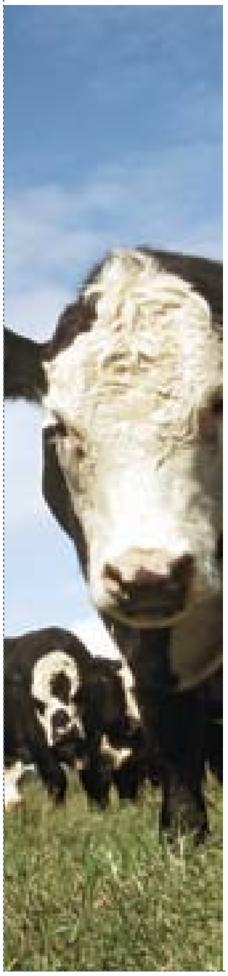


PASTORAL MONITORING 2010

OTAGO DRY HILL SHEEP AND BEEF

This report contains the key results from MAF's 2010 sheep and beef monitoring programme. Please note that the sample of farms has changed between 2008/09 and 2009/10. Caution should be taken when comparing data between these two years.

KEY POINTS

- Dry conditions from early summer to late autumn affected forage crops, available supplements and pasture growth for winter 2010, and are expected to affect output in the 2010/11 season.
- Most farmers made the decision to sell store lambs early while prices were high and were able to retain capital stock in reasonable condition in this difficult season. Sixty percent of lambs were sold store due to a strong lamb store market and the need to destock. In 2008/09 only 15 percent of lambs were sold store.
- Net cash income in 2009/10 fell $40 500 (9 percent) from 2008/09, as the average lamb price dropped $20 per head.
- Farm working expenses decreased 18 percent in 2009/10 to $221 000, due to decreased expenditure on feed (hay and silage) and regrassing not being undertaken as a result of the dry season.
- Farm profit before tax declined 50 percent between 2008/09 and 2009/10 to $74 000. A further 10 percent decline is budgeted in 2010/11, as a result of a 9 percent reduction in net cash income ($38 000) with most of this attributable to reduced cattle sales.
- Farmers are concerned with the increasing frequency of extreme climatic seasons and the lack of flexibility it causes in their farming operations through having to rely on the store market.

TABLE 1: KEY PARAMETERS, FINANCIAL RESULTS AND BUDGET FOR THE OTAGO DRY HILL SHEEP AND BEEF FARM MODEL

YEAR ENDED 30 JUNE	2006/07	2007/08	2008/09	2009/10[1]	2010/11 BUDGET
Effective area (ha)	2 000	2 000	2 000	2 000	2 000
Breeding ewes (head)	4 675	4 675	4 155	3 745	3 762
Replacement ewe hoggets (head)	1 130	1 130	780	895	950
Other sheep (head)	261	261	271	203	203
Breeding cows (head)	84	84	89	102	99
Rising 1-year cattle (head)	54	54	54	51	50
Other cattle (head)	39	44	29	75	34
Opening sheep stock units (ssu)	5 654	5 655	4 897	4 983	4 575
Opening cattle stock units	870	892	844	1 120	904
Opening total stock units (su)	6 523	6 546	5 741	6 103	5 479
Stocking rate (stock unit/ha)	3.3	3.3	2.9	3.1	2.7
Ewe lambing (%)	119	120	117	122	117
Average lamb price ($/head)	47.69	43.46	88.71	67.80	69.35
Average store lamb price ($/head)	45.43	33.50	51.22	63.00	60.00
Average prime lamb price ($/head)	48.31	51.00	71.22	75.00	77.00
Average wool price ($/kg)	3.36	3.15	3.08	3.31	3.38
Total wool produced (kg)	26 401	24 380	21 392	19 881	19 818
Wool production (kg/ssu)	4.67	4.31	4.37	3.99	4.33
Average rising 2-year steer ($/head)	800	559	743	732	795
Average cull cow ($/head)	595	495	520	521	521
Net cash income ($)	390 008	376 077	470 024	429 531	391 525
Farm working expenses ($)	223 220	252 421	269 866	220 996	223 735
Farm profit before tax ($)	91 751	–15 240	148 056	74 010	66 969
Farm surplus for reinvestment ($)[2]	37 818	–13 758	94 006	77 148	28 503

Notes

1 The sample of farms used to compile this model changed between 2008/09 and 2009/10. Caution is advised if comparing data between these two years.

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.

Ministry of Agriculture and Forestry
Te Manatū Ahuwhenua, Ngāherehere

TABLE 2: OTAGO DRY HILL SHEEP AND BEEF MODEL BUDGET

	2009/10			2010/11 BUDGET		
	WHOLE FARM ($)	PER HECTARE ($)	PER STOCK UNIT[1] ($)	WHOLE FARM ($)	PER HECTARE ($)	PER STOCK UNIT[1] ($)
REVENUE						
Sheep	299 483	150	60.10	287 626	144	62.86
Wool	65 806	33	13.21	66 985	33	14.64
Cattle	88 718	44	79.24	52 595	26	58.19
Grazing income (including hay and silage sales)	0	0	0.00	0	0	0.00
Other farm income	1 695	1	0.28	1 695	1	0.31
LESS:						
Sheep purchases	11 236	6	2.25	7 236	4	1.58
Cattle purchases	14 935	7	13.34	10 140	5	11.22
Net cash income	**429 531**	**215**	**70.38**	**391 525**	**196**	**71.46**
Farm working expenses	**220 996**	**110**	**36.21**	**223 735**	**112**	**40.83**
Cash operating surplus	**208 534**	**104**	**34.17**	**167 790**	**84**	**30.62**
Interest	55 502	28	9.09	51 592	26	9.42
Rent and/or leases	948	0	0.16	948	0	0.17
Stock value adjustment	–25 470	–13	–4.17	4 573	2	0.83
Minus depreciation	52 604	26	8.62	52 854	26	9.65
Farm profit before tax	**74 010**	**37**	**12.13**	**66 969**	**33**	**12.22**
Taxation	22 848	11	3.74	35 047	18	6.40
Farm profit after tax	**51 162**	**26**	**8.38**	**31 922**	**16**	**5.83**
ALLOCATION OF FUNDS						
Add back depreciation	52 604	26	8.62	52 854	26	9.65
Reverse stock value adjustment	25 470	13	4.17	–4 573	–2	–0.83
Income equalisation	0	0	0.00	0	0	0.00
Off-farm income	3 796	2	0.62	3 470	2	0.63
Discretionary cash	**133 032**	**67**	**21.80**	**83 673**	**42**	**15.27**
APPLIED TO:						
Net capital purchases	14 274	7	2.34	13 330	7	2.43
Development	17 360	9	2.84	10 000	5	1.83
Principal repayments	86 764	43	14.22	23 846	12	4.35
Drawings	52 088	26	8.54	51 700	26	9.44
New borrowings	52 088	26	8.54	0	0	0.00
Introduced funds	0	0	0.00	833	0	0.15
Cash surplus/deficit	**14 634**	**7**	**2.40**	**–14 370**	**–7**	**–2.62**
Farm surplus for reinvestment[2]	**77 148**	**39**	**12.64**	**28 503**	**14**	**5.20**
ASSETS AND LIABILITIES						
Farm, forest and building (opening)	3 432 667	1 716	562.49	3 191 333	1 596	582.45
Plant and machinery (opening)	178 927	89	29.32	178 533	89	32.58
Stock valuation (opening)	660 490	330	108.23	635 020	318	115.90
Other produce on hand (opening)	0	0	0.00	0	0	0.00
Total farm assets (opening)	**4 272 084**	**2 136**	**700.04**	**4 004 886**	**2 002**	**730.93**
Total assets (opening)	**4 305 751**	**2 153**	**705.55**	**4 004 886**	**2 002**	**730.93**
Total liabilities (opening)	654 413	327	107.23	613 778	307	112.02
Total equity (farm assets - liabilities)	**3 617 671**	**1 809**	**592.80**	**3 391 108**	**1 696**	**618.91**

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.

TABLE 3: OTAGO DRY HILL SHEEP AND BEEF MODEL EXPENDITURE

	2009/10			2010/11 BUDGET		
	WHOLE FARM ($)	PER HECTARE ($)	PER STOCK UNIT[1] ($)	WHOLE FARM ($)	PER HECTARE ($)	PER STOCK UNIT[1] ($)
FARM WORKING EXPENSES						
Permanent wages	8 600	4	1.41	8 600	4	1.57
Casual wages	3 760	2	0.62	3 760	2	0.69
ACC	863	0	0.14	524	0	0.10
Total labour expenses	**13 223**	**7**	**2.17**	**12 884**	**6**	**2.35**
Animal health	17 050	9	2.79	17 300	9	3.16
Breeding	2 300	1	0.38	2 300	1	0.42
Electricity	4 330	2	0.71	4 550	2	0.83
Feed (hay and silage)	7 430	4	1.22	12 800	6	2.34
Feed (feed crops)	4 320	2	0.71	4 350	2	0.79
Feed (grazing)	1 140	1	0.19	400	0	0.07
Feed (other)	2 050	1	0.34	660	0	0.12
Fertiliser	34 850	17	5.71	38 820	19	7.08
Lime	6 710	3	1.10	5 520	3	1.01
Cash crop expenses[2]	650	0	0.11	0	0	0.00
Freight (not elsewhere deducted)	5 700	3	0.93	5 690	3	1.04
Regrassing costs	7 980	4	1.31	7 400	4	1.35
Shearing expenses	25 450	13	5.11	26 730	13	5.84
Weed and pest control	12 140	6	1.99	11 300	6	2.06
Fuel	11 890	6	1.95	12 400	6	2.26
Vehicle costs (excluding fuel)	12 190	6	2.00	10 730	5	1.96
Repairs and maintenance	17 320	9	2.84	17 720	9	3.23
Total other working expenses	**173 500**	**87**	**28.43**	**178 670**	**89**	**32.61**
Communication costs (phone and mail)	2 590	1	0.42	2 700	1	0.49
Accountancy	3 640	2	0.60	3 670	2	0.67
Legal and consultancy	1 530	1	0.25	1 200	1	0.22
Other administration	1 220	1	0.20	1 240	1	0.23
Water charges (irrigation)	1 400	1	0.23	1 400	1	0.26
Rates	8 110	4	1.33	8 290	4	1.51
Insurance	7 010	4	1.15	6 960	3	1.27
ACC employer	6 933	3	1.14	4 981	2	0.91
Other expenditure	1 840	1	0.30	1 740	1	0.32
Total overhead expenses	**34 273**	**17**	**5.62**	**32 181**	**16**	**5.87**
Total farm working expenses	**220 996**	**110**	**36.21**	**223 735**	**112**	**40.83**
CALCULATED RATIOS						
Economic farm surplus (EFS[3])	56 739	28	9.30	48 460	24	8.84
Farm working expenses/NCI[4]	51%			57%		
EFS/total farm assets	1.3%			1.2%		
EFS less interest and lease/equity	0.0%			-0.1%		
Interest+rent+lease/NCI	13.1%			13.4%		
EFS/NCI	13.2%			12.4%		
Wages of management	73 721	37	12.08	71 049	36	12.97

Notes
1 Shearing expenses per stock unit based on sheep stock units.
2 Includes forestry expenses.
3 EFS 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.

FINANCIAL PERFORMANCE OF THE OTAGO DRY HILL SHEEP AND BEEF FARM MODEL IN 2009/10

The cash operating surplus was up 4 percent ($8400) on 2008/09 driven by reduced farm expenditure.

FARM INCOME DOWN 9 PERCENT

Net cash income in 2009/10 was down 9 percent ($40 500), due to the fall in average lamb price but partially offset by increased cattle sales income as dry conditions forced farmers to destock.

SHEEP REVENUE DECLINES 19 PERCENT

Sheep revenue (sales less purchases) declined $65 700 (19 percent) in 2009/10 compared with 2008/09, in spite of a 5 percentage point higher lambing percentage. The main driver of lower revenue was a decline in average lamb price from $88.71 in 2008/09 to $67.80 in 2009/10. This was due to a combination of lower prices for finished lambs and 60 percent of lambs being sold as stores compared with only 15 percent in 2008/09 as dry conditions began to affect feed supplies. The decision to sell a higher percentage of lambs store was due to both the dry weather but also the high store lamb prices offered relative to schedule for finished lambs.

CATTLE REVENUE RISES

Cattle revenue (sales less purchases) more than doubled compared with 2008/09, to $73 800, as the dry conditions forced farmers to sell cattle as stores that traditionally would have been taken through and finished as two- and three-year olds. This will impact on cattle revenue in 2010/11 as there will be fewer cattle available for sale.

WOOL INCOME REMAINS STATIC

This model contains a mix of crossbred and mid-micron sheep flocks. The average wool price in 2009/10 was $3.31 per kilogram, an increase from $3.08 per kilogram in 2008/09. However, total wool income remains the same due to a decrease in sheep stock units and kilograms of wool shorn.

EXPENDITURE FALLS DUE TO DECLINE IN INCOME AND DRY CONDITIONS

Farm working expenditure decreased 18 percent ($48 900) from 2008/09. This was due to a the fall in income leading farmers to take a cautious approach to spending, and the dry conditions in 2009/10 resulting in significant declines in expenditure mainly on feed (less conserved), regrassing, fuel and repairs and maintenance.

FERTILISER COSTS DECREASE AND REPAIRS AND MAINTENANCE EXPENDITURE FALLS

Even though fertiliser prices were higher, many farmers put on fertiliser in autumn 2009 in reaction to good incomes in 2008/09. In 2009/10, total expenditure on fertiliser declined $5300 (13 percent); but with the declining cost of fertiliser the tonnage applied was similar in most cases. Repairs and maintenance fell $10 300 (37 percent) in 2009/10 compared with 2008/09, but this is more of a reflection that farmers achieved some catch up spending in 2008/09 when income was higher.

FEED AND REGRASSING EXPENDITURE DECLINES

The extended dry season reduced the amount of feed supplements made (hay and silage) due to a lack of pasture surplus; and reduced in the amount of regrassing undertaken. Total expenditure on feed reduced $7100 (32 percent) from 2008/09. Regrassing expenditure also reduced $4700 (37 percent) with little to no regrassing undertaken due to dry conditions.

Interest charges are very similar to the 2008/09 year at $55 500, and represent 13 percent of net cash income.

NET RESULT DETERIORATES BUT STILL A REASONABLE OUTCOME

While the farm profit before tax of $74 000 has deteriorated compared with the record result achieved in 2008/09 of $148 000, it is still the second best result recorded for this model. However, it is important to note that a big contributor to the net result is from early sales of cattle which would usually appear in the 2010/11 results.

BUDGET FINANCIAL PERFORMANCE OF THE OTAGO DRY HILL SHEEP AND BEEF FARM MODEL IN 2010/11

A 20 percent decline is expected in the cash operating surplus in 2010/11 from $208 500 to $167 800. The key drivers of this are the reduced number of cattle sold and an anticipated 5 percentage point decrease in the lambing percentage. Farmers expect a reduction of $3.00 per store lamb but this is offset by an expectation that a greater percentage of lambs will be finished instead of being sold store compared with the previous year.

SIGNIFICANT DECLINE IN REVENUE EXPECTED

CATTLE REVENUE DECLINES SUBSTANTIALLY

Cattle revenue (sales less purchases) is expected to fall by $31 300 (42 percent), as a result of animals that traditionally would have been finished and sold as two- and three-year olds in 2010/11, having been sold as stores or killed at lighter weights in the 2009/10 year to help cope with the dry conditions.

SHEEP AND WOOL REVENUE LESS AFFECTED

Sheep revenue (sales less purchases) is expected to fall $7900 (3 percent), mainly because of an expected decrease in the lambing percentage of 5 percentage points to 117 percent and an expected decrease of $3.00 per head in the store price. The decrease in forecast lambing percentage is the farmers expectations of the effect of the 2009/10 dry conditions on the ewe ovulation rates. Farmers however, expect the proportion of lambs finished to increase to average levels of 60 percent compared with 40 percent in 2009/10. It is also anticipated that there will be a lift in the prime lamb price to $77.00 per head, up $2.00 per head from $75.00 in 2009/10. Industry comments suggested that prices for finished lambs are likely to be the same in 2010/11 but this result will depend on exchange rate movements.

Farmers expect a small rise in wool price to $3.38 per kilogram increasing total wool income $1200 (2 percent) to $67 000 in 2010/11.

TABLE 4: OTAGO DRY HILL SHEEP AND BEEF MODEL CASH FARM INCOME

YEAR ENDED 30 JUNE	2006/07 ($)	2007/08 ($)	2008/09 ($)	2009/10 ($)[1]	2010/11 BUDGET ($)
Sheep sales less purchases	258 392	241 848	353 965	288 247	280 390
Cattle sales less purchases	42 907	42 783	34 682	73 783	42 455
Wool	88 708	76 846	65 887	65 806	66 985
Grazing income (including hay and silage sales)	0	6 900	6 900	0	0
Other income	0	7 700	7 700	1 695	1 695
Net cash income	390 008	376 077	470 024	429 531	391 525

Note
1 The sample of farms used to compile this model changed between 2008/09 and 2009/10. Caution is advised if comparing data between these two years.

FARM EXPENDITURE REMAINS STATIC

Total farm working expenditure is budgeted to increase 1 percent to $223 700 which indicates most farmers anticipate holding expenditure at similar levels and allowing for some inflation increases.

FEED EXPENDITURE BUDGETED TO RISE

Expenditure on hay and silage is expected to rise in 2010/11 as farmers anticipate a more usual climatic season that will produce a pasture surplus enabling them to make the supplements they require for the winter. This increase is partially offset by reduced grazing expenses and bought-in feed (grain and sheep nuts) with total expenditure on feed and grazing increasing by $3300 (22 percent) in 2010/11.

Industry comments suggests there may yet be an increase in expenditure on bought-in feed in 2010/11, if farmers find they need to purchase additional grain and sheep nuts in late winter 2010 to fill a feed deficit.

FERTILISER EXPENDITURE RISES

Farmers plan to spend 11 percent ($4000) more on fertiliser with most of this targeted towards hill blocks which have not received maintenance fertiliser for a number of years. This expenditure is likely to be delayed until the autumn when the seasons' income is better known and fertiliser applications can be adjusted accordingly.

Interest costs are expected to fall to $51 600 with a drop in interest rates as fixed mortgages are renewed in 2010/11.

NET RESULT DETERIORATES

A further decline in the net result is expected in 2010/11 as a fall in income and a rise in expenses results in an expected cash deficit of $14 400. Tax payments increase to $35 000 from $22 800 in 2009/10, reducing the farm surplus available for reinvestment. Some farmers who have previously made use of taxable losses carried over from previous years will not have these available.

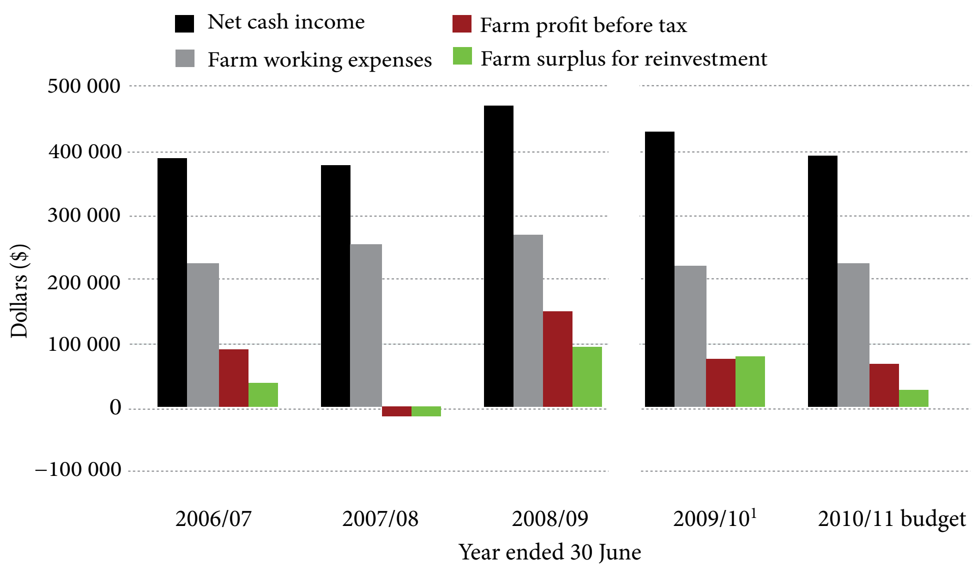
INFORMATION ABOUT THE MODEL

The Otago dry hill model represents 400 farms in the Otago area. The farms range in size from 500 to 4000 hectares and are spread from Kurow to Millers Flat in Central Otago; with the main concentration being in the Middlemarch and inland Palmerston areas.

These farms are characterised by systems that cope with dry summers and long cold winters. Rainfall is 400 to 700mm but drought days average over 100 per year. These farms are predominantly hill with a small area of valley floor. Some have a small area of irrigation on the valley floor.

For more information on this model contact: trish.burborough@maf.govt.nz

FIGURE 1: OTAGO DRY HILL SHEEP AND BEEF MODEL PROFITABILITY TRENDS



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Ministry of Agriculture and Forestry

PO Box 2526, Wellington 6140, New Zealand

Tel +64 4 894 0100 or Freephone 0800 008 333

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