



Imported Elk from Canada

543

## New Zealand Elk and the 'Red deer test' in Alberta

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IN ALBERTA, the demand for Elk for farming exceeds the supply, so Alberta game growers are obtaining animals from outside the province.

To protect natural populations of Elk, the Alberta Fish and Wildlife has stipulated that no Red deer or Elk-Red hybrids can be imported. To enforce this, the Invermay Deer Bloodtyping Laboratory has been contracted to analyse the blood of Elk entering Alberta.

The test results show that some of the animals do have a history of hybridisation with Red deer. This has implications, not only for the Alberta game growers, but also for New Zealand farmers who own Elk imported from Canada.

Game growing is a growth industry in Alberta. Although venison cannot be sold, animals can be sold to neighbouring states for slaughter and velvet can be cut.

However, in a situation familiar to New Zealanders the greatest value of the animals is as livestock in a market where demand exceeds supply. There are large natural populations of Elk in Alberta, but these are protected and not generally available for capture.

Game growers are allowed to capture six animals from the wild to establish a herd if the population density of protected Elk allows. This is hardly the basis of a competitive deer indus-

try, so to obtain animals game growers are importing animals from the other Canadian provinces and the United States.

To date, the Invermay laboratory has tested more than 1000 animals imported into Alberta. In this group, 6 per cent of animals contained genes not found in pure Elk. These animals have types typical of hybrids between Elk and Red deer.

The only way these hybrid animals can now enter Alberta is if the male animals are vasectomised. This policy effectively avoids the spread of Red deer genes and the possibility that these genes will spread into natural populations of Elk.

Red deer have been introduced into the United States and occur both on ranches and in the wild. Small unfenced populations have been reported in Texas, Kentucky, and California by Mr C. Lever in his book 'Naturalised animals of the world' but the majority of Red deer in the United States are on ranches.

Some of the hybrids detected entering Alberta can be traced to ranches which have run both Red deer and Elk. In other cases, the exact source of the Red deer genes is obscure as the animals may have been traded several times.

Since 1981, 341 Elk have been im-

ported into New Zealand from a variety of sources in Canada. The Alberta results show that there is a possibility that a small proportion of these Elk will have a history of hybridisation with Red deer.

The presence of hybrids in Canada emphasises how difficult it is to select and maintain populations of pure animals. The steps which the Alberta government is taking to protect its wild populations should ensure continued purity.

Farmers who own or purchase imported Elk in New Zealand face a more complex problem, which is to maintain the identity and purity of imported Elk and their progeny in the face of an increasing number and variety of hybrids on farms in New Zealand.

The population of pure imported Elk in New Zealand is a valuable source of genes for our crossbreeding industry.

The New Zealand Wapiti Society has recognised the need to identify and maintain this population of pure animals. They are presently developing a registration procedure which includes bloodtyping.

The value of this registration procedure is that it will maintain the purity and identity of New Zealand's imported Elk and their progeny so these animals can continue to provide a base stock for crossbreeding. □