

Misunderstood Animal— *Musk Ox Easily Tamed, Stays Tame*

By PAUL F. WILKINSON

('Oomingmak' — the domesticated musk ox. Part 2)

In order to decide if it would be possible to domesticate the musk ox on a large scale, the following questions had to be answered: Could musk ox calves be tamed easily, and would they remain tame even when fully grown? Would musk oxen adapt to the restrictions of farm life, and would they breed successfully under these conditions?

Was there a good way to collect and process their qiviut? What was the quality of qiviut textiles? Would raising domesticated musk oxen fit in with social and economic structure of life in the Arctic?

Between 1954 and 1964 a series of experiments was conducted in Vermont to answer

these questions.

Taming musk ox calves proved easy, as I described above, and it became clear that

(Continued on page 6)

Musk Ox Stays Tame...

(Continued from page 1)

musk oxen remained tame and trusting even as adults, when bulls weigh up to 900 lb. and cows from 500-650 lb.

Musk oxen are apparently intelligent animals, and they quickly learned the routine of farm life; indeed, some of them even learned their names and would come running across the pastures when they were called.

All the animals soon became accustomed to entering the barn to be weighed, and they tolerated the frequent physical examinations and scientific experiments to which they were subjected.

Fortunately, it was discovered that sick musk oxen responded well to drugs and treatments developed for sheep and cattle, although one advantage of the harsh Arctic climate is that many types of diseases are much rarer than further South. Because musk oxen thrive on a diet of grasses and browse species, as well as on hay, feeding them is easy.

As far as we know, most musk ox cows do not breed until they are 4 years old, and bulls may not breed until later than this, since the older bulls are often the best fighters and take all the females for themselves.

Because domesticated musk oxen are so well fed, they grow very rapidly, and most cows can be bred when they are just over two years old. Wild musk ox cows normally have only one baby every two years, for they suckle their calves for up to 12 months after birth, and therefore they do not come into heat in the same years that they calve.

On a farm, in contrast, calves can be weaned when they are four months old, and their mothers can be bred every year. Twinning is unknown for wild musk oxen, but domesticated musk oxen have already produced one set of twins.

All these points are obviously important for someone who is raising musk oxen commercially.

Since domestication means principally that animals are bred selectively, great attention was paid in the early days to working out a program of selective breeding.

This program, which is still operating, is designed to increase the quality and quantity of the annual qiviut yield, to make musk oxen as tame as possible, to create a hornless animal, and to encourage twinning.

When the Musk Ox Project started, some people said that it would be impossible to collect the qiviut. They believed that it would have to be sheared like sheep's wool, and that the qiviut and the coarse outer hairs would become inextricably mixed.

Shearing is, however, unnecessary, for musk oxen shed their qiviut every spring, but they keep the outer hairs all the year round as protection from the sun and insects in summer.

Because domesticated musk oxen are tame, collecting their qiviut is an easy task. When the qiviut starts to fall off, usually in May, the musk oxen are put into small stalls once every few

days, and the herder gets into the stall with the animal and pulls off the loose qiviut by hand.

Adult bulls give from 5 1/2-7 lb. annually, females and younger animals proportionately less. Musk oxen probably live for more than 20 years, and their qiviut can be collected each year. The estimated value of raw qiviut is \$50.00 per lb., although, as I shall explain later, the value of qiviut textiles is far higher than this.

Technically, natural fibres are graded according to the length and diameter of individual fibres. By these standards, qiviut fibres are on average both longer and finer than those of cashmere.

Processing natural fibres involves in the first stages separating the wool from the outer hairs, cleaning the wool by washing it, and spinning it into yarn. Happily, it turned out that machinery designed to process cashmere and other exotic fibers was admirably suited for processing qiviut.

Sample garments and pieces of yarn were sent to experts in the fields of fashion and textiles, and they were deeply impressed, stating confidently that there would be a good market for such products once they were available.

All the evidence suggested that raising musk oxen in the Arctic would not conflict with the existing social and economic structure of village life. Since musk oxen require little attention and can be handled with ease, the burden on herders would not be too great, and the anticipated profits would be great enough to pay these men well; nor would there be an important clash with other activities such as hunting, fishing, or cash-labor.

Unlike the reindeer, the musk ox is not migratory, and herders would not have to leave their homes and families in order to look after the animals. Producing the textiles would be an activity to be carried out by the women in their spare time, and it would not interfere with their other activities associated with their homes and families.

Because musk oxen eat different foods from reindeer and caribou, and because they give different products, domesticated musk oxen would not interfere with either of these.

By 1964, it was clear that commercial musk ox farming in the Arctic was feasible. With the assistance of the W.K. Kellogg Foundation and the University of Alaska, the first large-scale musk ox breeding station was established near the University with 23 female and 10 male musk ox calves captured on Nunivak Island in 1964 and 1965.

Since that time, two more breeding stations have been established: at Old Fort Chimo, Quebec, Canada; and at Bardu, in the North of Norway. If plans work out well, more such stations will be started in Canada and Greenland.

In the next article, I shall describe life on a breeding farm.