

## SLAUGHTER SHEEP EXPORTS FROM NEW ZEALAND 1985-1989

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The export of live sheep from New Zealand for slaughter (as distinct from those exported for breeding purposes) began in late 1985. Over 4 years 2,508,000 sheep were transported in 37 consignments on 16 ships, mainly to markets in the Middle East. Other destinations were North Africa, Mexico and the United States of America. New Zealand Ministry of Agriculture veterinarians and livestock officers accompanied voyages to monitor the welfare of the sheep. On their return a report was submitted to the Chief Veterinary Officer. In 1990 data from these reports were analysed, the objective being to define the health and welfare problems and to identify major associated risk factors.

In the 4 years since the trade had started 64,300 (2.56%) deaths were recorded. The mortality in each year (total deaths as a percentage of total sheep loaded) varied little in the range 2.04% to 2.82%. On each shipment the daily mortality rate generally increased during each phase from feedlot to unloading (feedlot=2/day/10000, voyage=9, unloading=31). During the voyage a variety of patterns of mortality were observed; a notable feature being the occasional occurrence of extraordinary numbers of deaths over several days usually towards the end of the voyage.

Eighty percent of deaths fell into 5 categories. They were inanition (failure to eat, 20.4% of deaths), pneumonia (17.3%), heat stress (16.9%), gastroenteritis (12.8%) and smothering (12.1%).

Although heat stress was frequently not considered to be a primary cause of death, the data suggest that it is a major risk factor. Seasonal effects, the pattern of deaths during the voyage and deck effects can be attributed to temperature/humidity excesses. It was recommended that there be immediate attention to reducing heat stress.

Inanition either by itself or in combination with gastroenteritis was a problem on most voyages. It was considered that the pathogenesis and treatment of this condition required attention.

It was also concluded that a standardised data collection system was needed.

Ryan, T.J. 1990. Slaughter Sheep Exports: A Review of Shipments of Slaughter Sheep from New Zealand 1985-89. MAF, PO Box 2526, Wellington, New Zealand, 60 pp.

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