

NORTHLAND SHEEP AND BEEF



THIS REPORT CONTAINS THE KEY RESULTS FROM THE MINISTRY OF AGRICULTURE AND FORESTRY'S 2009 PASTORAL MONITORING PROGRAMME.

KEY POINTS

- › The 2008/09 season returned a farm surplus for reinvestment of \$29 100 or \$9.04 per stock unit, compared with \$1400 or 44 cents per stock unit in 2007/08.
- › Cattle revenue (sales less purchases) improved 8 percent for the 2008/09 season on the back of an average 4 percent increase in prices and a larger than usual pre-winter reduction in stock numbers which was influenced by low pasture covers and a strong store market.
- › Sheep revenue (sales less purchases) was up 21 percent with higher prices and a further 11 percent decline in sheep numbers during 2008/09. Wool revenue was up 3 percent with a lower price per kilogram offset by more wool shorn per sheep.
- › Despite the improved result expenditure remains constrained on Northland sheep and beef farms.
- › Higher farm gate prices have helped farmer morale. This is despite a 15 percent decline in the market value of most Northland sheep and beef properties over the 2008/09 season.
- › Volatility in prices, returns and the economic environment are expected to remain at higher than usual levels in 2009/10. Despite these uncertainties the Northland farm model is budgeting a \$39 700 farm profit before tax and a zero farm surplus for reinvestment.

»» TABLE 1: KEY PARAMETERS, FINANCIAL RESULTS AND BUDGET FOR THE NORTHLAND SHEEP AND BEEF MODEL FARM

YEAR ENDED 30 JUNE	2005/06	2006/07	2007/08	2008/09	2009/10 BUDGET
Effective area (ha)	314	314	314	314	314
Breeding ewes (head)	621	616	614	572	545
Replacement ewe hoggets (head)	188	180	175	173	142
Other sheep (head)	75	60	60	58	29
Breeding cows (head)	99	99	108	114	115
Rising 1-year cattle (head)	235	235	242	244	233
Other cattle (head)	159	151	156	158	149
Opening sheep stock units (ssu)	806	785	780	735	666
Opening cattle stock units	2 372	2 367	2 436	2 485	2 399
Opening total stock units (su)	3 178	3 152	3 216	3 220	3 065
Stocking rate (stock unit/ha)	10.1	10.0	10.2	10.3	9.8
Ewe lambing (%)	127	128	123	117	121
Average lamb price (\$/head)	57.29	55.78	59.00	78.26	76.76
Average wool price (\$/kg)	2.27	2.24	2.26	2.08	1.82
Total wool produced (kg)	3 821	3 690	3 587	4 008	3 622
Wool production (kg/ssu)	4.80	4.70	4.60	5.46	5.44
Average rising 2-year steer (\$/head)	738	775	750	780	780
Average cull cow (\$/head)	600	571	435	452	403
Net cash income (\$)	213 170	209 566	215 641	236 854	203 364
Farm working expenses (\$)	120 163	114 599	118 064	120 870	118 790
Farm profit before tax (\$)	41 286	47 888	48 577	40 355	39 703
Farm surplus for reinvestment (\$)¹	1 920	11 209	1 403	29 111	-17

Note

¹ Farm surplus for reinvestment represents the cash available from the farming business, after meeting living costs, which is available for investment on-farm or for principal repayments. It is calculated as discretionary cash less off-farm income and drawings.



»» TABLE 2: NORTHLAND SHEEP AND BEEF MODEL BUDGET

	2008/09			2009/10 BUDGET			CHANGE 2008/09 AND 2009/10 (%)
	WHOLE FARM (\$)	PER HECTARE (\$)	PER STOCK UNIT¹ (\$)	WHOLE FARM (\$)	PER HECTARE (\$)	PER STOCK UNIT¹ (\$)	
REVENUE							
Sheep	54 623	174	74.35	49 231	157	73.95	-10
Wool	8 337	27	11.35	6 576	21	9.88	-21
Cattle	251 448	801	101.19	215 950	688	90.01	-14
Grazing income (including hay and silage sales)	0	0	0.00	0	0	0.00	...
Other farm income	8 300	26	2.58	8 300	26	2.71	0
LESS:							
Sheep purchases	4 755	15	6.47	4 734	15	7.11	0
Cattle purchases	81 099	258	32.64	71 958	229	29.99	-11
Net cash income	236 854	754	73.57	203 364	648	66.35	-14
Farm working expenses	120 870	385	37.54	118 790	378	38.76	-2
Cash operating surplus	115 984	369	36.02	84 574	269	27.59	-27
Interest	31 307	100	9.72	28 478	91	9.29	-9
Rent and/or leases	0	0	0.00	0	0	0.00	...
Stock value adjustment	-21 837	-70	-6.78	-5 135	-16	-1.68	-76
Minus depreciation	22 485	72	6.98	11 258	36	3.67	-50
Farm profit before tax	40 355	129	12.53	39 703	126	12.95	-2
Taxation	6 430	20	2.00	5 994	19	1.96	-7
Farm profit after tax	33 925	108	10.54	33 709	107	11.00	-1
ALLOCATION OF FUNDS							
Add back depreciation	22 485	72	6.98	11 258	36	3.67	-50
Reverse stock value adjustment	21 837	70	6.78	5 135	16	1.68	-76
Income equalisation	0	0	0.00	0	0	0.00	...
Off-farm income	10 607	34	3.29	10 607	34	3.46	0
Discretionary cash	88 855	283	27.60	60 709	193	19.81	-32
APPLIED TO:							
Net capital purchases	4 700	15	1.46	5 640	18	1.84	20
Development	2 850	9	0.89	3 000	10	0.98	5
Principal repayments	0	0	0.00	0	0	0.00	...
Drawings	49 137	156	15.26	50 119	160	16.35	2
New borrowings	0	0	0.00	0	0	0.00	...
Introduced funds	0	0	0.00	0	0	0.00	...
Cash surplus/deficit	32 168	102	9.99	1 950	6	0.64	-94
Farm surplus for reinvestment²	29 111	93	9.04	-17	0	-0.01	-100
ASSETS AND LIABILITIES							
Farm, forest and building (opening)	3 129 981	9 968	972.17	2 656 624	8 461	866.80	-15
Plant and machinery (opening)	88 296	281	27.42	75 051	239	24.49	-15
Stock valuation (opening)	411 807	1 311	127.91	389 970	1 242	127.24	-5
Other produce on hand (opening)	520	2	0.16	455	1	0.15	-13
Total farm assets (opening)	3 630 603	11 562	1 127.66	3 122 100	9 943	1 018.67	-14
Total assets (opening)	3 684 303	11 733	1 144.34	3 175 800	10 114	1 036.19	-14
Total liabilities (opening)	316 778	1 009	98.39	391 778	1 248	127.83	24
Total equity (farm assets – liabilities)	3 313 826	10 554	1 029.27	2 730 322	8 695	890.84	-18

Notes

¹ Sheep stock units are used in the per stock calculation for sheep and wool income and sheep purchases. Cattle stock units are used for cattle income and purchases. The remainder of the time total stock units are used.

² Farm surplus for reinvestment represents the cash available from the farming business, after meeting living costs, which is available for investment on-farm or for principal repayments. It is calculated as discretionary cash less off-farm income and drawings.

Symbol

... Not applicable.

»»» TABLE 3: NORTHLAND SHEEP AND BEEF MODEL EXPENDITURE

	2008/09			2009/10 BUDGET			CHANGE BETWEEN 2008/09 AND 2009/10 (%)
	WHOLE FARM (\$)	PER HECTARE (\$)	PER STOCK UNIT¹ (\$)	WHOLE FARM (\$)	PER HECTARE (\$)	PER STOCK UNIT¹ (\$)	
FARM WORKING EXPENSES							
Permanent wages	0	0	0.00	0	0	0.00	...
Casual wages	7 854	25	2.44	7 618	24	2.49	-3
ACC	183	1	0.06	208	1	0.07	14
Total labour expenses	8 037	26	2.50	7 827	25	2.55	-3
Animal health	10 888	35	3.38	10 675	34	3.48	-2
Breeding	1 420	5	0.44	1 392	4	0.45	-2
Electricity	2 479	8	0.77	2 501	8	0.82	1
Feed (hay and silage)	2 898	9	0.90	2 648	8	0.86	-9
Feed (feed crops)	951	3	0.30	869	3	0.28	-9
Feed (grazing)	0	0	0.00	0	0	0.00	...
Feed (other)	1 706	5	0.53	1 559	5	0.51	-9
Fertiliser	22 770	73	7.07	23 134	74	7.55	2
Lime	6 100	19	1.89	4 880	16	1.59	-20
Cash crop expenses	0	0	0.00	0	0	0.00	...
Freight (not elsewhere deducted)	4 145	13	1.29	4 228	13	1.38	2
Regrassing costs	1 053	3	0.33	1 053	3	0.34	0
Shearing expenses	4 849	15	6.60	4 394	14	6.60	-9
Weed and pest control	4 193	13	1.30	4 360	14	1.42	4
Fuel	6 346	20	1.97	6 346	20	2.07	0
Vehicle costs (excluding fuel)	6 461	21	2.01	6 590	21	2.15	2
Repairs and maintenance	16 642	53	5.17	16 143	51	5.27	-3
Total other working expenses	92 901	296	28.85	90 774	289	29.62	-2
Communication costs (phone and mail)	1 660	5	0.52	1 726	5	0.56	4
Accountancy	2 194	7	0.68	2 282	7	0.74	4
Legal and consultancy	1 255	4	0.39	1 305	4	0.43	4
Other administration	1 325	4	0.41	1 378	4	0.45	4
Water charges (irrigation)	0	0	0.00	0	0	0.00	...
Rates	6 294	20	1.95	6 483	21	2.12	3
Insurance	2 796	9	0.87	2 908	9	0.95	4
Other expenditure²	4 409	14	1.37	4 108	13	1.34	-7
Total overhead expenses	19 932	63	6.19	20 189	64	6.59	1
Total farm working expenses	120 870	385	37.54	118 790	378	38.76	-2
Wages of management	67 306	214	20.91	62 221	198	20.30	-8
Depreciation	22 485	72	6.98	11 258	36	3.67	-50
Total farm operating expenses	210 662	671	65.43	192 269	612	62.73	-9
CALCULATED RATIOS							
Economic farm surplus (EFS³)	4 356	14	1.35	5 960	19	1.94	
Farm working expenses/NCI⁴	51%			58%			
EFS/total farm assets	0.1%			0.2%			
EFS less interest and lease/equity	-0.8%			-0.8%			
Interest+rent+lease/NCI	13.2%			14.0%			
EFS/NCI	1.8%			2.9%			

Notes

1 Shearing expenses per stock unit based on sheep stock units.

2 Includes Accident Compensation Corporation (ACC) employer levy.

3 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.

4 Net cash income.

Symbol

... Not applicable.

FINANCIAL PERFORMANCE OF THE NORTHLAND SHEEP AND BEEF MODEL FARM IN 2008/09

The cash operating surplus for the Northland sheep and beef model was \$116 000 for the 2008/09 season, a 19 percent (\$18 400) improvement compared with 2007/08. Drivers of this result include higher prices received for both sheep and cattle and continued restraint around farm working expenses.

Climatically, Northland suffered a wet winter and spring in 2008 which led to pugging damage and lower than average pasture covers in many areas. Dry spells in the east and persistent dry conditions in the west through summer and autumn also reduced pasture growth rates. A cold wet May combined with existing low pasture covers and a strong autumn store market saw many farmers reduce stock numbers earlier in the season than usual.

REVENUE REBOUNDS TO HIGHEST LEVEL IN FIVE YEARS

Net cash income for the model farm was up 10 percent to \$236 900 or \$73.57 per stock unit, compared with \$215 600 in 2007/08. This was due to higher prices, some farmers choosing to reduce stock numbers through the sale of capital stock in response to a difficult winter, low pasture covers throughout the season, and a strong store market late in the autumn of 2009.

The sheepmeat schedule was consistently strong throughout the season and though there was more volatility in the cattle schedule, it too was generally up compared with 2007/08.

CATTLE REVENUE EDGES UPWARD

Despite the greater volatility in the market in the 2008/09 season, cattle revenue in the farm model increased 9 percent to \$251 400, compared with \$229 900 in 2007/08. This increase was a result of generally higher prices received and slightly more stock sold.

The wet weather and lower than average pasture covers at mating contributed to a 3 percent reduction in the calving percentage but this was more than outweighed by a 4 percent increase in the price received for stock sold to average \$911.04 per head.

SHEEP REVENUE IMPROVES SIGNIFICANTLY

A substantial improvement in both the prime and store schedules more than offset the 6 percent reduction in lambing percentage and survival rates that resulted from the difficult winter and spring period. Though some farmers saw the upswing in prices as an opportunity to restock with sheep, others saw high autumn store prices and low pasture covers as an opportunity to increase profits through the sale of both breeding ewes and hoggets. Allowing for this, closing sheep numbers in 2008/09 were down 11 percent on opening numbers.

►► TABLE 4: NORTHLAND SHEEP AND BEEF MODEL CASH FARM INCOME

YEAR ENDED 30 JUNE	2005/06 (\$)	2006/07 (\$)	2007/08 (\$)	2008/09 (\$)	2009/10 BUDGET (\$)
Sheep sales less purchases	43 330	40 195	41 193	49 868	44 497
Cattle sales less purchases	152 060	152 086	157 071	170 350	143 992
Wool	8 780	8 266	8 107	8 337	6 576
Grazing income (including hay and silage sales)	0	0	0	0	0
Other income	9 000	8 300	8 300	8 300	8 300
Net cash income	213 170	209 566	215 641	236 854	203 364

The average sheep sale price in the model increased 35 percent or by \$19.11 in the 2008/09 season to \$74.22, and contributed to a sheep revenue increase of 21 percent to \$54 600, compared with \$45 000 in 2007/08.

Wool revenue increased 3 percent to \$8300 in 2008/09 compared with \$8100 in 2007/08. However, the economics of wool remain poor with some farmers choosing to increase the interval between shearings in an effort to reduce shearing costs.

EXPENDITURE RESTRAINED

Despite the lift in income most farmers continued to show restraint with their spending during 2008/09. Farm working expenditure in the Northland model increased 2 percent to \$120 900 or \$37.54 per stock unit compared with \$118 000 in 2007/08.

Fuel (up 11 percent), lime (up 124 percent) and regrassing (up 35 percent) expenses saw significant percentage increases, though of these only lime was significant in dollar terms, up \$3400 to \$6100 in 2008/09.

Feed costs were up 6 percent to \$1.73 per stock unit in response to feed deficits resulting from poor pasture growth rates during the winter/spring period.

Overhead expenses such as rates, communications, insurance, legal and accountancy also continued to rise and made up 16 percent of total farm working expenses.

Repairs and maintenance expenditure rose a modest 6 percent to \$5.17 per stock unit from \$4.88 per stock unit in 2007/08. Better returns in the 2008/09 season allowed farmers to catch up on deferred spending in this area.

Interest costs declined 9 percent to \$31 300 or \$9.72 per stock unit in 2008/09, compared with \$34 300 or \$10.67 per stock unit in 2007/08, as interest rate reductions increasingly filtered through the sector.

CONSTRAINED FERTILISER SPEND PUTS PRODUCTION AT RISK

Fertiliser expenditure decreased 12 percent in 2008/09 to \$22 800 compared with \$25 900 in 2007/08. This was the main area of reduced expenditure and resulted from the application of fertiliser at less than maintenance levels.

Instead of using phosphate fertilisers farmers increased their use of lime due to an expectation that it would improve pasture production through the increased rate of soil phosphorous mineralisation brought about by a pH increase. Though this may be reasonable in the short-term, there can be no denying that this practice is not sustainable from a productivity viewpoint in the medium term.

The common strategy of capping the fertiliser spend at the previous year's level and adjusting the application rate to fit within the cap may already be contributing to lower production on farms with lower soil fertility.

Farmers also appear to be thinking more strategically about their fertiliser applications and it is common for fertiliser applications to be concentrated on farm areas likely to give the best pasture growth response.

NET RESULT BOOSTED BY ONE-OFF ITEMS

Farm profit before tax for the 2008/09 season declined 17 percent to \$40 400 largely as a result of a \$21 800 fall in the stock value due to a decrease in stock numbers. This was despite a 19 percent increase in cash operating surplus to \$116 000 in 2008/09 compared with \$97 600 in 2007/08 and a \$3000 reduction in interest paid.

The gloomy economic environment put paid to all but the most important or unavoidable capital expenditure. The model farm only spent \$4700 in this category during 2008/09, down from \$16 800 in the previous year. This in turn led to a reduced need for new borrowings.



The final result shows an increase in farm surplus for reinvestment to \$29 100 compared with \$1400 in 2007/08. This is likely to be carried forward by most and reinvested in the business during 2009/10.

The large gains in farm value during recent years suffered their first correction in 2008/09 primarily as a result of the world economic recession and its impact on credit availability. Though few farms were actually selling, the farm model factored in a 15 percent decline in land value over the financial year.

BUDGET FINANCIAL PERFORMANCE OF THE NORTHLAND SHEEP AND BEEF MODEL FARM IN 2009/10

The budgeted cash operating surplus for the Northland sheep and beef model farm is expected to decline 27 percent to \$84 600 in 2009/10 compared with \$116 000 in 2008/09, or in stock unit terms from \$36.02 per stock unit in 2008/09 to \$27.59 per stock unit in 2009/10. Drivers of this result are an anticipated 14 percent (\$33 500) reduction in net cash income in 2009/10, with the expected 2 percent reduction in farm working expenses to \$118 800 having little offsetting impact.

REVENUE EXPECTED TO FALL

The Northland model farm is budgeting a decline in net cash income of 14 percent to \$203 400 or \$66.35 per stock unit, in 2009/10. This is compared with \$236 900 in 2008/09.

Contributing to this result are indications that both cattle and sheep schedules may decline slightly and wool revenue is also anticipated to fall 21 percent. The reduction in stock numbers during 2008/09 also affects sheep net revenue, as additional stock need to be purchased for resale later and there will be a reduction in sheep numbers sold. This is expected to occur as farmers opt to retain stock to rebuild numbers after low pasture covers and a strong store schedule prompted a sell-off of hoggets late in the 2008/09 season.

EXPENDITURE LARGELY UNCHANGED

Optimism that the 2009/10 season will be a better one climatically than 2008/09 leads the Northland model farm to budget 2 percent reductions in animal health and breeding expenses. Feed expenditure is expected to decrease 9 percent. All of these expenses were up in the 2008/09 season due primarily to the difficult winter/spring period.

Shearing expenses are expected to be flat on a per stock unit basis but down 9 percent on a total cost basis as sheep numbers continue to fall and some farmers reduce their shearing frequency.

As has been the trend in recent years, administration expenses, electricity, rates and insurance all continue to increase.

FERTILISER APPLICATION RATES STILL BELOW MAINTENANCE LEVELS

Many Northland farmers intend to delay fertiliser decisions until the autumn of 2010 when they will have a better idea of how the season has panned out. However, it is expected that fertiliser prices will decline by around 15 percent. This should allow application rates to be higher than in 2008/09. The majority of farmers plan to continue applying a cap to total fertiliser spending and as a result total phosphate based fertiliser application rates are expected to remain at significantly less than maintenance levels for another year.

Lime expenditure is expected to be down by 20 percent to \$4900 in 2009/10, compared with \$6100 in 2008/09. This will compensate for the anticipated 2 percent increase in phosphate based fertiliser spend.



NET RESULT BARELY BREAKEVEN

Farm profit before tax for 2009/10 is budgeted to be \$39 700 and represents a 2 percent decline compared with \$40 400 achieved in 2008/09.

Spending on capital purchases, development, and drawings is expected to remain constrained though no new borrowing is considered necessary. As a result the model farm finishes with a modest cash surplus of \$2000 and a zero farm surplus for reinvestment.

INFORMATION ABOUT THE MODEL

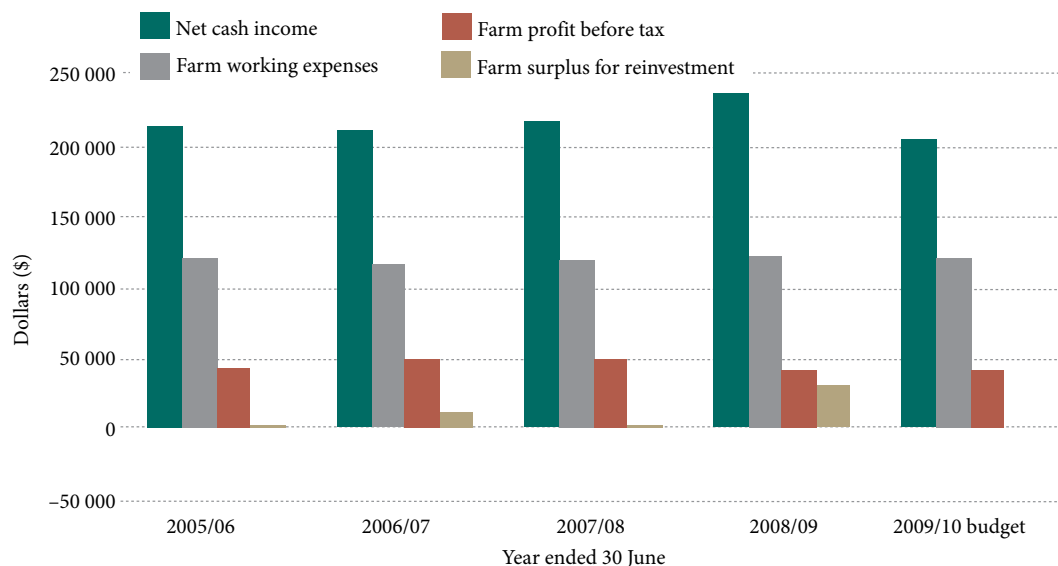
The Northland sheep and beef model represents 950 hill country and intensive finishing farms from Auckland north. Cattle form 75 percent of total stock units.

The model runs a breeding flock with 25 to 30 percent ewe hogget replacements. Lambs are bought in late in the autumn and finished during the winter period and early spring.

A cross-bred breeding herd is run, with nearly all homebred cattle wintered. Replacement heifers are bought in. Homebred heifers are mainly sold as prime rising 24 to 36-month heifers to the local trade market. The majority of steers are wintered over and sold on the spring grass market or carried through to slaughter from 22 to 30 months of age. A number of bull calves are purchased during the spring as weaners and sold as 24 to 36-month bulls.

For more information on this model contact: Russell.Knutson@maf.govt.nz

»» FIGURE 1: NORTHLAND SHEEP AND BEEF MODEL PROFITABILITY TRENDS



PUBLISHER

Ministry of Agriculture and Forestry

PO Box 2526, Wellington 6140, New Zealand

Tel +64 4 894 0100 or Freephone 0800 008 333

Email: policy.publications@maf.govt.nz

Web: www.maf.govt.nz

ISBN 978-0-478-35194-1 (Online)

© Crown copyright – Ministry of Agriculture and Forestry 2009

This report can be downloaded from www.maf.govt.nz

**DISCLAIMER**

The information in this report by the Ministry of Agriculture and Forestry is based on the best information available to the the Ministry at the time it was drawn up and all due care was exercised in its preparation. As it is not possible to foresee all uses of this information or to predict all future developments and trends, any subsequent action that relies on the accuracy of the information in this report is the sole commercial decision of the user and is taken at his/her own risk. Accordingly, the Ministry of Agriculture and Forestry disclaims any liability whatsoever for any losses or damages arising out of the use of this information, or in respect of any actions taken.

New Zealand Government