promote musk-ox hunting as a sport, but this form of wool-gathering has been firmly rejected on the grounds that there would soon be no musk-oxen left. The species was at one time in danger of extinction. Between 1917 and 1968, all killing of musk-oxen was banned by the Federal Government and sports hunting of the animals is still forbidden.

Musk oxen to Soviet Union

This winter a small herd of fourteen musk-oxen were travelling in the opposite direction from the deer of 1899 — from Canada to the Soviet Union, with love. They are a gift from the governments of Canada and the Northwest Territories to the people of the U.S.S.R., in response to a request for help to re-establish these rugged animals in the Soviet Arctic.

Fossil evidence suggests that musk-oxen crossed to North America from Asia about 90,000 years ago. Today, however, the only native populations of musk-oxen are found in Arctic Canada and Greenland. Some herds have recently been introduced to Alaska. Their re-introduction into Siberia is a positive step to maintain and preserve this unique species in its natural habitat.

The Old World species became extinct in Europe following the disappearance of the continental glaciers, although there is evidence that the beasts may have continued to exist in Siberia up until about 2,000 years ago.

Canada's musk-oxen live mostly on the Arctic Islands. The three largest herds, on Ellesmere, Melville and Banks Islands, number 4,000, 3,000 and 4,000 animals respectively. The fourteen destined for Russia, including young male and female animals, are being taken from Banks Island in the Northwest Territories. The Eskimos who live on Banks Island were reported to be enthusiastic about the scheme and keen to help gather the animals for shipment. Arrangements are being made to fly them direct to the Soviet Union, with two Canadian biologists accompanying them as far as Moscow.

The Soviet Government has indicated that their final destination may be the Taymyr Peninsula on the Siberian coast. The people who live there, known as Dolgans and Nentsy, follow a lifestyle similar to the Canadian Eskimo.

Mr. Judd Buchanan, Minister of Indian and Northern Affairs, commented in announcing the plan, "This gift is made in the spirit of co-operation which exists between our two countries as circumpolar neighbours, particularly in the field of Arctic science."

Reindeer farming produces cheap meat in the Arctic

By Nick Noble

It doesn't take more than a couple of reindeer to pull Father Christmas' sleigh, but in northern Canada hundreds more are serving in a more mundane and practical way to get mankind over the winter solstice and through to spring. Reindeer farming is producing growing quantities of meat to fill the ice boxes and stomachs of hungry Eskimos, at prices they can afford — about quarter the price of beef.

The recent success of the project is largely due to a biologist, Robert Nowasad, who six years ago was appointed by the Canadian Government to investigate and advise on the already existing reindeer farm, which for various reasons was not doing well.

The story began way back in 1899, when reindeer were originally imported from Russia to Alaska: the Americans say they bought the beasts, but the Russians still insist they were stolen. Then in the 1920s, the Canadian Government were seeking to supplement the diet of natives living in the Mackenzie Delta on the shores of the Beaufort Sea. There was plenty of fish, but the only meat came from the indigenous caribou: it was a case of hunting the animals or going hungry. They decided on a grand experiment, allocating a 17,900-square-mile reserve for the establishment of a reindeer farm — a ranch as big as Denmark.

They bought 3,000 reindeer in Alaska, and in 1929 the task began of herding them together and driving them to their new home — a drive which took six years, at the end of which only one tenth of the original animals arrived safely.

These formed the basis of the herd which is there today. The thinking behind the project was that reindeer could serve the purpose of Arctic cattle, since they had the capacity to live in an extremely cold climate. Reindeer are of the same species as the local caribou, but where the caribou is footloose and fancy-free the reindeer does not have strong migratory instincts. Yet the reindeer farm did not prosper. Robert Nowasad went to find out why.

When he arrived at Inuvik — a modern arctic town whose name means 'place of man' in Eskimo — the reindeer herd was a mere 2,500 strong. Today it has doubled in size and over 600 carcasses, primarily excess bulls, have been sold locally.

He found that one of the main problems was with people, not reindeer. Eskimos are by nature hunters, not farmers, and looking after reindeer is a full-time job, he said. Indians were even less adaptable.

"On the other hand I reckon we have lost about 35,000 head since 1935. There are the predators, such as wolves, foxes and ravens which are particularly active in the fawning season.

"Then the reindeer see the caribou all fancy-free, and wander off to see the boys on the other side. Some interbreed; some go off on to the ice which melts and they drown; and we have lost some through poaching." Some of Nowasad's problems were a direct result of oil exploration. Seismic teams have torn up strips of forest, and as a 125-year-old tree can be as small as 3 ft in diameter it takes another century to replace.

Nobody is permitted to kill reindeer on the reserve, but the opening up of the area has increased the danger of poaching — the prevalence of which is directly linked to accessibility.

Said Nowasad: "The attraction of the reindeer is that they stay put. You know where to find them, but the snag is so do the poachers."

A developing bi-product of the reindeer experiment is tourism, and each year about 3,000 visitors fly north to Inuvik to see and photograph the now healthiest herd on the North American continent. The health of the herd was one of Nowasad's prime interests, and one result of his six-years as manager of the project was the banishment of dogs from the reserve.

"We discovered that there was a parasitic link between the reindeer and the dogs we were using, and we didn't help by feeding the dogs on reindeer meat. So we got rid of the dogs and now use snowmobiles for herding purposes. At least they, like the reindeer, are predictable."

Actual animal husbandry is a relatively straightforward affair because the reindeer find more or less the same food in the Canadian Arctic as in their native Lapland. In summer they forage along the Arctic coast eating grasses, shrubs and seaweed — "and take off at top speed if they find some mushrooms," said Nowasad. Then in winter they migrate about 140 miles south to their new range, existing mainly on lichen below the treeline.

What concerned Robert Nowasad was that too many trees might be lost as a result of oil exploration or, in summer, fire which is another result of man's presence. At least the Canadian Wildlife Service, in the person of Nowasad, proved that the Arctic reindeer project can be a success, provided man can be contained — and the natives can be educated away from their hunting instinct towards farming.