

Asian Markets for Deer Products

511

Dr J. M. Suttie

AG - Research,
Invermay Agricultural Centre,
Private Bag 50034 Mosgiel, New Zealand

M. J. Loza

New Zealand Game Industry Board
PO Box 10702
Wellington New Zealand

Jimmy Suttie leads the Velvet Antler Research Programme at the Invermay Agricultural Research Centre, Mosgiel, New Zealand. This programme is resourced about equally from investment from government contracts and the NZ Game Industry Board via deer farmer velvet levies. The combined programme is called VARNZ, Velvet Antler Research New Zealand. Originally from Scotland, Jimmy has degrees from the University of Aberdeen. His PhD studies were in deer nutrition at the Rowett Research Institute.

ABSTRACT

This paper describes Asian markets for New Zealand deer products over the last few years and briefly indicates possible future trends.

KEYWORDS

Deer, products, export, Asia, New Zealand

BACKGROUND

Asia was a major market for deer products since before the upsurge in deer farming worldwide which began in the 1970's. The products traded were mainly velvet antlers, and the co-products, pizzles, tails and sinews. China, as a major deer farming nation exported to Korea, Japan and other countries. Hong Kong acted as a crucial staging post for this trade during periods of political upheaval in the region. Although domestically produced venison is consumed in both China and Korea, it is a by-product of the velvet antler production industry. Deer farming is still strong in China and there are growing deer farming industries in most, if not all, Asian nations with enough land to farm. Nonetheless Asia is, and will probably remain a net importer of deer products.

Apart from hides/skins/leather, deer products can be categorised into three discrete areas, venison, velvet and co-products. For the purposes of this review they will be treated separately. New Zealand is the major exporter of deer products in the region and has the most accurate records. Consequently this review will be restricted to New Zealand - Asian trade. In practice, Australian trade patterns are similar to New Zealand, but with far lower volumes and intra-Asian trade is difficult to quantify.

APPROACH

New Zealand export statistics as provided by the GIB are presented. The statistics are discussed in the context of known patterns in general deer product marketing in Asia. Velvet export data from 1991/1997 are available and venison data from 1996/1997.

VELVET

New Zealand has produced up to 600 tons of unprocessed velvet a year though current production is falling. The velvet can be exported frozen, but most often it is dried (processed) in New Zealand prior to export. Velvet loses about 2/3 of its water content after processing. Processing takes place in a purpose designed plant inspected by the New Zealand Ministry of Agriculture & Forestry. Most velvet in New Zealand is processed by Korean nationals using a combination of steam and oven drying. Some velvet in New Zealand is processed by repeated dipping in near boiling water, which is a modification of traditional Chinese techniques. Increasing use of freeze drying is also being made to process velvet in New Zealand mainly for further processed products for non-traditional markets. The velvet can either be sold in whole stick form, sliced, powdered or encapsulated. Formerly most velvet was sold in a whole stick, but increasing exports of powdered and encapsulated velvet is taking place.

From 1991/1997 most of New Zealand was exported to Korea and Hong Kong (Tables 1 and 2). It is likely that most velvet exported to Hong Kong was then re-exported to Korea. In terms of export value both Hong Kong and Korea dominate the New Zealand export trade in velvet. There is substantial trade with the USA and robust markets in Taiwan, Japan, Canada and Australia. Since 1991, velvet production has increased in New Zealand but the value of the exports has stayed largely static at around \$50M FOB (Figure 1).

VENISON

Exports of frozen, chilled and total venison from New Zealand to Asian countries in 1996 and 1997 are given in Tables 5 and 6. Although exports of \$4-5m are substantial it is worth-while noting that Asia represents only about 5% of the total New Zealand venison export business. Within Asia, Japan is the strongest importer, particularly of chilled venison. Korea is a limited, but, until recently, growing market.

CO-PRODUCTS

Almost all pizzles, tails and sinews from New Zealand deer and a growing volume of blood products are exported to Hong Kong, Taiwan and China. Due to their popularity and the lack of a venison industry in Asia, this is a strong market. The Chinese are keen on all parts of the deer and indeed the Chinese Materia Medica quotes a use for almost every part.

PROSPECTS

The Asian economic crisis has negatively affected the ability of traders to import, lowered business confidence and lowered consumer demand throughout the region. This has already meant substantially lower prices for velvet in New Zealand during the 1997/1998 season. The general prospects for the three product streams in Asia differ. The supply of velvet worldwide is increasing so that in the short term, with slack demand, the market has sufficient product. Exporters are looking to other markets and to value added products, for example extracts. Venison demand in Asia is likely to be reduced in the short term by the economic crisis but can be expected to grow in the future. Co-product demand will gradually rise, driven mainly by increasing prosperity in China.

Asia will remain as a centre of deer product trade for the foreseeable future.

Table 1: Total volume of velvet antler exported from New Zealand to each country (kg dried product)

	1991	1992	1993	1994	1995	1996	1997
Australia	1,207	1,457	1,594	1,393	637	1,488	2,164
Canada	35	57	35	450	249	275	1,952
China	0	0	0	0	10	510	1,901
Hong Kong	63,212	62,279	78,565	114,649	75,347	96,728	81,786
Japan	275	162	1,319	1,251	661	1,796	2,994
Kenya	1,500	200	0	200	2,200	0	200
Korea	52,416	56,454	58,109	78,945	65,584	76,974	87,862
Macau	0	0	0	0	0	0	65
Malaysia	0	0	45	0	0	0	0
Singapore	211	218	262	205	378	202	140
Thailand	0	0	0	10	0	4,480	1,819
Taiwan	6,967	4,358	1,788	3,750	2,842	5,437	1,819
USA	15,190	11,363	9,227	7,225	17,401	22,535	17,753

Table 2: Percentage of total exports of New Zealand velvet to each country

	1991	1992	1993	1994	1995	1996	1997
Australia	0.86%	1.07%	1.06%	0.67%	0.39%	0.71%	1.08%
Canada	0.02%	0.04%	0.02%	0.22%	0.15%	0.13%	0.97%
China	0.00%	0.00%	0.00%	0.00%	0.01%	0.24%	0.95%
Hong Kong	44.83%	45.61%	52.05%	55.10%	45.58%	45.97%	40.80%
Japan	0.20%	0.12%	0.87%	0.60%	0.40%	0.85%	1.49%
Kenya	1.06%	0.15%	0.00%	0.10%	1.33%	0.00%	0.10%
Korea	37.17%	41.34%	38.50%	37.94%	39.67%	36.58%	43.83%
Macau	0	0	0	0	0	0	0.03%
Malaysia	0	0	0.03%	0	0	0	0
Singapore	0.15%	0.16%	0.17%	0.10%	0.23%	0.10%	0.07%
Thailand	0.00%	0.00%	0.00%	0.00%	0.00%	2.13%	0.91%
Taiwan	4.94%	3.19%	1.18%	1.80%	1.72%	2.58%	0.91%
USA	10.77%	8.32%	6.11%	3.47%	10.53%	10.71%	8.86%

Table 3: Total value of New Zealand velvet antler to each country (NZ\$FOB)

	1991	1992	1993	1994	1995	1996	1997
Australia	538,442	736,115	657,317	574,957	323,509	590,899	593,665
Canada	21,133	45,701	6,000	57,421	194,259	187,389	610,586
China	-	-	-	-	1,974	81,842	107,314
Hong Kong	13,314,725	18,630,045	14,385,487	20,856,736	17,434,315	30,629,142	18,469,048
Japan	162,317	88,029	344,732	317,404	183,378	331,097	710,343
Kenya	948,606	137,840	-	106,207	538,926	-	17,856
Korea	29,533,066	35,551,765	29,673,362	35,403,940	22,025,188	22,952,954	23,854,948
Macau	-	-	-	-	-	-	21,300
Malaysia	-	-	12,943	-	-	-	-
Singapore	42,102	61,278	52,669	34,296	50,690	36,898	19,954
Thailand	-	-	-	6,284	-	235,002	119,545
Taiwan	463,510	290,130	206,358	284,235	221,760	276,654	119,545
USA	4,236,087	4,640,564	2,171,630	1,840,307	4,882,478	6,753,458	3,494,355

Table 4: % of total value exported to each country

	1991	1992	1993	1994	1995	1996	1997
Australia	1.09%	1.22%	1.38%	0.97%	0.71%	0.95%	1.23%
Canada	0.04%	0.08%	0.01%	0.10%	0.42%	0.30%	1.27%
China	0.00%	0.00%	0.00%	0.00%	0.00%	0.13%	0.22%
Hong Kong	27.03%	30.96%	30.28%	35.06%	38.02%	49.34%	38.37%
Japan	0.33%	0.15%	0.73%	0.53%	0.40%	0.53%	1.48%
Kenya	1.93%	0.23%	0.00%	0.18%	1.18%	0.00%	0.04%
Korea	59.95%	59.07%	62.46%	59.52%	48.03%	36.98%	49.55%
Macau	0.00%	-	-	-	-	-	0.04%
Malaysia	0.00%	-	0.03%	-	-	-	-
Singapore	0.09%	0.10%	0.11%	0.06%	0.11%	0.06%	0.04%
Thailand	0.00%	0.00%	0.00%	0.01%	0.00%	0.38%	0.25%
Taiwan	0.94%	0.48%	0.43%	0.48%	0.48%	0.45%	0.25%
USA	8.60%	7.71%	4.57%	3.09%	10.65%	10.88%	7.26%

Table 5: Exports of New Zealand venison to Asian countries in kg and as a % of New Zealand total venison exports

	Frozen		Chilled		Frozen and Chilled	
	Volume (kg)	% of NZ's total venison exports	Volume (kg)	% of NZ's total venison exports	Volume (kg)	% of NZ's total venison exports
1996						
China	1,615	0.02%	-	-	1,615	0.01%
Hong Kong	29,802	0.29%	547	0.04%	30,349	0.26%
Japan	132,135	1.29%	47,318	3.32%	179,453	1.54%
Korea	23,445	0.23%	9,248	0.65%	32,693	0.28%
Malaysia	894	0.01%	-	-	894	0.01%
Singapore	52,300	0.51%	6,123	0.43%	58,423	0.50%
Thailand	-	-	504	0.04%	504	0.00%
TOTAL	240,191	2.35%	63,740	4.47%	303,931	2.61%
1997						
Hong Kong	64,022	0.6%	1,292	0.09%	65,314	0.5%
Japan	85,404	0.8%	33,721	2.3%	119,125	1%
Korea	18,366	0.2%	6,605	0.5%	24,971	0.2%
Singapore	116,894	1.1%	5,051	0.4%	121,945	1.00%
Thailand	412	0.004%	-	0.00%	12,462	0.10%
TOTAL	285,098	2.66%	46,669	3.24%	343,817	2.83%

Table 6: Exports of New Zealand venison to Asian countries in kg and as a % of New Zealand total venison exports

	Frozen		Chilled		Frozen and Chilled	
	Value NZ\$FOB	% of NZ's total venison export value	Value NZ\$FOB	% of NZ's total venison export value	Value NZ\$FOB	% of NZ's total venison export value
1996						
China	64,369	0.06%	-	-	64,369	0.05%
Hong Kong	680,876	0.61%	11,978	0.04%	692,854	0.49%
Japan	2,738,878	2.46%	1,152,738	3.785	3,891,616	2.75%
Korea	225,386	0.20%	69,442	0.23%	294,828	0.21%
Malaysia	8,990	0.01%	-	-	8,990	0.01%
Singapore	908,775	0.82%	79,718	0.26%	988,493	0.70%
Thailand	-	-	19,171	0.06%	19,171	0.01%
TOTAL	4,627,274	4.16	1,333,047	4.37%	5,960,321	4.21%
1997						
Hong Kong	1,647,678	1.6%	21,024	0.07%	1,668,702	1.2283%
Japan	2,043,707	1.9%	913,412	3.0%	2,957,119	2%
Korea	114,810	0.1%	52,171	0.2%	166,981	0.1%
Singapore	1,648,434	1.6%	91,442	0.3%	1,739,876	1.28%
Thailand	15,705	0.01%	-	-	35,083	0.03%
TOTAL	5,470,334	5.17%	1,078,049	3.58%	6,567,761	4.83%

Figure 1:

New Zealand Velvet Exports

