

This article first appeared in the October/November 2007 issue of The Deer Farmer magazine, published by Country-Wide Publications Ltd, PO Box 529, Feilding, NZ. It is reprinted here with permission.

Reindeer, Red deer and horses

All ungulates and good to eat

By Dr Eva Wiklund, Senior Scientist, AgResearch MIRINZ

The Arctic Ungulate Conference (AUC) has occurred every fourth year since 1972 and attracts international scientists involved in all aspects of research into Northern Ungulates. In August I attended the 12th AUC, which was held in Yakutsk, eastern Siberia. There they have a long tradition of human engagement with ungulate species: the conference logo (below) features a rock painting of a deer from the second half of the first millennium A.D. found in the local area.

About 100 participants met up at the conference, of which 20 were non-Russian delegates from Canada, USA, Norway, Sweden, Finland, Mongolia and New Zealand. Norway was particularly well represented by scientists, members from the Reindeer Herders Association and members from the Reindeer Herding Administration.

The 58 presentations covered a very wide range of topics, including: wild and domestic Reindeer, Reindeer husbandry issues including pasture/grazing and disease (Tuberculosis and Brucellosis), Red deer numbers, density and morphology in the wild Yakutian population, Roe deer migration in Yakutia, studies of the local Yakutian breeds of horse and cattle, and work on re-introduction of Muskoxen to Northern Siberia.

The wild population of Red deer in the Yakutian Republic, we were told, has been studied for at least 50 years. A clear seasonal pattern of movements have been recorded. During spring the deer density is highest in the hill country, on the slopes where the snow first disappears. During the autumn and rutting season animals are more scattered than at other times and an average size of harem groups of nine hinds per stag has been observed. In the winter, deer density is highest in the river valleys, which will provide the best grazing conditions at that time of the year. Currently the average density of animals in the area (120,000 km²) is 0.4 deer/10 km², which means an estimated total number of 4,800 deer. In the time they've been studied, the Red deer numbers have increased by 35%.

The chemical composition and nutritional value of venison from both wild and domestic Reindeer was presented by both Finnish and Russian scientists. And their conclusions were very similar: Reindeer venison was found to be low in fat, high in important minerals and trace elements, and to have a favourable fat composition. However, the Finnish studies highlighted the fact that supplementary feeding of the animals can relatively quickly have a negative impact (increase fat content and the amount of saturated fatty acids) on these positive quality attributes.

Another presentation explained how Siberian Reindeer herders have selected Reindeer for certain attributes to suit different purposes, such as meat production and transport.

In the Yakutian Republic the native horse breed, a small, sturdy and “pony-like” horse, is traditionally a very important source of meat and milk. In fact, during the conference we were offered many horsemeat dishes, including horsemeat soup, stew and casserole.

These amazing animals have adapted to the extreme Siberian climate over the past 2,000 years and seem to be as well adapted to the Arctic climate as the Reindeer. Temperature variation over the year is huge, with winter recordings of -60 °C and summer temperatures of +38 °C considered to be normal. The horses are farmed in a free-range setting similar to Reindeer (which means no housing in the winter and no supplementary feeding), but during spring and summer are kept in fenced farms to facilitate milking of the mares. Chemical composition and nutritional value of the horse meat has been found to be similar to that of Reindeer venison, particularly the fat composition.

At the conference I presented results from recent research into venison quality, a collaborative project between AgResearch MIRINZ and Invermay’s Deer Systems group. This project was focused on selecting young fast-growing red deer for venison production. My presentation led to several questions and a general discussion about the various aspects of deer farming in New Zealand. During the conference I was interviewed twice for local newspapers and once for an agricultural news show on local TV.

As the only conference participant from the Southern Hemisphere, I was indeed treated as a very special guest and this meant I was expected to give a speech at every official dinner – something that I wasn’t prepared for at all but gradually got used to over the conference week.

END