



# GISBORNE HILL COUNTRY SHEEP AND BEEF

## Key results from the Ministry for Primary Industries 2012 sheep and beef monitoring programme

### KEY POINTS

- Regular rainfall close to district average levels from November 2011 to February 2012 provided quality summer pasture for the growth of both finishing and breeding stock.
- Continued strong product prices for stock and wool produced a cash operating surplus of \$287 800 for the 2011/12 year. Prices for sheepmeat and wool are expected to ease, but farmers are still anticipating a significant cash operating surplus of \$247 400 for 2012/13.
- Improved income levels have allowed farmers to make critical investments in areas such as fertiliser, principal repayments and the upgrade of key plant.
- The morale of Gisborne hill country sheep and beef farmers was high at the time of writing in mid-2012 although had been tempered by a recent drop in both sheep and wool prices.

Table 1: Key parameters, financial results and budget for the Gisborne hill country sheep and beef farm model

Year ended 30 June	2008/09	2009/10 <sup>1</sup>	2010/11	2011/12 actual	2012/13 budget
Effective area (ha)	821	829	829	829	837
Breeding ewes (head)	3 000	2 792	2 706	2 697	2 790
Replacement ewe hoggets (head)	1 120	760	851	911	950
Other sheep (head)	229	204	284	295	249
Breeding cows (head)	252	257	267	229	241
Rising one-year cattle (head)	235	232	268	269	260
Other cattle (head)	193	192	161	203	211
Opening sheep stock units (ssu)	3 950	3 879	4 187	4 254	4 357
Opening cattle stock units	3 283	3 335	3 382	3 394	3 458
Opening total stock units (su)	7 233	7 214	7 569	7 648	7 815
Stocking rate (stock unit/ha)	8.8	8.7	9.1	9.2	9.3
Ewe lambing (%)	115	124	134	136	137
Average lamb price (\$/head)	81.80	74.00	103.32	106.62	96.07
Average store lamb price (\$/head)	73.74	66.00	85.00	91.00	84.00
Average prime lamb price (\$/head)	85.98	77.00	108.0	111.0	99.72
Average wool price (\$/kg)	2.18	2.17	3.56	3.51	3.17
Total wool produced (kg)	17 651	17 223	18 825	19 266	20 431
Wool production (kg/ssu)	4.5	4.4	4.5	4.5	4.7
Average rising two-year steer (\$/head)	997	924	1 098	1 100	1 080
Average cull cow (\$/head)	619	587	800	904	836
Net cash income (\$)	490 793	442 337	626 693	666 270	633 796
Farm working expenses (\$)	216 039	344 298	360 623	378 436	386 420
Farm profit before tax (\$)	122 568	32 554	190 575	250 952	194 812
Farm surplus for reinvestment (\$) <sup>2</sup>	122 188	- 5 095	140 764	117 786	87 736

#### 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 is the cash available from the farm business, after meeting living costs, which is available for investment on the farm or for principal repayments. It is calculated as farm profit after tax plus depreciation plus stock adjustments less drawings.

Table 2: Gisborne hill country sheep and beef model budget

	2011/12			2012/13 budget		
	Whole farm (\$)	Per hectare (\$)	Per stock unit <sup>1</sup> (\$)	Whole farm (\$)	Per hectare (\$)	Per stock unit <sup>1</sup> (\$)
<b>Revenue</b>						
Sheep	427 086	515	100.39	393 184	470	90.24
Wool	67 574	82	15.88	64 699	77	14.85
Cattle	245 706	296	72.40	253 695	303	73.36
Grazing income (including hay and silage sales)	0	0	0.00	0	0	0.00
Other farm income	13 000	16	1.70	12 000	14	1.54
<b>Less:</b>						
Sheep purchases	39 930	48	9.39	40 522	48	9.30
Cattle purchases	47 165	57	13.90	49 260	59	14.24
<b>Net cash income</b>	<b>666 271</b>	<b>804</b>	<b>87.12</b>	<b>633 796</b>	<b>757</b>	<b>81.10</b>
<b>Farm working expenses</b>	<b>378 436</b>	<b>456</b>	<b>49.48</b>	<b>386 420</b>	<b>462</b>	<b>49.44</b>
<b>Cash operating surplus</b>	<b>287 835</b>	<b>347</b>	<b>37.63</b>	<b>247 376</b>	<b>296</b>	<b>31.65</b>
Interest	40 355	49	5.28	33 952	41	4.34
Rent and/or leases	13 000	16	1.70	13 000	16	1.66
Stock value adjustment	30 130	36	3.94	9 171	11	1.17
Minus depreciation	13 658	16	1.79	14 783	18	1.89
<b>Farm profit before tax</b>	<b>250 952</b>	<b>303</b>	<b>32.81</b>	<b>194 812</b>	<b>233</b>	<b>24.93</b>
Income equalisation	0	0	0.00	0	0	0.00
Taxation	71 694	86	9.37	64 688	77	8.28
<b>Farm profit after tax</b>	<b>179 257</b>	<b>216</b>	<b>23.44</b>	<b>130 125</b>	<b>155</b>	<b>16.65</b>
<b>Allocation of funds</b>						
Add back depreciation	13 658	16	1.79	14 783	18	1.89
Reverse stock value adjustment	- 30 130	- 36	-3.94	- 9 171	- 11	-1.17
Drawings	45 000	54	5.88	48 000	57	6.14
<b>Farm surplus for reinvestment<sup>2</sup></b>	<b>117 786</b>	<b>142</b>	<b>15.40</b>	<b>87 736</b>	<b>105</b>	<b>11.23</b>
<b>Reinvestment</b>						
Net capital purchases	15 000	18	1.96	16 000	19	2.05
Development	2 500	3	0.33	2 500	3	0.32
Principal repayments	80 035	97	10.46	54 366	65	6.96
<b>Farm cash surplus/deficit</b>	<b>20 251</b>	<b>24</b>	<b>2.65</b>	<b>14 870</b>	<b>18</b>	<b>1.90</b>
<b>Other cash sources</b>						
Off-farm income	1 800	2	0.24	2 000	2	0.26
New borrowings	0	0	0.00	0	0	0.00
Introduced funds	0	0	0.00	0	0	0.00
<b>Net cash position</b>	<b>22 051</b>	<b>27</b>	<b>2.88</b>	<b>16 870</b>	<b>20</b>	<b>2.16</b>
<b>Assets and liabilities</b>						
Farm, forest and building (opening)	3 785 000	4 566	494.90	3 780 344	4 517	483.71
Plant and machinery (opening)	90 994	110	11.90	92 345	110	11.82
Stock valuation (opening)	1 198 880	1 446	156.76	1 229 010	1 468	157.26
Other produce on hand (opening)	0	0	0.00	0	0	0.00
<b>Total farm assets (opening)</b>	<b>5 074 874</b>	<b>6 122</b>	<b>663.55</b>	<b>5 101 699</b>	<b>6 095</b>	<b>652.78</b>
<b>Total assets (opening)</b>	<b>5 074 874</b>	<b>6 122</b>	<b>663.55</b>	<b>5 101 699</b>	<b>6 095</b>	<b>652.78</b>
Total liabilities (opening)	627 000	756	81.98	546 965	653	69.99
<b>Total equity (farm assets - liabilities)</b>	<b>4 447 874</b>	<b>5 365</b>	<b>581.57</b>	<b>4 554 734</b>	<b>5 442</b>	<b>582.79</b>

**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 is the cash available from the farm business, after meeting living costs, which is available for investment on the farm or for principal repayments. It is calculated as farm profit after tax plus depreciation plus stock adjustments less drawings.

Table 3: Gisborne hill country sheep and beef model expenditure

	2011/12			2012/13 budget		
	Whole farm (\$)	Per hectare (\$)	Per stock unit (\$)	Whole farm (\$)	Per hectare (\$)	Per stock unit (\$)
<b>Farm working expenses</b>						
Permanent wages	90 000	109	11.77	92 000	110	11.77
Casual wages	8 000	10	1.05	9 000	11	1.15
ACC	3 545	4	0.46	3 131	4	0.40
<b>Total labour expenses</b>	<b>101 545</b>	<b>122</b>	<b>13.28</b>	<b>104 131</b>	<b>124</b>	<b>13.32</b>
Animal health	26 386	32	3.45	27 745	33	3.55
Breeding	2 600	3	0.34	2 657	3	0.34
Electricity	7 572	9	0.99	7 581	9	0.97
Feed (hay and silage)	4 000	5	0.52	2 300	3	0.29
Feed (feed crops)	4 900	6	0.64	3 600	4	0.46
Feed (grazing)	0	0	0.00	0	0	0.00
Feed (other)	885	1	0.12	1 000	1	0.13
Fertiliser	55 304	67	7.23	64 909	78	8.31
Lime	3 696	4	0.48	5 576	7	0.71
Cash crop expenses <sup>1</sup>	500	1	0.07	2 000	2	0.26
Freight (not elsewhere deducted)	6 348	8	0.83	6 487	8	0.83
Regrassing costs	2 677	3	0.35	1 563	2	0.20
Shearing expenses <sup>2</sup>	29 293	35	6.89	30 445	36	6.99
Weed and pest control	11 980	14	1.57	11 340	14	1.45
Fuel	8 700	10	1.14	9 000	11	1.15
Vehicle costs (excluding fuel)	14 400	17	1.88	14 100	17	1.80
Repairs and maintenance	38 747	47	5.07	33 340	40	4.27
<b>Total other working expenses</b>	<b>217 988</b>	<b>263</b>	<b>28.50</b>	<b>223 642</b>	<b>267</b>	<b>28.62</b>
Communication costs (phone and mail)	3 400	4	0.44	3 400	4	0.44
Accountancy	10 740	13	1.40	10 480	13	1.34
Legal and consultancy	8 100	10	1.06	8 500	10	1.09
Other administration	6 831	8	0.89	4 917	6	0.63
Water charges (irrigation)	0	0	0.00	0	0	0.00
Rates	14 072	17	1.84	14 849	18	1.90
Insurance	6 118	7	0.80	7 034	8	0.90
ACC employer	4 641	6	0.61	4 467	5	0.57
Other expenditure	5 000	6	0.65	5 000	6	0.64
<b>Total overhead expenses</b>	<b>58 903</b>	<b>71</b>	<b>7.70</b>	<b>58 647</b>	<b>70</b>	<b>7.50</b>
<b>Total farm working expenses</b>	<b>378 436</b>	<b>456</b>	<b>49.48</b>	<b>386 420</b>	<b>462</b>	<b>49.44</b>
<b>Calculated ratios</b>						
Economic farm surplus (EFS <sup>3</sup> )	229 307	277	29.98	166 764	201	21.34
Farm working expenses/NCI <sup>4</sup>	57%			61%		
EFS/total farm assets	4.5%			3.3%		
EFS less interest and lease/equity	4.0%			2.6%		
Interest+rent+lease/NCI	8.0%			7.4%		
EFS/NCI	34.4%			26.3%		
Wages of management	75 000	90	9.81	75 000	90	9.60

**Notes**

1 Includes forestry expenses.

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

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 GISBORNE HILL COUNTRY SHEEP AND BEEF FARM MODEL IN 2011/12

Good pasture growing conditions and the continuation of relatively strong stock and wool prices lifted the cash operating surplus of the Gisborne hill country model to \$287 800 (\$347 per hectare) in 2011/12; up from \$266 100 (\$321 per hectare) in 2010/11.

Farm working expenditure increased 5 percent (\$17 800) from \$360 600 in 2010/11 to \$378 400 in 2011/12.

## REVENUE REMAINS STRONG, INCREASING 6 PERCENT

Net cash income in 2011/12 continued at strong levels, increasing \$39 600 (6 percent) to \$666 300. The main increase was in sheep income, with stable income levels achieved for wool and beef. A key driver was the favourable rainfall over summer and autumn, which allowed good levels of both pasture and livestock growth.

### Strong pasture growth and prices lift sheep income

Sheep income (sales less purchases) increased by \$47 200 (14 percent) to \$387 200 in 2011/12, compared with \$339 900 in 2010/11. Breeding ewes entered winter 2011 in good order with the potential for an improved lambing result. However, the winter was dominated by above-average rainfall in July, which reduced stock pasture utilisation. This was followed by storms in August, which affected the early lambing flocks. Despite this, a lambing percentage of 136 percent was achieved, which was up two percentage points from 134 percent in 2010/11.

Prime lambs increased \$3 to \$111 per head in 2010/11. The favourable pasture conditions resulted in farmers retaining and selling lambs in 2011/12 that were 1 kilogram carcass weight heavier compared with 2010/11. The lamb schedule was strong until late January, when the drop in global lamb prices was reflected in the New Zealand schedule. Store lamb prices increased \$6 per head to average \$91 per head in 2011/12. Once again, the favourable pasture conditions resulted in heavier liveweight lambs being traded. The demand for both breeding and cull ewes remained strong, with the average price increasing \$13 per head from \$88 per head in 2010/11 to \$101 per head in 2011/12.

High rainfall amounts fell across the district during the months of March and April 2012 (254 millimetres and 209 millimetres respectively), with some pockets experiencing significant fence and access damage after receiving in excess of 400 millimetres during one rainfall event.

### Cattle income eases slightly

Cattle income (sales less purchases) decreased by \$11 300 to \$198 500 in 2011/12, due to lower schedule prices being paid by processors. The lower schedule price was influenced by strike action and a lack of killing at Wairoa, the closest beef plant for this farm model.

High pasture levels across the district meant farmers were able to grow out cattle that they normally sold store. Farmers commented that the high clover content in pastures meant cattle achieved spring liveweight gain right through summer and into the autumn.

Cow condition in spring 2011 was average and this was reflected in "very average" cow scanning results in autumn 2012. The cows were, however, well-fed during lactation and were heavier, with a better than average condition score going into winter 2012.

### Wool prices ease

Wool income stabilised at \$67 600 for 2011/12, being up only \$600 on 2010/11. The average wool price dropped by 5 cents per kilogram to \$3.51 per kilogram in 2011/12. However, there were considerable price variations from around \$3.80 per kilogram, at the start of the 2011/12 year, to around \$3.20 per kilogram at the end of the 2011/12 year. Farmers continued the trend towards second shearing.

## FARM COSTS INCREASE 5 PERCENT

The improved income levels for this farm model resulted in an increase in farm working expenses of 5 percent to \$378 400 in 2011/12. This is the second consecutive year that there has been a 5 percent increase in farm working expenses. The main items of increased expenditure were animal health, feed, fertiliser, freight, weed and pest control and repairs and maintenance. Feed expenditure increased 16 percent as farmers cut larger areas of silage and hay in an attempt to control the higher summer pasture growth.

Insurance expenditure increased 9 percent due to higher premiums but this also includes fewer assets being insured.

### Healthier stock

Favourable pasture growth rates and quality resulted in better feed and healthier stock for 2011/12. All the same, spending on animal health increased 9 percent as farmers used proactive treatments to capitalise on the higher commodity prices. An example is the increased use of long-term worm capsules for ewes over the lambing period. Industry comment is that farmers have moved to premium products on the basis that they are making more money so can afford to spend more.

### Soil fertility rebuild

Farmers are investing in fertiliser to rebuild soil fertility by spending \$55 300 (up 12 percent) in 2011/12. They believe phosphate and sulphur fertilisers are reasonably well-priced relative to commodity prices. Expenditure on fertiliser would have been higher, but the wet March and April meant the autumn programme could not be completed. The poor facilities on farm airstrips and a lack of truck drivers also compounded the problem.

Lime application is now being considered by most farmers to manage soil acidity. Some farmers are also looking to pre-buy fertiliser to manage taxation for the 2011/12 year.

### Weeds controlled

The weed problem on many farms has worsened due to years of low spending. In 2011/12, costs in this area increased to \$12 000 (95 percent increase) as farmers attempted to achieve better weed control.

## NET RESULT INCREASED SIGNIFICANTLY

Farm profit before tax rose to \$251 000, an increase of \$60 400 from 2011/12.

A \$51 600 increase in taxation, to \$71 700 in 2011/12, impacted on the farm profit after tax, which rose only slightly from \$170 500 in 2010/11 to \$179 300 in 2011/12.

The improved trading conditions enabled principal repayments of \$80 000 in 2011/12, an increase of \$31 800 on 2010/11. This principal repayment resulted in a 13 percent reduction in liabilities and a comparable increase in equity. This has improved the rural bankers' risk profile for this farm model. Lower interest rates, combined with lower debt, have seen interest costs drop 24 percent to \$40 400 (\$5.28 per stock unit) for 2011/12. The principal payment also impacted on the farm cash surplus, which is \$20 300 in 2011/12, down on the \$77 600 result in 2010/11.

Key plant and machinery, such as farm bikes, have been replaced on many farms, with \$15 000 being spent this year.

**Table 4: Gisborne hill country sheep and beef model cash farm income**

Year ended 30 June	2008/09 (\$)	2009/10 (\$)	2010/11 (\$)	2011/12 (\$)	2012/13 budget (\$)
Sheep sales less purchases	264 265	223 661	339 935	387 156	352 662
Cattle sales less purchases	178 085	165 225	209 829	198 541	204 435
Wool	38 444	37 451	66 929	67 574	64 699
Grazing income (including hay and silage sales)	2 500	7 000	5 000	0	0
Other income	7 500	9 000	5 000	13 000	12 000
Net cash income	490 793	442 337	626 693	666 270	633 796

**Note**

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.

# BUDGET FINANCIAL PERFORMANCE OF THE GISBORNE HILL COUNTRY SHEEP AND BEEF FARM MODEL IN 2012/13

The farm model's cash operating surplus is expected to decrease 14 percent to \$247 400 in 2012/13. This is mainly due to a predicted easing in sheepmeat and wool prices, which will reduce net cash income by \$32 500 (5 percent). A budgeted increase in farm working expenses of just 2 percent in 2012/13 is expected as farmers try to reduce costs. The effective area of the farm model is planned to increase by 8 hectares, to 837 hectares, in 2012/13, as a result of increased spending on weed control and scrub clearing by farmers in both 2011/12 and 2012/13.

## REVENUE EXPECTED TO DECREASE BY 5 PERCENT

Net cash income is predicted to decrease 5 percent to \$633 800 in 2012/13, a drop of \$47 per hectare. A small increase in cattle revenue is expected to be offset by reductions in sheepmeat and wool revenue.

### Cattle returns increase slightly

Cattle income (sales less purchases) is expected to increase 3 percent to \$204 400 in 2012/13. Farmers are more positive about the prospects for beef than other commodities and believe income levels will stay stable in 2012/13, compared with 2011/12.

Cattle production is predicted to lift slightly as a result of the positive pasture conditions in the 2012 autumn, which enabled cattle to both gain weight and condition. This had cattle well positioned from a production perspective as they entered the 2012/13 year.

### Stock numbers increase

Farmers are planning to increase their stocking rates for 2012/13. The model opened the year with an increase of 167 stock units, which equates to a stocking rate of 9.3 stock units per effective hectare. However, there is still a heavy focus on improving the liveweight and per head performance, particularly of sheep.

### Sheep income predicted to fall

Sheep income (sales less purchases) is expected to decrease 9 percent to \$352 700 in 2012/13.

The lambing percentage is budgeted to be up one percentage point to 137 percent in 2012/13, due to the favourable conditions for ewes at tupping. This is reflected in some of the early ewe scanning results being at above usual levels.

The average lamb price is predicted to be \$96.07 per head in 2012/13, down \$10.55 per head on the 2011/12 year.

The average ewe price is predicted to be \$88 per head in 2012/13, down \$13 per head on the 2011/12 year.

### Wool income eases

Farmers have once again lost some confidence in wool and believe the price will drop 10 percent to \$3.17 per kilogram in 2012/13. Wool weights per sheep stock unit continue to improve as ewe liveweight increases, with 4.69 kilograms per stock unit predicted for 2012/13 (up 4 percent).

## EXPENDITURE INCREASES SLIGHTLY

With lower income levels, farmers plan to limit the increase in farm working expenses to just 2 percent. Industry commentators believe this will be difficult to achieve, given the need for maintenance and the inflationary pressure on some costs.

### Fertiliser spend to increase

Farmers plan to spend an extra \$11 500 in 2012/13 on fertiliser and lime, an increase of 19 percent. This includes deferred fertiliser from 2011/12 that could not be applied due to wet weather conditions. However, farmers also plan to build soil fertility that may have been lost due to low inputs during recent years. More lime is being applied as farmers try to address the acidifying of the soil.

### NAIT cost

The cost of National Animal Identification and Tracing (NAIT) compliance is anticipated to be \$3000 per farm, which will be spread between electronic tags and capital scanners. The survey data indicates that farmers have not adequately budgeted for this cost in 2012/13.

### Feed crop spend drops

The expenditure on feed and feed crops is anticipated to drop by 29 percent in 2012/13, as farmers anticipate a normal season for pasture growth and reassess the cost effectiveness of new grass and feed crops. Some believe that increased fertiliser inputs are the most cost-effective way of growing extra feed.

### INSURANCE COSTS CONTINUE TO RISE

An insurance premium increase of 15 percent is predicted, due to the state of the New Zealand insurance market after the earthquakes in Christchurch altered perceptions of risk.

### Net result to fall

The farm profit before tax is expected to decrease 22 percent to \$194 800 in 2012/13. There will, however, still be a significant taxation cost of \$64 700 due to the level of profitability in

the previous year. The relatively strong farm profit after tax will still allow planned principal repayments of \$54 400 to occur, which will improve equity and reduce future interest payments.

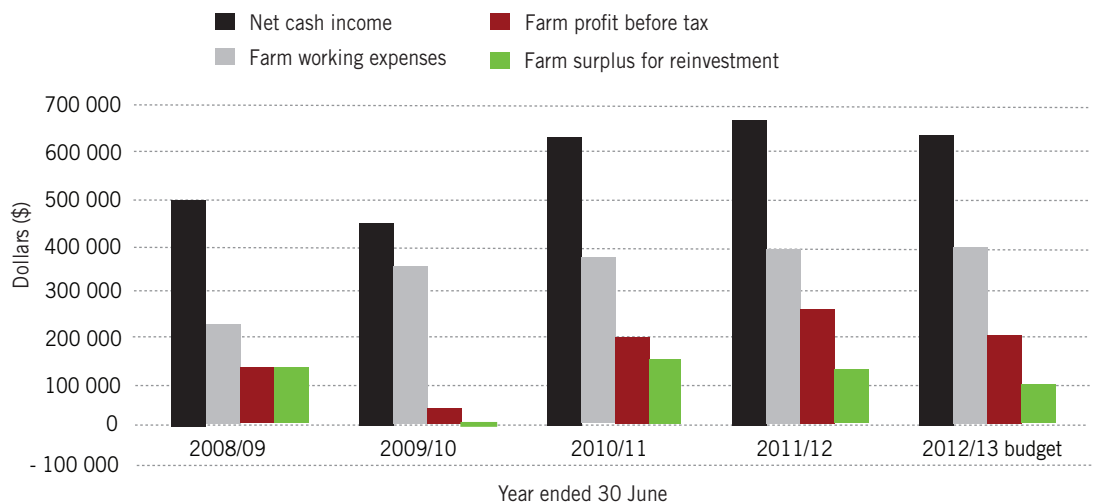
Farmers plan to continue the process of updating key machinery, with \$16 000 allocated to be spent in 2012/13.

The lower debt, combined with lower interest rates, will see the expected cost of interest drop 16 percent to \$34 000 (\$4.34 per stock unit) for 2012/13.

### Farmer morale high

At the time of writing, farmer morale is high in the Gisborne and Wairoa districts due to the improved level of farm profitability. This has also seen an improvement in equity, which has had a positive impact on the whole farm family. Farm succession is increasing in the district as the ability to pay off debt in recent years makes succession more viable.

Figure 1: Gisborne hill country sheep and beef farm model profitability trends



## INFORMATION ABOUT THE MODEL

The Gisborne hill country sheep and beef model represents about 600 farms. These are on both steep hill country and easier hill country (with mudstone soil and pumice overlay) in the Gisborne and Wairoa districts. The model's stock policy is based around breeding ewes and cows with replacement stock retained, surplus stock sold prime or store and some trading stock for finishing or margin trading.

Please note that the sample of farms has changed between 2008/09 and 2009/10. Caution should be taken if comparing data between these two years.

Farm monitoring models calculate sheep stock units based on lambing performance. One standard sheep stock unit is based on a ewe lambing greater than 111 and less than 120 percent. Based on the lambing percentage for this model breeding ewe numbers were multiplied by 1.2 stock units in both years. Any per stock unit calculations or indices should take this into account when comparing to other sources of financial information.

For further information on the model contact [Gillian.Mangin@mpi.govt.nz](mailto:Gillian.Mangin@mpi.govt.nz)

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