

DEER FARMING IN NEW ZEALAND

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From one end of the country to the other, New Zealand is a pastoral (outdoor, pasture feeding) farming landscape. Profitability of traditional sheep and cattle farming diminished in the early 1970's and, with the innovation of wild animal capture, a new farmed-deer industry emerged. There were two main reasons why the farming of deer developed at a faster rate in New Zealand than anywhere else in the world: (1) The country had a very large wild deer population and no natural predators so the deer population was virtually out of control. Public perception saw the deer as a "noxious pest". The seed stock for a farming industry was abundant. (2) New Zealand's livestock industry, built up over 150 years in a favorable temperate climate, was entirely based on pastoral farming with the animals grazing their feed from pasture. Supplementary feeding was confined to maintaining the breeding herds on hay and silage over winter to add to the winter pasture production (winter pasture growth in most areas of New Zealand is comparable to fall pasture growth in Wisconsin). Deer do not readily adapt to a feedlot environment, but can be readily managed in modified pastoral farming systems.

The first deer farm was licensed in 1970, and within 20 years the farmed deer population has grown to a million animals. Considerable research has been performed in all aspects of the industry including farm management, reproduction, growth physiology and product development. Venison will become the main product from New Zealand deer farms, but in the early days of deer farming it was less important than animal trading (female prices reached \$3,000

per animal) and in recent times has had a lower profile than velvet antler (prices have fluctuated from \$100 to \$300 per kilogram). The medium term outlook for venison is an increase in production from 4,500 tonnes in 1990 to 20,000 tonnes by 1995.

New Zealand export earnings from deer products exceeded \$80M in 1990. Venison from farmed deer (mainly red deer, *Cervus elaphus*) as a top quality gourmet food item is an economically significant export product. With the growth in health consciousness in today's society and concern for fat content in red meats, there has been a growing interest in venison as a source of lean meat. The industry is in a phase of rapid expansion, and new technologies in processing and packaging have been investigated to cater for future markets and consumers. Areas of venison research have included composition and nutrient analysis, factors affecting venison quality (e.g. electrical stimulation, dressing procedures, packaging and shelf life of chilled and frozen venison) and comparisons between different ages, sexes and breeds. The attainment and maintenance of quality in both velvet antler and venison are high priorities. There has been a recent launching of a venison "quality mark". The objective is to provide a consistent guarantee in the industry's markets that product bearing the mark comes from New Zealand deer, meets a set of identified quality standards, and is being offered by an approved exporter.

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