisingly, the Eskimos preferred an easy and social life in the settlements to the arduous and monotonous life of close-herding reindeer.

The Federal Government had realized from the beginning that the reindeer project was unlikely to be profitable during its initial stages and that it would have to be heavily subsidized; in fact they spent \$1165510 on it during the twentytwo years between 1935 and 1957. However, even though the only clear result of the experiment had been the demonstration that herded reindeer can live and multiply in northern Canada, the economic importance of the experiment ought not to be misjudged or underrated. During the twenty-two years, about 10 per cent of the herd was slaughtered annually, giving a total slaughter of 12054 animals. This slaughter, assuming an average weight of 55 kg per reindeer carcass, produced about 662970 kg of meat, a considerable benefit to the regional population of both Eskimos and whites, and the slaughter might have been greater had not there been such emphasis on building up the herds. In Finland, a herd's annual quota for slaughter is between 20 and 30 per cent, a percentage it would have been possible to attain had the Eskimo-owned herds been better managed. During this period, 13275 reindeer were lost through straying—a loss greater than the total slaughter—and 6872 reindeer are recorded as being lost to predators, diseases, and injuries. Reindeer hides were exported to other regions; for example, by 1957, 4647 hides had been exported to Baffin Island and northern Quebec. Although in the main herd some 60 to 70 castrated reindeer were kept as draft animals, they were used only for moving camp or pulling firewood.

### Reindeer husbandry under private management

From the time of the return of Herd No 3 in 1958, it was obvious that the experiment was no longer viable in its existing form. The government had three possible courses of action: to abandon the herds altogether, to increase government supervision and involvement, or to transfer management to experienced private interests to see if they could achieve economic success. In October 1960, J. Teal, Director of the Institute of Northern Agricultural Research in Vermont, and A. J. Oeming, manager of an animal farm in Alberta, contracted to assume responsibility for the herd for a period of five years with the continuation of the sums previously spent annually by government. Teal withdrew soon afterwards and Oeming continued with a Swede, S. B. Johansson, as manager.

Finally, in 1965, Johansson took up the contract himself and it has been renewed annually since that date.

## Selected bibliography

ABRAHAMSON, G. 1963. Canada's reindeer. Canadian Geographical Journal, Vol 66, No 6, p 189-93.

BANFIELD, A. W. F. 1961. A review of the reindeer and caribou, genus Rangifer. National Museum of Canada. Bulletin No 177.

CANADA. 1922. Royal Commission on Possibilities of Reindeer and Musk-ox Industries in the Arctic and Sub-Arctic regions. Report of the Royal Commission appointed... May 20 1919, to investigate the possibilities of the reindeer and musk ox industries in the Arctic, and Sub-Arctic regions of Canada. Ottawa, King's Printer.

Grenfell, W. T. et al. 1922. Labrador, the country and the people. New York.

Krebs, C. J. 1961. Population dynamics of the Mackenzie Delta reindeer herd, 1938-1958. Arctic, Vol 14, No 2, p 91-100.

LANTIS, M. 1950. The reindeer industry in Alaska. Arctic, Vol 3, No 1, p 27-44.

MIKKLEBORG, J. 1949–50. Reindeer from Lapland. *Bay* Outfit 3, Shipment 2, 1949, p 22–27; Outfit 3, Shipment 3, 1949, p 37–41; Outfit 4, Shipment 1, 1950, p 16–18, 25, 28–30; Outfit 4, Shipment 2, 1950, p 12–16.

Porsild, A. E. 1936. The reindeer industry and the Canadian Eskimo. Geographical Journal, Vol 88, No 1, p 1-19.

TREUDE, É. 1966. Die Entwicklung der Rentierwirtschaft in Kanada. Geographische Rundschau Jahr 18, Heft 9, p 347-53.

Tuck, J. Jr. 1954. The Baffin Island reindeer experiment. Unpublished BA thesis, Department of Geography, Dartmouth College, Hanover, New Hampshire.