

SR at Peak	2.79	2.80	2.90	2.86
KG LW/tDM	91.0	90.5	99.0	91.4
KgMS/ha	1138	1176	1171	1180
Cow wastage	16.4%	13.3%	11.8%	13.6%
Bought in feed/kgMS	2.18	2.4	3.2	2.5
Utilised Pasture t/ha	11.1	11.5	10.4	11.55
Margin/ha	\$4255	\$4760	\$8040	\$5298
Margin/ha @ \$4.10	\$4255	\$4337	\$3901	\$3975

Over time we have seen a general lift in stocking rates, production and utilized pasture. This reflects improved management and the establishment of farms post conversion.

A couple of concerning though are that our bought in feed has lifted from 2.18kgDM/kgMS to 2.5kgDM/kgMS and that cow wastage is still too high.

Bought in feed includes nitrogen application but this is not the reason and average application has actually fallen. The increase in bought in feed (15%) is thus either bought in silage or concentrates.

In my analysis I try to put an economic analysis on it by valuing all feed inputs and cow wastage to calculate a net margin. From the above you can see that the margin has lifted with payout but when you adjust it back to a \$4.10/kgMS payout our margin has actually fallen. This raises questions about how economic our productivity increases are. 2007/08 figures are affected by last years drought.

My analysis is similar to that carried out by DairyNZ³ on behalf of SIDDC and shows very similar correlations between pasture production and profitability even though their analysis was more details and used full DairyBase Analysis⁴.

This year I have further analysed the difference between those farmers who are basically all grass farmers vrs those whose feed significant amounts of concentrates (45% of database):

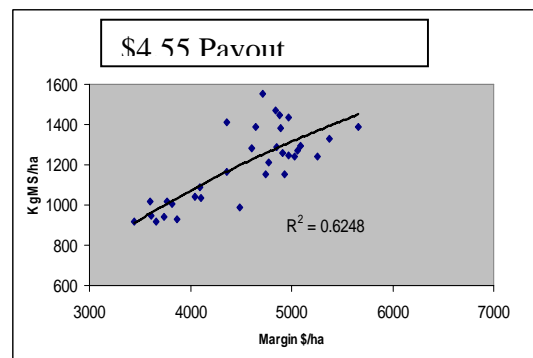
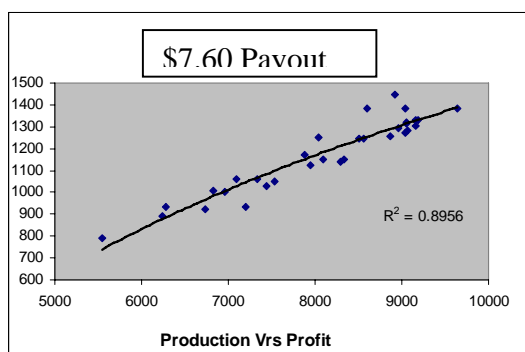
³ DairyNZ presentation to LUDF Focus Day 2nd July 2009

⁴ DairyBase is the NZ dairy industry financial and physical database.

	<u>All Grass</u>	<u>Concentrates</u>
SR at Peak	2.82	2.95
KG MS/KGLW	0.83	0.88
KG LW/tDM	89.9	93.3
KgMS/ha	1129	1266
Empties	9.3%	8.4%
Concentrates Fed (kg/head)	34	467
Bought in feed/kgMS	2.02	3.17
Utilised Pasture t/ha	11.6	11.7
Margin/ha	\$5264	\$5372
Margin/ha @ \$4.55/kgMS	\$4540	\$4585

From the above you can see that concentrate feeders have a higher stocking rate (5%) and produce more milk (12%). Their cows are more efficient at converting liveweight into milk (presumably because they are better fed) and they have a lower empty rate. Pasture utilization though is similar and the conversion ration for the extra feed input is a very poor 9.4kgDM/kgMS.

At a \$5.20/kgMS payout the concentrate feeders were earning approximately \$108/ha more. At a \$4.55/kgMS payout the net return though would have only been \$45/ha.



The relationship between gross margin and production gets more blurred the lower the payout is. That is, with a high payout feed inputs are easily justified ($R^2 = 0.89$ at \$7.60/kg) but not so at a low payout ($R^2 = 0.62$ at \$4.55/kg). It's a pretty simple message but almost half of high concentrate farmers did not make anymore net income than their all grass counterparts last year.

This is not saying that concentrate feeding is not economic but optimizing pasture utilization has to remain the number one priority at all payouts.

