

Macalister Demonstration Farm, Dairy Australia, Extension Project

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Macalister Demonstration Farm Update 255 (Week ending July 1, 2011)

The Macalister Demonstration Farm continues to dry off cows and is now milking 178 cows, grazing 51 hectares, a stocking rate of 3.5 cows per hectare. Last year at this time, the stocking rate was 2.6 cows per hectare. The daily allocation for the week is one 50th of the grazing area, and the grazing rest time is 46 days.

Compared to last week, milk production per cow is down from 1.47 to 1.36 kg milk solids (MS) per cow per day. Litres per cow per day are down from 17.2 to 16.1. Milk fat test has fallen from 4.53% to 4.46% (fat yield is down from 0.78 to 0.72 kg per cow per day). The protein test has fallen from 4.02% to 4.00% (protein yield is down from 0.69 to 0.65 kg per cow per day). This time last year, milk production was 15.1 litres, 1.23 kg MS, 0.64 kg fat, and 0.60 kg protein per cow per day.

The daily pasture consumption from the grazing area is up from 28 to 29 kg dry matter (DM) per hectare per day. The pasture consumption per cow is up from 7.7 to 8.2 kg DM per cow per day. This time last year, pasture consumption was 28 kg DM per hectare per day, and 10.8 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 \$1.52 per hectare per day. Based on those inputs only, pasture price is estimated to be \$54 per tonne of dry matter, down from \$55.

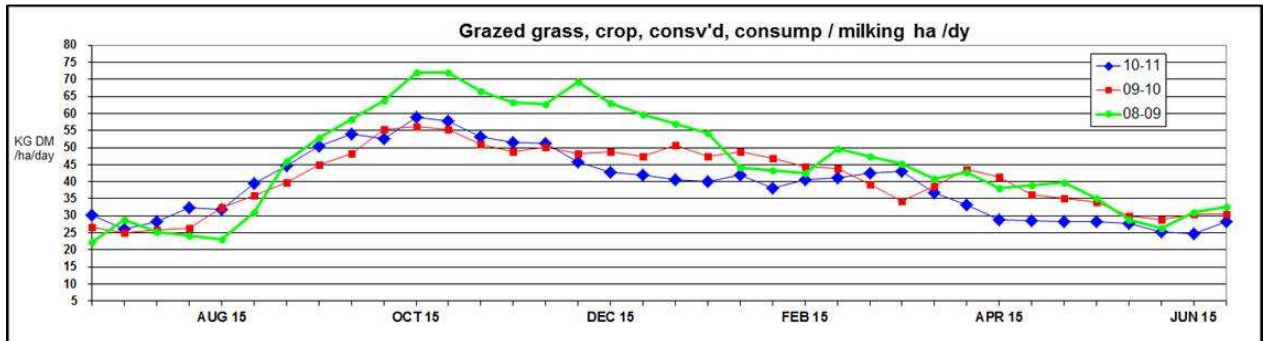
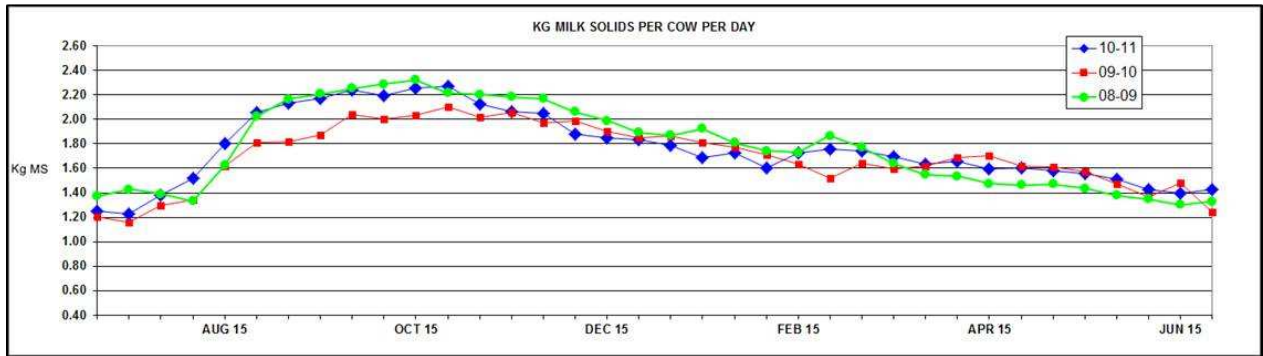
Supplementary concentrates include crushed wheat and minerals totalling 7.2 kg DM per cow per day, at an average price of \$339 per DM tonne. 1.1 kg DM per cow per day of hay, at \$186 per tonne DM, is being fed also.

The BMCC has risen from 110 to 132. This time last year the BMCC was 140.

The milk price (less compulsory levies) that the MDF anticipates receiving for the week is \$6.82 per kg milk solids, or 57.6 cents per litre. Milk income per cow per day is \$9.32, down from \$10.15, made up of \$3.01 for the fat, \$6.73 for the protein, and minus \$0.42 for the litres. This time last year milk income per cow per day was \$7.72.

Feed cost per cow per day (including pasture and supplements) is down from \$3.31 to \$3.09 per cow per day, leaving a Margin Over All Feed (MOAF) per cow of \$6.23, down from \$6.84 per day. The margin over all feed per hectare is \$21.79. The whole farm feed margin is \$1,100, down from \$1,499 per day. This time last year the whole farm feed margin was \$641 per day.

The feed plan for the dry cows and about to calf heifers is keep all of them at home and feed them grass and PKE. There is plenty of grass and if it stays reasonably dry this system they should be well fed, and well supervised, as it has worked out for the last two years. The PKE has been chosen rather than hay or silage because it is a reliably high energy food. However, like hay and silage, much can be wasted during storage and feed out. We have one good feed-out trailer and will use some deep walled concrete troughs. Also the PKE will be stored in a shed, under cover, on concrete, to minimise loss onto the ground, wind blowing it away, and rain damage. This means only small loads can be delivered and it will have to be augured in. Small loads are 7% more expensive but the on-the-ground-under-plastic storage probably wasted more than 7%. Waste of inputs is a major reason why good margins are not achieved.



WEEKLY FEEDING PERFORMANCE	Last Year	Last week	This week	Units
Week to date:	02-Jul	24-Jun	01-Jul	
Milker graze area	46	61	51	ha
Milker nos	119	220	178	head
Average days in milk		302	309	days
Stocking rate	2.6	3.6	3.5	cows/ha
Grazing allocation 1/	50	50	50	th of graze area
Average graze rest time	48	45	46	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)	28	28	29	kg DM/ha/dy
Pasture consum'd per cow	10.8	7.7	8.2	kg DM/cow/dy
Daily spend / milking ha	\$2.06	\$1.52	\$1.52	\$/ha/day
Estm'd pasture price	\$75	\$55	\$54	\$/T DM
Conc (incl additives)supp fed/cow	4.6	7.2	7.2	kg DM/cow/dy
Hay/silage supp fed/cow	0.0	2.5	1.1	kg DM/cow/dy
PKE supp fed/cow	0.0	0.0	0.0	kg DM/cow/dy
Estim'd supp waste	3%	5%	4%	%
Conc (incl additives)supp avg price	\$313	\$337	\$339	\$/T DM
Hay/silage supp avg price	\$0	\$186	\$186	\$/T DM
PKE supp price	\$0	\$0	\$0	\$/T DM
Total feed intake/cow	15.3	16.9	16.2	kg DM/cow/dy
Estm'd body cond't'n change	0.50	0.37	0.40	kg LWT/cow/dy
Litres/cow	15.1	17.2	16.1	l/cow/day
Fat test	4.21%	4.53%	4.46%	%
Protein test	3.94%	4.02%	4.00%	%
Fat per cow	0.637	0.782	0.720	kg/cow/dy
Protein per cow	0.597	0.693	0.647	kg/cow/dy
MS per cow	1.23	1.47	1.36	kg/cow/dy
Anticipated final milk price (less levies)	\$6.25	\$6.88	\$6.82	\$/kg MS
Anticipated final milk price (/litre)	\$0.509	\$0.589	\$0.576	\$ per litre
Fat return per cow	\$2.42	\$3.30	\$3.01	\$/cow/dy
Protein return per cow	\$5.69	\$7.30	\$6.73	\$/cow/dy
Volume charge per cow	\$0.40	\$0.45	\$0.42	\$/cow/dy
Milk income/cow	\$7.72	\$10.15	\$9.32	\$/cow/dy
All feed cost/cow	\$2.26	\$3.31	\$3.09	\$/cow/dy
Margin over all Feed/cow	\$5.46	\$6.84	\$6.23	\$/cow/dy
MOAF /ha /day	\$13.87	\$24.55	\$21.79	\$/ha/day
Farm MOAF per DAY	\$641	\$1,499	\$1,100	\$/day
MOAF per month	\$19,564	\$45,708	\$33,538	\$/month
Energy density of diet	12.3	11.8	12.0	MJ ME/kg DM
Crude protein % of diet	21.4%	18.2%	18.6%	% CP
NDF Fibre level of diet	33.1%	30.9%	29.3%	% NDF
FCE kg MS per tonne DM food	80	85	83	
Tonne feed /day	1.8	3.8	2.9	tonne DM /day
Milk Return /tonne feed	\$499	\$584	\$563	\$/tonne DM
Average Price of feed	\$146	\$191	\$187	\$/tonne DM
Margin /tonne feed	\$353	\$393	\$376	\$/tonne DM
BMCC	140	110	132	