

Macalister Demonstration Farm, Dairy Australia, Extension Project

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Macalister Demonstration Farm Update 256 (Week ending July 8, 2011)

The Macalister Demonstration Farm continues to dry off cows and is now milking 155, grazing 45 hectares, a stocking rate of 3.4 cows per hectare. Last year at this time, there were 101 milkers, and the stocking rate was 2.9 cows per hectare. The milker numbers are staying higher into July this year because we have moved the start of calving date forward ten days, to August 20, so drying off can now be later. The daily allocation for the week is one 50th of the grazing area, and the grazing rest time is 48 days.

Compared to last week, milk production per cow is the same at 1.36 kg milk solids (MS) per cow per day. These are very late lactation cows, most about to be dried off, about 20 to be milked through winter not-in-calf. The latter will be sold only if their production falls below 12 litres. Litres per cow per day are up from 16.1 to 16.9. Milk fat test has fallen from 4.46% to 3.95% (fat yield is down from 0.72 to 0.67 kg per cow per day). The protein test has risen from 4.00% to 4.09% (protein yield is up from 0.65 to 0.69 kg per cow per day). This time last year, milk production was 15.5 litres, 1.24 kg MS, 0.64 kg fat, and 0.61 kg protein per cow per day. Protein being higher than fat is unusual and is being caused by the low fibre diet (28.5% NDF). The diet is low in fibre because of the low grass to concentrate proportion, and no hay being fed.

The daily pasture consumption from the grazing area is up from 29 to 32 kg dry matter (DM) per hectare per day. The pasture consumption per cow is up from 8.2 to 9.3 kg DM per cow per day. This time last year, pasture consumption was 31 kg DM per hectare per day, and 10.9 kg DM per cow per day.

1.0 kg nitrogen element, 0.07 kg potassium, no phosphorus, no irrigation, no topping, and \$0.19 of pasture renovation, all per hectare per day, have contributed to the current pasture consumption. The daily spend on these pasture inputs is \$1.70 per hectare per day. Based on those inputs only, pasture price is estimated to be \$53 per tonne of dry matter, down from \$54.

Supplementary concentrates include crushed wheat and minerals totalling 6.9 kg DM per cow per day, at an average price of \$341 per DM tonne.

The BMCC has fallen from 132 to 123. This time last year the BMCC was 115. For the ten days to June 30, the MDF was ranked 9th out of 339 suppliers.

The milk price (less compulsory levies) that the MDF anticipates receiving for the week is \$6.76 per kg milk solids, or 54.3 cents per litre. Milk income per cow per day is \$9.17, down from \$9.26, made up of \$2.68 for the fat, \$6.94 for the protein, and minus \$0.44 for the litres. This time last year milk income per cow per day was \$8.16.

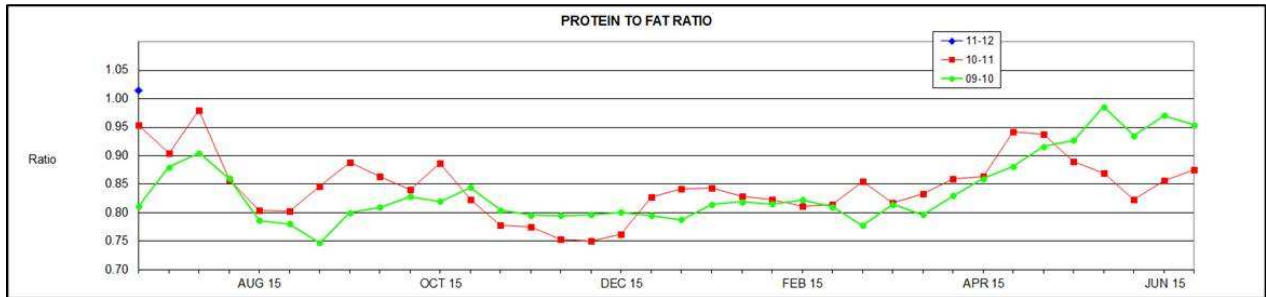
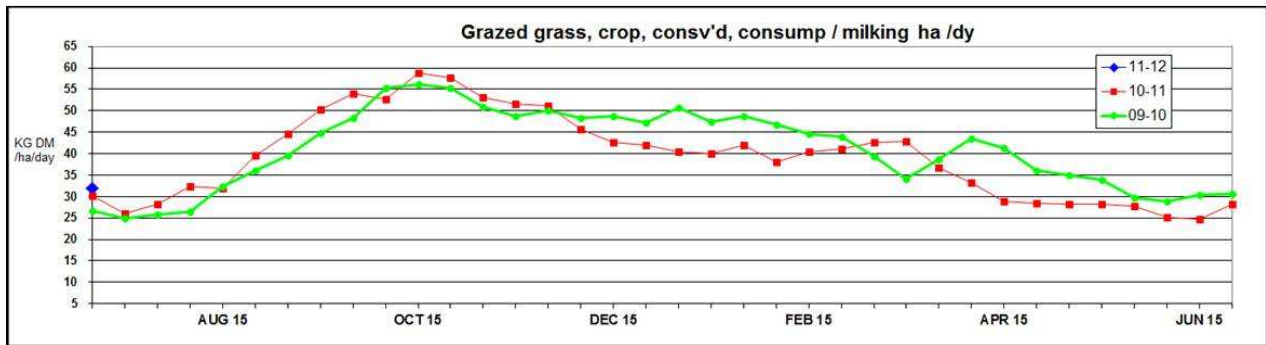
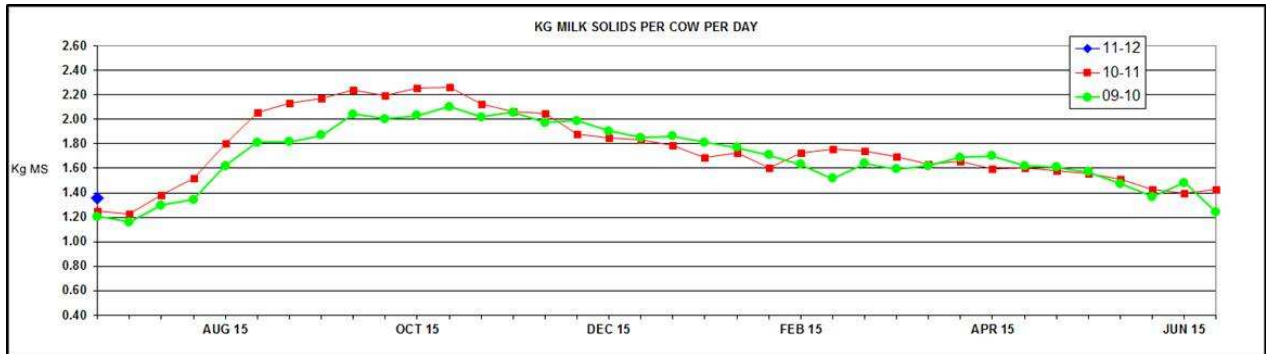
In last week's report the anticipated milk price was \$6.88 per kg MS. Since then the final price step-up for 2010-11 has been announced. It was not quite as high as anticipated, so last week's price became actually \$6.77. The current anticipated milk price includes the announced opening milk price for 2011-12, plus the same amount of step-ups as 2010-11.

Feed cost per cow per day (including pasture and supplements) is down from \$3.09 to \$2.85 per cow per day, leaving a Margin over All Feed (MOAF) per cow of \$6.32, down from \$6.17 per day. The margin over all feed per hectare is \$21.77. The whole farm feed margin is \$980, down from \$1,089 per day. This time last year the whole farm feed margin was \$606 per day.

The oaten hay we have bought to feed to the springing cows has been feed tested to ascertain its mineral levels, to calculate its Dietary Cation Anion difference (DCAD). DCAD is calculated using the

formula $(Na + K) - (Cl + S)$. Its DCAD is 14.6 meq/100 gm, which is an acceptably low level. In previous years barley hay was 6.7, wheaten hay 14.8, and wheaten hay 10.7. Pasture hay can be 30 to 60. Springing diets aim to have a negative DCAD, so it is best if the hay DCAD is not high to start with.

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WEEKLY FEEDING PERFORMANCE	Last Year	Last week	This week	Units
Week to date:	09-Jul	01-Jul	08-Jul	
Milker graze area	35	51	45	ha
Milker nos	101	178	155	head
Average days in milk		309	317	days
Stocking rate	2.9	3.5	3.4	cows/ha
Grazing allocation 1/	50	50	50	th of graze area
Average graze rest time	50	46	48	days
Element N/hectare/day	1.2	1.0	1.0	kg element/ha/day
mm irrigation/hectare/day	0.0	0.0	0.0	mm water/ha/day
Estm'd pasture consmp'n (incl cons'vd forage)	31	29	32	kg DM/ha/dy
Pasture consum'd per cow	10.9	8.2	9.3	kg DM/cow/dy
Daily spend / milking ha	\$2.06	\$1.52	\$1.70	\$/ha/day
Estm'd pasture price	\$66	\$54	\$53	\$/T DM
Conc (incl additives)supp fed/cow	4.6	7.2	6.9	kg DM/cow/dy
Hay/silage supp fed/cow	0.0	1.1	0.0	kg DM/cow/dy
PKE supp fed/cow	0.0	0.0	0.0	kg DM/cow/dy
Estim'd supp waste	3%	4%	3%	%
Conc (incl additives)supp avg price	\$313	\$339	\$341	\$/T DM
Hay/silage supp avg price	\$0	\$186	\$0	\$/T DM
PKE supp price	\$0	\$0	\$0	\$/T DM
Total feed intake/cow	15.4	16.2	16.0	kg DM/cow/dy
Estm'd body cond't'n change	0.50	0.40	0.40	kg LWT/cow/dy
Litres/cow	15.5	16.1	16.9	l/cow/day
Fat test	4.11%	4.46%	3.95%	%
Protein test	3.91%	4.00%	4.09%	%
Fat per cow	0.635	0.720	0.667	kg/cow/dy
Protein per cow	0.605	0.647	0.691	kg/cow/dy
MS per cow	1.24	1.36	1.36	kg/cow/dy
Anticipated final milk price (less levies)	\$6.58	\$6.77	\$6.76	\$/kg MS
Anticipated final milk price (/litre)	\$0.528	\$0.572	\$0.543	\$ per litre
Fat return per cow	\$2.53	\$2.98	\$2.68	\$/cow/dy
Protein return per cow	\$6.03	\$6.70	\$6.94	\$/cow/dy
Volume charge per cow	\$0.40	\$0.42	\$0.44	\$/cow/dy
Milk income/cow	\$8.16	\$9.26	\$9.17	\$/cow/dy
All feed cost/cow	\$2.16	\$3.09	\$2.85	\$/cow/dy
Margin over all Feed/cow	\$6.00	\$6.17	\$6.32	\$/cow/dy
MOAF /ha /day	\$17.31	\$21.59	\$21.77	\$/ha/day
Farm MOAF per DAY	\$606	\$1,089	\$980	\$/day
MOAF per month	\$18,475	\$33,224	\$29,883	\$/month
Energy density of diet	12.3	12.0	12.2	MJ ME/kg DM
Crude protein % of diet	21.4%	18.6%	19.2%	% CP
NDF Fibre level of diet	33.1%	29.3%	28.5%	% NDF
FCE kg MS per tonne DM food	80	83	84	
Tonne feed /day	1.6	2.9	2.5	tonne DM /day
Milk Return /tonne feed	\$526	\$560	\$565	\$/tonne DM
Average Price of feed	\$139	\$187	\$176	\$/tonne DM
Margin /tonne feed	\$387	\$373	\$390	\$/tonne DM
BMCC	115	132	123	