

PART 3: DEER SECTOR

This section provides information on the production and financial status of deer farmers, as well as commentary on deer sector issues and developments.

The deer farm models presented typify an average deer farm within a region. The two deer models: a North Island and South Island model, represent owner-operated, stand alone, deer farms. Each model presents budget figures for the 2006/07 season, and a forecast for the 2007/08 season. Forecasts and budgets are based on farmer views collected in May 2007, augmented with input from those servicing the sectors. For more information on the models and the calculations used in the models see Appendix 2.

The budget format used in the 2007 Pastoral Monitoring Report differs from the format used in previous monitoring reports. The new format is based on that used by DairyBase. A comparison of the old and new formats can be seen in Appendix 3.

NORTH ISLAND DEER

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The North Island deer model farm is a small stand-alone deer farm that is big enough to support a family and does not run sheep or beef cattle. The model farm is theoretically situated near Rotorua, in the Bay of Plenty. More detail about the model farm can be seen in Appendix 2.

»» KEY POINTS

- › Back in black for the first time in four years, the North Island deer model showed a cash surplus in 2006/07 of \$11 000.
- › Venison prices improved, with the spring schedule holding its peak price for longer.
- › Velvet prices doubled due to increasing demand and undersupply.
- › The outlook is improving for those who remained committed to deer farming, with a cash surplus of \$38 000 forecast for 2007/08.

»» TABLE 15.1: KEY PARAMETERS, FINANCIAL RESULTS AND FORECAST FOR THE NORTH ISLAND DEER MODEL FARM

YEAR ENDED 30 JUNE	2003/04	2004/05	2005/06	2006/07	2007/08 FORECAST
Effective area (ha)	140	140	140	140	140
Opening deer stock units	1 750	2 184	2 197	2 197	2 194
Mixed age breeding hinds (head)	420	440	440	440	440
Rising 2-year hinds (mated/head)	100	100	100	100	100
Rising 2-year hinds (unmated/head)	0	0	0	0	0
Rising 1-year hinds (head)	218	223	227	227	226
Rising 1-year stags (head)	218	223	227	227	226
Rising 2-year stags (head)	25	25	25	25	25
Rising 3- and older-year stags (head)	70	70	70	70	70
Breeding stags (head)	10	10	10	10	10
Total stock units wintered	1 758	2 184	2 197	2 197	2 194
Stocking rate (stock units/ha)	12.6	15.6	15.7	15.7	15.7
FAWNING¹					
Farm average (%)	86	86	86	86	86
Mixed age hinds (%)	88	88	88	88	88
2-year-old hinds (%)	77	76	76	74	76
VELVET					
Farm average (includes re-growth but excludes yearling velvet) (kg/stag)	2.0	2.2	2.3	2.5	2.6
Mixed age stags (kg/stag)	3.8	4.0	4.2	4.5	4.7
3-year-old stags (kg/stag)	3.5	3.5	3.7	4.1	4.1
2-year-old stags (kg/stag)	1.8	1.8	2.0	2.2	2.4
CARCASS WEIGHTS					
Cull 2-year-old hinds (kg)	52	52	52	53	54
3-year-old plus stags (kg)	100	100	100	101	101
2-year-old stags (kg)	69	69	69	70	71
Yearling stags (kg)	55	55	55	56	57
INCOME					
Net cash income (\$)	90 918	103 363	110 632	148 688	214 838
Cash operating surplus (\$)	12 529	27 959	23 971	50 366	112 530
Farm profit before tax (\$)	- 6 820	3 985	233	23 390	58 581
Farm surplus for reinvestment (\$) ²	- 46 969	- 36 754	- 53 622	- 34 140	16 278

Note

¹ Fawning percentage is the breeding stock scanned in calf at balance date.

² Farm surplus for reinvestment is discretionary cash less off-farm income and drawings.

»» FINANCIAL PERFORMANCE OF THE NORTH ISLAND DEER MODEL FARM IN 2006/07

The cash operating surplus for the model farm in 2006/07 was \$50 000 (\$23 per stock unit). This was an improvement of 110 percent on 2005/06 and reflected the improved venison returns and the doubling of velvet prices. See Tables 15.2 and 15.3 (pages 96–97) for details of the model's budget and expenditure in 2006/07.

» REVENUE INCREASES

Net cash income for the model was \$149 000 in 2006/07 (\$68 per stock unit), up 34 percent from \$111 000.

VENISON

North Island mixed sex weaner sales were up to around \$3.00 per kilo. Sales data for mixed sex weaners ranged from \$84 to \$260 per head compared with \$88 to \$135 per head in 2005/06. This was an indication that deer farmers were feeling more confident and that some balance had returned to the demand/supply issues that had previously plagued the sector.

Feed supply throughout the year was good on deer farms. The cool late spring in 2006 meant that feed supply and demand were well matched and the mild 2007 summer meant slow, steady quality growth was maintained. As surplus feed was available a dry period in February caused no problems. The good growing season for deer meant weaner weights were slightly ahead on previous years. This allowed sale stock to reach planned carcass weights, often a month early, and contributed to the better returns. Being able to sell stock earlier also provided the added benefit of more feed being left for capital stock.

Venison sales throughout 2006/07 were on average up \$1.00 per kilogram from last year. Average net sale prices ranged from \$3.30 to \$5.80. This was an improvement on the 2005/06 range of \$3.15 to \$4.25 per kilogram. In addition to these improved prices, the schedule held close to its peak spring prices for a longer period, which allowed more farmers to benefit from the improved prices.

Net sales from the surveyed farms after Christmas for stags were \$3.50 to \$4.00 per kilogram compared with last year's \$1.50 to \$3.40 per kilogram. Hinds were \$3.30 to \$4.40 per kilogram compared with \$2.70 to \$2.80 per kilogram last year. Higher payments continue to be gained by farmers with long-standing relationships with processors, as processors reward loyalty and try to guarantee supply. Farmers continue to sell surplus hinds and stags without difficulty and concentrate on feeding capital stock.

The model farm recorded a 14 percent increase in venison returns compared with the 2005/06 season.

VELVET

Farmers running velvet had the biggest smiles this year, with the prices of velvet more than doubling on average from \$44 per kilogram to \$99 per kilogram. In addition, farmers made slight gains in velvet production. The model reflected this as an average 0.2 kilogram lift in production per head. North Island velvet farmers have improved the quality and production of velvet over the last few years due to the culling of lower-

performing animals. Those farmers who have stayed in the business of velvet know what they are doing. The deer sector continues to improve the velvet enterprise with its efforts in velvet research and its establishment of a New Zealand velvet brand to overseas consumers. The model farm experienced a 148 percent increase in velvet revenue for 2006/07, contributing 28 percent of net cash income in 2006/07 compared with 15 percent in 2005/06.

OFF-FARM INCOME PROVIDES INSURANCE TO NORTH ISLAND DEER FARMERS

For the last two years, off-farm income has contributed significantly to North Island deer farmers' cash position. In 2006/07, off-farm income helped to keep the model in the black by contributing 48 percent of the discretionary cash surplus. This extra income has been vital in the last four years and continues to provide deer owner-operators with some insurance and flexibility for the future.

> EXPENDITURE UP SLIGHTLY BUT STEADY

Farm working expenses increased by 13 percent to \$98 000 in 2006/07. This reflected cost increases in the usual key areas of casual wages (up 24 percent), fuel costs (up 35 percent), fertiliser (up 14 percent), vehicle costs excluding fuel (up 20 percent), repairs and maintenance (up 15 percent), electricity (up 8 percent) and rates (up 8 percent).

Survey data shows that communication costs have gone down slightly from last year. This is most likely due to better communication plans being sought and use being tightened, rather than any real price decrease.

Repairs and maintenance are still being completed, including deferred maintenance on gates and fences. (Repairs and maintenance are usually supported by other stock enterprises or off-farm income.) This work is undertaken by deer farmers who aim to provide greater flexibility in their stock management, rather than by optimists who are expanding their operation.

Farmers continue to carry out planned fertiliser tonnage applications, which shows that fertiliser is price insensitive due to its necessity in a pastoral production system. Fertiliser expenditure increased in 2006/07 as a result of higher prices and increased cartage rates.

Breeding expenditure increased in 2006/07 as some farmers reintroduced pregnancy scanning of their breeding herd. Overall though, animal health and breeding expenses remain low, as the prices of animal health products have largely remained unchanged over the last year due to the New Zealand dollar being high and most of these products being imported. No significant animal health problems were reported during the year.

Supplement use is driven by necessity and it continues to be required in the model budget. Farmers are looking for alternative food sources such as kiwifruit to get the weight gain they need to match the peak in the venison price schedule. The cost of feed increased by 10 percent from last year, mainly reflecting higher fuel costs and cartage rates. A good 2006/07 growing season in the North Island meant there was less reliance on

supplementary feed and farmers were able to manage pasture more effectively to match deer's feed demand curve.

› POSITIVE NET RESULT

For the first time in four consecutive years, the North Island model has made a cash surplus of \$11 000 (\$4.80 per stock unit). This was due to a number of factors but the biggest gain came from the doubling of velvet prices. Venison prices were slightly improved but, more importantly, they held longer and were more stable. This, combined with four years of tightly controlled expenses, has also helped the model show a profit after tax of \$23 000 (\$10 per stock unit). The taxation expense was minimal in 2006/07.

Personal drawings increased by \$2000 in 2006/07. Drawings at \$37 000 are still one of the lowest of all the pastoral models, and it is unlikely that these will be able to be held at these modest levels. Development costs continued at \$3000, reflecting the minimal approach of most established deer farmers. Higher servicing costs are expected for seasonal finance and as fixed interest loans are reviewed.

››› FORECAST FINANCIAL PERFORMANCE OF THE NORTH ISLAND DEER MODEL FARM IN 2007/08

The cash operating surplus is forecast to more than double in 2007/08 to \$113 000 (\$51.30 per stock unit). See Tables 15.2 and 15.3 (pages 96–97) for details of the model's forecast budget and expenditure in 2007/08.

› REVENUE CONTINUES TO IMPROVE

Net cash income is expected to increase by 44 percent to \$215 000 (\$98 per stock unit) in 2007/08. This results mainly from higher venison returns combined with some productivity gains and further lifts in velvet prices.

VENISON

The model's venison sales revenue for 2007/08 is expected to rise by 49 percent to \$172 000 (\$78 per stock unit). Venison producers are generally optimistic. Most farmers forecast an increase of at least \$1.00 per kilogram in venison returns for 2007/08, with the schedule providing greater stability and tracking between \$4.50 and \$6.00 per kilogram. This optimism is based on the good progress made by the deer sector in creating a slightly wider demand period for the higher-premium chilled venison. This has been achieved through well-targeted marketing and promotion strategies that are focused outside the traditional European Christmas peak period. Small gains in liveweight are also expected.

VELVET

In 2007/08, velvet revenue is forecast to increase by \$20 per kilogram to \$120 per kilogram. Factors driving the price increase are:

- › declining volumes of velvet;
- › differentiation of quality New Zealand velvet;
- › increasing demand from Asia's growing middle classes.

› EXPENDITURE KEPT UNDER CONTROL

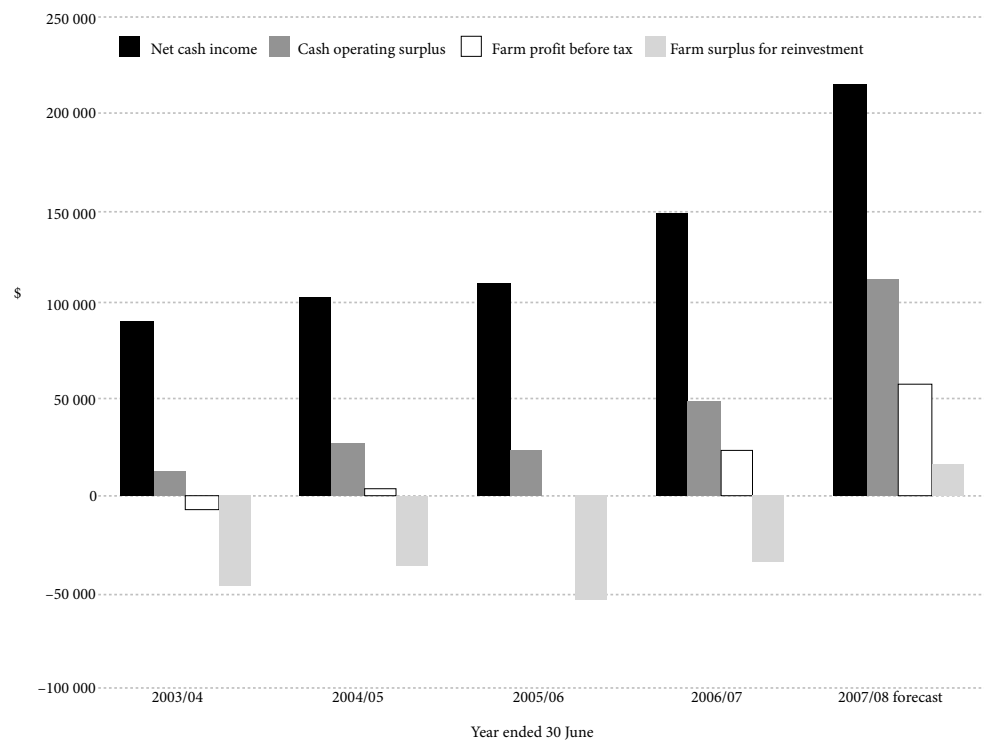
One year of improved deer revenue after four bad years has not gone to deer farmers' heads and expenditure will remain tight for 2007/08. Total farm working expenses are forecast to increase by 4 percent in 2007/08 to \$102 000. This is mainly due to unavoidable price increases, for example electricity (up 10 percent), rates (up 5 percent) and fertiliser (up 4 percent). Regrassing costs are also forecast to increase in the model (up 5 percent). Feed costs are expected to increase 4 percent to \$5.79 per stock unit.

› NET RESULT POSITIVE

Farm profit after tax is forecast to more than double to \$49 000 (\$22 per stock unit) in 2007/08 as a result of expected improved returns and careful budgeting. Farmers expect interest rates to rise by 0.75 percent in 2007/08 to 9.5 percent.

With forecast improved prices for venison and velvet and increasing off-farm income, the forecast cash surplus for the model increases to \$38 000 (\$17 per stock unit), after allowing for \$25 000 in capital purchases in 2007/08 compared with nil in 2006/07.

››› FIGURE 15.1: NORTH ISLAND DEER MODEL FARM PROFITABILITY TRENDS



»» TABLE 15.2: NORTH ISLAND DEER BUDGET

	2006/07			2007/08 FORECAST		
	WHOLE FARM (\$)	PER HA (\$)	PER DEER STOCK UNIT (\$)	WHOLE FARM (\$)	PER HA (\$)	PER DEER STOCK UNIT (\$)
REVENUE						
Deer sales	115 535	825	52.59	172 124	1 229	78.46
Velvet (per stag stock unit)	42 153	301	61.68	53 214	380	78.06
Other farm income	0	0	0.00	0	0	0.00
LESS						
Deer purchases	9 000	64	4.10	10 500	75	4.79
Net cash income	148 688	1 062	67.68	214 838	1 535	97.93
Farm working expenses	98 322	702	44.75	102 308	731	46.64
Cash operating surplus	50 366	360	22.93	112 530	804	51.30
Interest	19 688	141	8.96	21 375	153	9.74
Rent and/or leases	0	0	0.00	0	0	0.00
Stock value adjustment	- 336	- 2	- 0.15	- 26 664	- 190	- 12.15
Minus depreciation	6 953	50	3.16	5 910	42	2.69
Farm profit before tax	23 390	167	10.65	58 582	418	26.70
Taxation	818	6	0.37	9 302	66	4.24
Farm profit after tax	22 572	161	10.27	49 279	352	22.46
Add back depreciation	6 953	50	3.16	5 910	42	2.69
Reverse stock value adjustment	336	2	0.15	26 664	190	12.15
Off-farm income	27 500	196	12.52	28 875	206	13.16
Discretionary cash	57 360	410	26.11	110 728	791	50.48
APPLIED TO						
Net capital purchases	0	0	0.00	25 000	179	11.40
Development	2 500	18	1.14	2 500	18	1.14
Principal repayments	7 815	56	3.56	8 340	60	3.80
Drawings	36 500	261	16.61	36 700	262	16.73
New borrowings	0	0	0.00	0	0	0.00
Introduced funds	0	0	0.00	0	0	0.00
Cash surplus/deficit	10 545	75	4.80	38 188	273	17.41
ASSETS AND LIABILITIES						
Farm, forest and building (opening)	2 310 000	16 500	1 051.48	2 564 100	18 315	1 169.85
Plant and machinery (opening)	46 350	331	21.10	39 398	281	17.96
Stock valuation (opening)	274 367	1 960	124.89	274 031	1 957	124.92
Other farm-related investments	0	0	0.00	0	0	0.00
Total farm assets	2 630 717	18 791	1 197.47	2 877 529	20 554	1 311.72
Total liabilities (opening)	225 000	1 607	102.42	225 000	1 607	102.57
Total equity (farm assets–liabilities)	2 405 717	17 184	1 095.05	2 652 529	18 947	1 209.16

»» TABLE 15.3: NORTH ISLAND DEER EXPENDITURE

	2006/07			2007/08 FORECAST		
	WHOLE FARM (\$)	PER HA (\$)	PER DEER STOCK UNIT (\$)	WHOLE FARM (\$)	PER HA (\$)	PER DEER STOCK UNIT (\$)
FARM WORKING EXPENSES						
Permanent wages	0	0	0.00	0	0	0.00
Casual wages	6 200	4	2.82	6 400	46	2.92
ACC	156	1	0.07	167	1	0.08
Total labour expenses	6 356	45	2.84	6 567	47	2.99
Animal health	5 500	39	2.50	5 500	39	2.51
Breeding	1 150	8	0.52	1 150	8	0.52
Electricity	2 800	20	1.27	3 080	22	1.40
Feed (hay and silage)	7 260	52	3.30	7 500	54	3.42
Feed (feed crops)	3 630	26	1.65	3 800	27	1.73
Feed (grazing)	0	0	0.00	0	0	0.00
Feed (other)	1 400	10	0.64	1 400	10	0.64
Fertiliser	25 707	184	11.70	26 824	192	12.23
Lime	1 656	12	0.75	1 656	12	0.75
Freight (not elsewhere deducted)	720	5	0.33	720	5	0.33
Regrassing costs	2 033	15	0.93	2 134	15	0.97
Weed and pest control	1 600	11	0.73	1 600	11	0.73
Fuel	8 100	58	3.69	8 100	58	3.69
Vehicle costs (excluding fuel)	5 040	36	2.29	5 040	36	2.30
Repairs and maintenance	8 625	62	3.93	8 625	62	3.93
Total other working expenses	75 221	537	34.24	77 129	551	35.16
Communication costs (phone and mail)	2 304	16	1.05	2 304	16	1.05
Accountancy	2 530	18	1.15	2 530	18	1.15
Legal and consultancy	1 100	8	0.50	1 100	8	0.50
Other administration	0	0	0.00	0	0	0.00
Rates	5 600	40	2.55	5 880	42	2.68
Insurance	3 300	24	1.50	3 450	25	1.57
Water charges (irrigation)	0	0	0.00	0	0	0.00
Other expenditure ¹	1 911	14	0.87	3 347	24	1.53
Total overhead expenses	16 745	120	7.62	18 611	133	8.48
Total farm working expenses	98 322	702	44.75	102 308	731	46.64
Wages of management	57 307	409	26.09	59 775	427	27.25
Depreciation	6 953	50	3.16	5 910	42	2.69
Total farm operating expenses	162 582	1 161	74.01	167 992	1 200	76.47
CALCULATED RATIOS						
Economic farm surplus (EFS) ²	- 14 230	- 102	- 6.48	20 181	144	9.20
Farm working expenses/NCI ³	66%			48%		
EFS/total farm assets	- 0.5%			0.7%		
EFS less interest and lease/equity	- 1.4%			0.0%		
Interest + rent + lease/NCI	13.2%			9.9%		
EFS/NCI	- 9.6%			9.4%		

Notes

1 Includes employers ACC.

2 EFS (or earnings before interest and tax) is calculated as follows: net cash income plus change in livestock values less farm working expenses less depreciation less wages of management (WOM). WOM is calculated as follows: \$31 000 allowance for labour input plus 1 percent of opening total farm assets to a maximum of \$75 000.

3 Net cash income.

SOUTH ISLAND DEER

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This model represents deer farms of Southland and South Otago that stock deer only. More detail about the model farm can be seen in Appendix 2.

»» KEY POINTS

- › Spring venison schedules in the south held at over \$5.50 per kilogram for 14 weeks in 2006.
- › The 2006 spring schedule was \$1.00 to \$1.50 per kilogram (36 percent) higher than the previous season.
- › Returns for rising 1-year stags increased by 36 percent to \$272 per head, at an average schedule of \$5.22 per kilogram.

»» TABLE 16.1: KEY PARAMETERS, FINANCIAL RESULTS AND FORECAST FOR THE SOUTH ISLAND DEER MODEL FARM

YEAR ENDED 30 JUNE	2003/04	2004/05	2005/06	2006/07	2007/08 FORECAST
Effective area (ha)	180	180	180	180	180
Opening deer stock units	2 325	2 832	2 860	2 752	2 812
Mixed age breeding hinds (head)	540	540	540	540	563
Rising 2-year hinds (mated/head)	130	130	130	100	82
Rising 2-year hinds (unmated/head)	0	0	33	0	0
Rising 1-year hinds (head)	275	280	276	282	269
Rising 1-year stags (head)	275	280	276	282	269
Rising 2-year stags (head)	60	60	65	50	81
Rising 3- and older-year stags (head)	35	105	95	104	109
Breeding stags (head)	80	10	10	10	10
Total stock units wintered	2 325	2 832	2 860	2 752	2 812
Stocking rate (stock units/ha)	12.9	15.7	15.9	15.3	15.6
FAWNING¹					
Farm average (%)	85	84	84	84	85
Mixed age hinds (%)	88	86	87	86	86
2-year-old hinds (%)	72	74	72	74	79
VELVET					
Farm average (includes re-growth but excludes yearling velvet) (kg/stag)	3.1	3.1	3.0	3.4	3.4
Mixed age stag (kg/stag)	4.0	4.0	4.0	4.3	4.3
3-year-old stag (kg/stag)	3.0	3.0	2.9	3.6	3.6
2-year-old stag (kg/stag)	1.8	1.8	1.8	2.3	2.3
CARCASS WEIGHTS					
Cull 2-year-old hinds (kg)	52	52	52	52	52
2-year-old stags (kg)	65	65	65	65	65
Yearling stags (kg)	57	55	56	55	55
INCOME					
Net cash income (\$)	151 851	143 681	142 508	183 216	194 310
Cash operating surplus (\$)	57 960	47 780	64 278	90 962	99 001
Farm profit before tax (\$)	23 670	7 834	12 500	51 088	61 611
Farm surplus for reinvestment (\$) ²	- 14 880	- 31 278	- 15 104	10 952	18 256

Note

1 Fawning percentage is the breeding stock scanned in calf at balance date.

2 Farm surplus for reinvestment is discretionary cash less off-farm income and drawings.

- › Velvet sale prices doubled to average \$95 per kilogram. Velvet contributed 23 percent of net cash income.
- › The cash operating surplus increased by 42 percent (\$91 000) in 2006/07.
- › Forecasts for 2007/08 are again optimistic, with the cash operating surplus expected to be \$99 000 and the farm profit before tax \$62 000. This should result in a cash surplus of \$18 000.

»» FINANCIAL PERFORMANCE OF THE SOUTH ISLAND DEER MODEL FARM IN 2006/07

The 2006/07 cash operating surplus for the model was \$91 000 (\$33 per stock unit). This was an improvement of 42 percent on 2005/06. See Tables 16.2 and 16.3 (pages 104–105) for details of the model's budget and expenditure in 2006/07.

› REVENUE IMPROVES

Net cash income increased by 29 percent to \$183 000 (\$67 per stock unit) in 2006/07. This positive outcome has provided a break to South Island deer farmers, who have experienced four consecutive years of declining revenue. Both venison and velvet prices increased beyond farmers' expectations and contributed to this gain, while production remained static.

WEANERS AND THE WEATHER

Farmers attributed periods of stormy weather in November 2006 to increased fawn losses. Rough conditions in the first half of March also caused weaning delays, a drop in the condition of weaners and slightly more deaths than normal. This contributed to an undersupply of weaners for sale. A freakish thunderstorm in northern Southland in January caused widespread losses of young deer against fences and resulted in a number of insurance claims being paid out.

Favourable weather in later autumn saw hind and fawn body condition lift. Fawns have regained some ground lost after weaning and should now be on track to reach target weights by killing dates around mid-November or December, two weeks behind normal. Good early pregnancy scanning results suggest hinds were less affected than fawns by the adverse weather around weaning and mating.

VENISON

The higher and relatively stable venison schedule gave farmers a much better average schedule price than the previous year, and the incentive to hold animals to heavier weights in the autumn. The peak schedule price for a 55 kilogram AP stag was \$6.20 per kilogram. It held around this level for five weeks from the beginning of October. The schedule then declined by only 10 to 20 cents per kilogram per week until it reached \$4.90 per kilogram on 15 January 2007. This was still \$1.50 per kilogram ahead of the January 2006 record low.

Yearling stag carcass weights from October to December were running at 50 to 55 kilograms, similar to recent years. However, once it became apparent that the schedule was holding at around \$5.00 per kilogram, remaining stags were held back until March/April, achieving weights of 58 to 65 kilograms. Most South Island deer farms have deer with the genetic potential to achieve this growth, but with the schedule usually falling quickly from its normal spring peak, the cost of feed to achieve this extra weight gain per head has in the past

made carrying stags to these weights uneconomic.

The average rising 1-year stag returned \$272 per head in 2006/07 compared with \$200 per head in 2005/06, representing a 36 percent increase. Based on this, confidence in the sector returned and competition to secure weaners drove autumn store weaner prices up 50 to 60 percent on 2006 prices (up \$1.00 per kilogram).

VELVET

Survey farmers achieved an average net velvet price of \$95 per kilogram, equivalent to the weighted average pool price for the season. This was more than double the \$41 per kilogram achieved in 2005/06 and well up on the \$49 per kilogram that farmers had forecast. Due to tight cash flow, farmers again sold their velvet as soon as it was cut, so few benefited from the late season market highs when supply became limited. Velvet contributed \$44 000 to net cash income (24 percent).

Velvet production is a sideline for many South Island venison operators and no real effort was put into improving velveting weights. No desire to seriously increase velvet herd numbers was expressed, despite the much better prices.

LESS RELIANCE ON OFF-FARM INCOME IN THE SOUTH

As prices for venison and velvet improve, there is less dependence on off-farm income to help balance the bank account. The South Island model has dropped its off-farm income by 46 percent from last year to \$15 000.

> EXPENDITURE INCREASES DESPITE TIGHT REIN

Farmers had forecast 2006/07 to be another tight year and planned to maintain spending at the level achieved in each of the previous two years. Due to price rises across most farm expenses, this was not achieved. Farm working expenditure totalled \$92 000 and accounted for 50 percent of net cash income in 2006/07. The ratio of farm working expenses to net cash income remains consistently around 50 to 60 percent. Deer are often thought of as a low-input system, but many fixed costs have risen and it is now difficult to achieve a ratio of less than 45 cents to every dollar.

Animal health was the only expense category to fall over the year, dropping 16 percent to \$2.43 per stock unit. This was because the Animal Health Board changed the tuberculosis testing regulations and large areas of Southland moved from annual to biennial testing.

All other essential expenses rose to varying levels, the largest increases being related to vehicles or fuel. Fuel and vehicle costs increased by 24 percent to \$5.71 per stock unit. Fuel is a significant expense, but increased repairs and maintenance of ageing vehicles also contributed.

Fertiliser and lime at \$6.24 per stock unit was the largest expense, up by 18 percent on the 2005/06 season. Fertiliser applications when considered with the stocking rate and the relative inefficiency of deer production

(kilogram of product sold per hectare) are now meeting maintenance requirements.

Feed costs rose by 32 percent to \$5.40 per stock unit due to more silage being made. Also, the substitution of silage for brassicas was evident as farmers moved to self-feeding pits to reduce costs and labour. This strategy is expected to continue.

Interest paid rose by 25 percent to \$27 000 and some farmers were caught with a double-up of terminal and provisional tax. Only \$12 000 was spent on capital purchases and development, and no principal was repaid.

› NET RESULT A SMALL CASH SURPLUS

Despite huge improvements in product prices, the 2006/07 year only provided a small cash surplus of \$14 000. This is a step in the right direction but far from acceptable given the plant replacement necessary in the near future. Deer farmers' drawings remain one of the lowest monitored at \$42 000 per year.

››› FORECAST FINANCIAL PERFORMANCE OF THE SOUTH ISLAND DEER MODEL FARM IN 2007/08

The cash operating surplus is budgeted to improve to \$99 000 in 2007/08 (\$35 per stock unit). If achieved, this represents a 9 percent improvement on 2006/07. See Tables 16.2 and 16.3 (pages 104–105) for details of the model's forecast budget and expenditure in 2007/08.

› REVENUE EXPECTED TO REACH 2003 LEVEL

Market feedback and improved sector confidence has farmers predicting that revenue will increase by 6 percent over the next 12 months. This would see net cash income reach \$194 000 (\$69 per stock unit), a level not seen since 2003. The basis for this prediction is sound, with the expectation there will be a shortage of stock to process by late spring and tough competition from meat companies wanting to procure stock to kill.

VENISON

Farmers expect the 2007 spring schedule to peak above \$6.50 per kilogram, with some optimists expecting over \$7.00 per kilogram. More recent indications are that the schedule may fall well short of this. Budgets have been completed using a net per head price of \$307 for rising 1-year stags, up 13 percent on 2006/07. For a 55 kilogram carcass, this equates to an average schedule price of \$5.85 per kilogram.

VELVET

A 3 percent increase in velvet price is forecast, which will bring it to \$98 per kilogram. Velvet sales will rise by \$4000, but this still only contributes 24 percent of net cash income. Farmers have less confidence in the future of velvet than venison and, with quality velvet herds taking time to build, farmers gave no indication they were in any hurry to expand production.

› EXPENDITURE RISES SLIGHTLY

Farmers will aim to hold inputs at current levels, but have budgeted for prices to rise by 3 percent to \$530 per hectare. Farm working expenditure is forecast at \$95 000, accounting for 49 percent of net cash income.

Consultants expect that, if the US exchange rate drops during 2007/08, import prices will rise, which would leave farmers' expenditure forecasts a bit light.

The big three expenses budgeted for are fertiliser and lime at \$6.62 per stock unit, vehicle expenses (including fuel) at \$6.08 per stock unit and feed at \$5.94 per stock unit. Collectively, these account for 55 percent of farm working expenses, and are predicted to increase by 8 to 12 percent compared with 2006/07. Other expense categories are being squeezed in an attempt to accommodate these major expenses while holding total farm working expenses at a reasonable level.

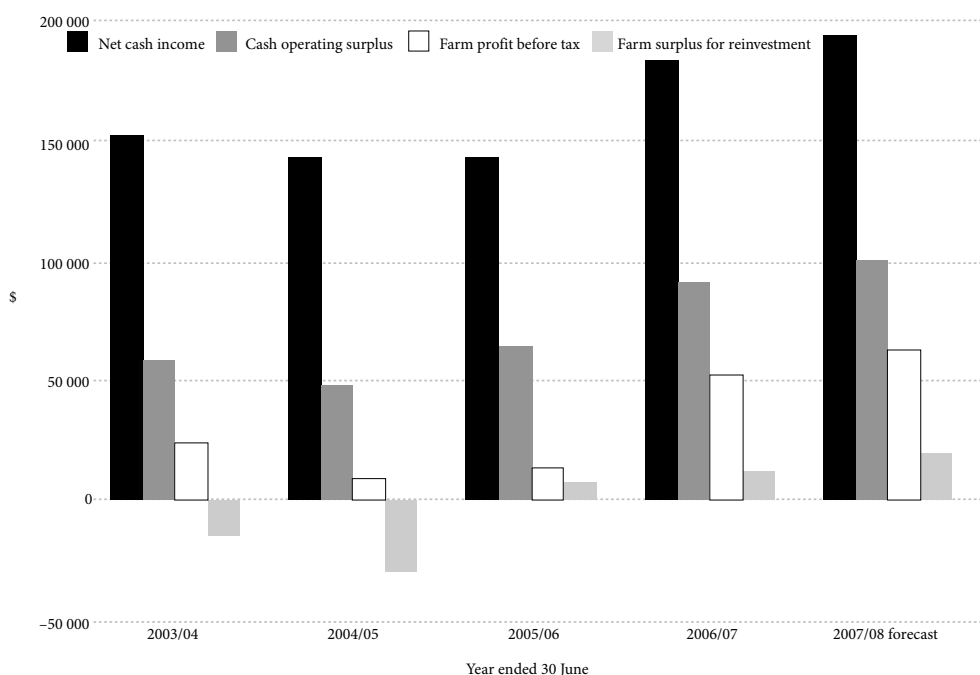
Combined capital purchases and development are similar to 2006/07 at \$12 000 in the 2007/08 forecast. Interest payments are expected to rise slightly to \$28 000 as term loans roll over onto higher rates. In some cases, farmers may be forced to borrow to cover the 2006/07 tax bill. Drawings will be held at the 2006/07 level.

› NET RESULT COMPETITIVE BUT NOT HIGHLY PROFITABLE

The expected cash operating surplus (\$99 000) is realistic and will be competitive with sheep and beef returns, but not highly profitable. Farm profit after tax is forecast at \$51 000. After limited discretionary spending, a cash surplus of \$18 000 will be generated for the year, which will be left in the farm's current account.

Even with the increase in economic farm surplus, South Island deer farms are only returning 1.3 percent on total farm capital.

»» FIGURE 16.1: SOUTH ISLAND DEER MODEL FARM PROFITABILITY TRENDS



»» TABLE 16.2: SOUTH ISLAND DEER BUDGET

	2006/07			2007/08 FORECAST		
	WHOLE FARM (\$)	PER HA (\$)	PER DEER STOCK UNIT (\$)	WHOLE FARM (\$)	PER HA (\$)	PER DEER STOCK UNIT (\$)
REVENUE						
Deer sales	133 872	744	48.64	141 808	788	50.43
Velvet (per stag stock unit)	43 833	244	46.81	47 334	263	47.31
Other farm income	9 915	55	3.60	9 768	54	3.47
LESS						
Deer purchases	4 404	24	1.60	4 600	26	1.64
Net cash income	183 216	1 018	66.57	194 310	1 080	69.11
Farm working expenses	92 254	513	33.52	95 309	529	33.90
Cash operating surplus	90 962	505	33.05	99 001	550	35.21
Interest	27 112	151	9.85	27 813	155	9.89
Rent and/or leases	0	0	0.00	0	0	0.00
Stock value adjustment	4 185	23	1.52	6 478	36	2.30
Minus depreciation	16 947	94	6.16	16 055	89	5.71
Farm profit before tax	51 088	284	18.56	61 611	342	21.91
Taxation	10 795	60	3.92	10 460	58	3.72
Farm profit after tax	40 292	224	14.64	51 150	284	18.19
Add back depreciation	16 947	94	6.16	16 055	89	5.71
Reverse stock value adjustment	- 4 185	- 23	- 1.52	- 6 478	- 36	- 2.30
Off-farm income	15 027	83	5.46	12 000	67	4.27
Discretionary cash	68 081	378	24.74	72 728	404	25.87
APPLIED TO						
Net capital purchases	11 000	61	4.00	9 048	50	3.22
Development	1 387	8	0.50	3 019	17	1.07
Principal repayments	0	0	0.00	0	0	0.00
Drawings	42 102	234	15.30	42 472	236	15.11
New borrowings	0	0	0.00	0	0	0.00
Introduced funds	0	0	0.00	0	0	0.00
Cash surplus/deficit	13 592	76	4.94	18 189	101	6.47
ASSETS AND LIABILITIES						
Farm, forest and building (opening)	2 000 000	11 111	726.64	2 250 000	12 500	800.23
Plant and machinery (opening)	112 983	628	41.05	107 036	595	38.07
Stock valuation (opening)	213 092	1 184	77.42	219 050	1 217	77.91
Other farm-related investments	0	0	0.00	0	0	0.00
Total farm assets	2 326 075	12 923	845.11	2 576 086	14 312	916.20
Total liabilities (opening)	316 100	1 756	114.85	312 100	1 734	111.00
Total equity (farm assets–liabilities)	2 009 975	11 167	730.26	2 263 986	12 578	805.20

»» TABLE 16.3: SOUTH ISLAND DEER EXPENDITURE

	2006/07			2007/08 FORECAST		
	WHOLE FARM (\$)	PER HA (\$)	PER DEER STOCK UNIT (\$)	WHOLE FARM (\$)	PER HA (\$)	PER DEER STOCK UNIT (\$)
FARM WORKING EXPENSES						
Permanent wages	0	0	0.00	0	0	0.00
Casual wages	2 512	14	0.91	1 262	7	0.45
ACC	38	0	0.01	68	0	0.02
Total labour expenses	2 550	14	0.93	1 330	7	0.47
Animal health	6 676	37	2.43	7 412	41	2.64
Breeding	1 280	7	0.47	1 300	7	0.46
Electricity	3 266	18	1.19	3 249	18	1.16
Feed (hay and silage)	12 490	69	4.54	12 775	71	4.54
Feed (feed crops)	360	2	0.13	360	2	0.13
Feed (grazing)	0	0	0.00	0	0	0.00
Feed (other)	2 000	11	0.73	3 577	20	1.27
Fertiliser	15 790	88	5.74	17 230	96	6.13
Lime	1 380	8	0.50	1 380	8	0.49
Freight (not elsewhere deducted)	1 515	8	0.55	1 421	8	0.51
Regrassing costs	2 958	16	1.07	2 764	15	0.98
Weed and pest control	1 822	10	0.66	2 147	12	0.76
Fuel	8 175	45	2.97	9 193	51	3.27
Vehicle costs (excluding fuel)	7 537	42	2.74	7 890	44	2.81
Repairs and maintenance	6 840	38	2.49	5 845	32	2.08
Total other working expenses	72 089	400	26.19	76 543	425	27.22
Communication costs (phone and mail)	2 306	13	0.84	1 902	11	0.68
Accountancy	2 316	13	0.84	2 253	13	0.80
Legal and consultancy	413	2	0.15	376	2	0.13
Other administration	971	5	0.35	896	5	0.32
Rates	4 284	24	1.56	4 564	25	1.62
Insurance	3 580	20	1.30	3 858	21	1.37
Water charges (irrigation)	0	0	0.00	0	0	0.00
Other expenditure ¹	3 745	21	1.36	3 588	20	1.28
Total overhead expenses	17 615	98	6.40	17 437	97	6.20
Total farm working expenses	92 254	513	33.52	95 309	529	33.90
Wages of management	54 261	301	19.71	56 761	315	20.19
Depreciation	16 947	94	6.16	16 055	89	5.71
Total farm operating expenses	163 462	908	59.39	168 126	934	61.08
CALCULATED RATIOS						
Economic farm surplus (EFS) ²	23 939	133	8.70	32 662	181	11.62
Farm working expenses/NCI ³	50%			49%		
EFS/total farm assets	1.0%			1.3%		
EFS less interest and lease/equity	- 0.2%			0.2%		
Interest + rent + lease/NCI	14.8%			14.3%		
EFS/NCI	13.1%			16.8%		

Notes

1 Includes employers ACC.

2 EFS (or earnings before interest and tax) is calculated as follows: net cash income plus change in livestock values less farm working expenses less depreciation less wages of management (WOM). WOM is calculated as follows: \$31 000 allowance for labour input plus 1 percent of opening total farm assets to a maximum of \$75 000.

3 Net cash income.

DEER SECTOR

ISSUES AND DEVELOPMENTS

17

»» FARMER CONFIDENCE IMPROVING

Deer farmer confidence is reservedly up. Prices have improved for venison and shown greater stability over the 2006/07 season. Velvet producers are also feeling more buoyant, seeing plenty of room for production growth and observing steady demand for an undersupplied product. No-one wants to be overly confident that the sector has seen its turning point, but it seems unlikely, at least in the near future, that there will be a return to the oversupply that plagued the sector in the past. Growth in supply is likely to be kept in check by pressure from other land uses, along with the recent memory of poor returns over the last four years.

»» DEER FARMERS BECOMING MORE SOUTHERN

The improvement in venison and velvet prices has not seen a resurgence in the deer sector. The usual number of survey farms (about 15 percent per year) continued to exit from the North Island deer monitoring programme.

Land prices continue to increase. In the far south, deer farm values have increased by 13 percent in the last 12 months. Land prices in the central North Island rose 11 percent. Particular pressure has been placed on those areas with land suitable for dairy conversion or dairy support, or for urban lifestyle development. Examples of this are the South Auckland and Waikato regions.

For deer farms in more remote or cooler climates, the decline in sheep income has improved the relativity of deer returns, so that these farms are more likely to be permanently retained. The 2006 Agricultural Production Survey (Statistics New Zealand) indicates a total of 1 586 900 farmed deer in New Zealand, down 7 percent from 2005. The divide between deer numbers in the North Island and South Island continues to widen, with 69 percent of deer now residing in the South Island. The majority of these are in Canterbury, Otago and Southland.

»» PRODUCTIVITY

In general, deer productivity is on the rise, particularly for stock live weights. The deer sector has been the first to admit its productivity gains have lagged other pastoral industries over the last 15 years, and it is looking to remedy this in the future.

Fawning percentages remain below target. Rising 2-year hinds are heavier going to the stag, but still struggle to consistently achieve good conception rates, which is the Achilles heel of the sector's fawning performance. This is one research area for Focus Farms – now funded by sector. Previously these farms, in Otago and Southland, were financed by the Sustainable Farming Fund (SFF), but this year Deer Industry New Zealand has picked up the programme and plans to roll out a further four farms over 2007/08.

Hinds are fawning earlier in the South Island as farmers put more emphasis on management for early fawning and increased weaning weights. Management trends involve April stag removal, early scanning and culling of late fawners, better late pregnancy feeding, and earlier pre-rut weaning. Gains are incremental and difficult to

measure but results are being seen in fawn weaning weight. On average fawns were 2 kilograms heavier at weaning in 2007, with some farmers gaining up to an additional 5 kilograms.

Higher prices are expected to encourage further productivity improvements. Purchasing quality breeding stock from farmers exiting the sector also provides an opportunity to improve individual herd genetics.

»» LENGTHENING THE CHILLED SEASON

A goal of the deer sector and processors has been to lengthen the higher valued, chilled venison season in overseas markets. Traditionally chilled venison is consumed at Christmas and the length of the peak demand associated with this, is short.

In 2006, the spring venison schedule held above \$5.50 per kilogram for 12 to 14 weeks, compared with 4 to 5 weeks in 2005. This gave more farmers the chance to supply animals at premium prices and made additional liveweight gains through November and December a viable option. Usually animals must be culled by October to achieve the peak schedule price. If the season can be extended and farmers can take their animals to heavier weights, the sector could easily achieve a 5 kilogram carcass weight gain per head, for very little additional input.

»» PROCESSORS

Muddy deer caused some controversy in 2005 between deer farmers and processors in the South Island. Since then, farmers have adapted to the new deer presentation standards required by processors. Heavy weaners are now killed first in spring. Four to six weeks prior to this, they are removed from the main mob and kept in paddocks without wallows. They may also undergo a series of washes and dagging on-farm. This is time consuming, but necessary to avoid price penalties from processors.

Long waits for killing space, particularly in the South Island, seem to be in the past, and farmers are feeling confident stock will be able to be killed on time.

»» MANAGEMENT TOOLS

Some deer farmers are displaying an increasing focus on deer breeding and genetics to improve production and reduce disease within populations. But the majority of North Island deer farmers surveyed are still apprehensive, and after four years of poor returns, see this as a discretionary investment. Some within the sector believe that with better returns this year and next, committed deer farmers will be looking to invest further in their business and genetic improvement may be one tool to achieve this. Generally, genetic improvement is used more by the larger corporate farms.

»» COMPLIANCE A MARKET ACCESS ISSUE

The cost of compliance is a continual concern for deer farmers. Farmers understand the necessity for compliance with animal welfare, employment and occupational health and safety regulations, but are disturbed with the ever increasing cost of compliance. With retailers becoming more powerful, compliance is increasingly becoming an issue of market access.

National animal identification and traceability was an issue raised at the annual deer industry conference, with suggestions the deer sector should wait and see how this issue develops in other sectors. While there was concern about what added value this compliance cost would provide, a national system is expected to meet increasing overseas customer demand for quality assurance and traceability from paddock to plate, as well as allowing rapid responses to suspected biosecurity incursions. The upcoming year should provide some clarity on these issues, but it is expected that a national animal identification tracing system will go ahead, with mandatory tagging of deer likely to occur by 2010.