

Macalister Demonstration Farm, Dairy Australia, Extension Project

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Macalister Demonstration Farm Update 304 (Week ending Jun 15, 2012)

The Macalister Demonstration Farm is milking 235 cows grazing 73 hectares, a stocking rate of 3.2 cows per hectare. Last year at this time, there were 250 milkers, and the stocking rate was 3.6 cows per hectare. The daily allocation for the recent week was one 50th of the grazing area, and the actual grazing rest time was 41 days.

Compared to last week, milk production per cow is the same at 1.38 kg milk solids (MS) per cow per day. Litres per cow per day are down from 17.4 to 17.2. Milk fat test has risen from 3.91% to 3.95% (fat yield is the same at 0.68 kg per cow per day). Milk protein test has risen from 4.04% to 4.06% (protein yield is the same at 0.70 kg per cow per day). This time last year, milk production was 16.1 litres, 1.40 kg MS, 0.76 kg fat, and 0.64 kg protein per cow per day. It is estimated that the cows gained no weight during the week.

The daily pasture consumption from the grazing area is down from 19 to 17 kg dry matter (DM) per hectare per day. The pasture consumption per cow is down from 5.5 to 5.4 kg DM per cow per day. This time last year, pasture consumption was 25 kg DM per hectare per day, and 6.9 kg DM per cow per day.

No irrigation water, 1.0 kg of nitrogen element, 0.05 kg phosphorus element, 0.15 kg of potassium element, 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 totals \$2.09 per hectare per day. Based on those cash inputs only, the consumed pasture price is estimated to be \$120 per tonne of dry matter, up from \$112 last week.

Supplementary feed includes crushed wheat, and a pellet containing 25% protein, minerals, Rumensin, and Tylan, totalling 7.1 kg DM per cow per day, at an average price of \$340 per DM tonne, and 1.8 kg DM of PKE at \$268 per DM tonne.

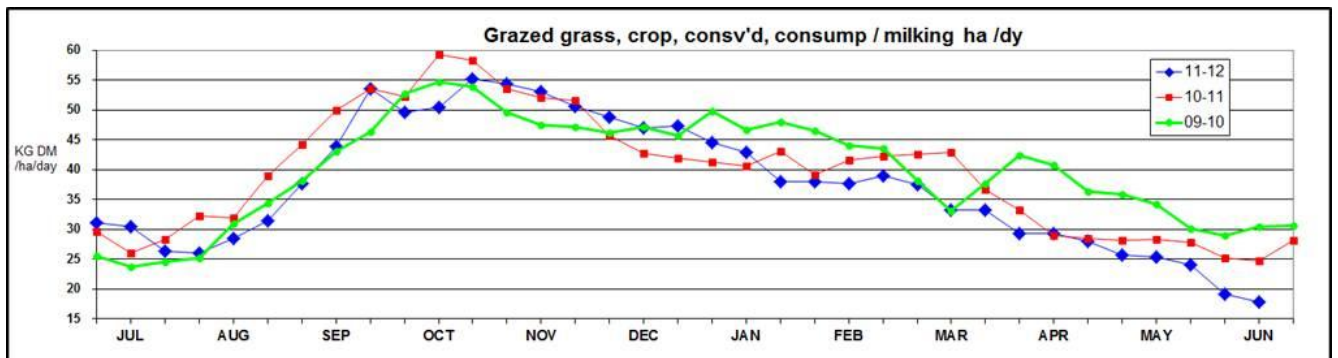
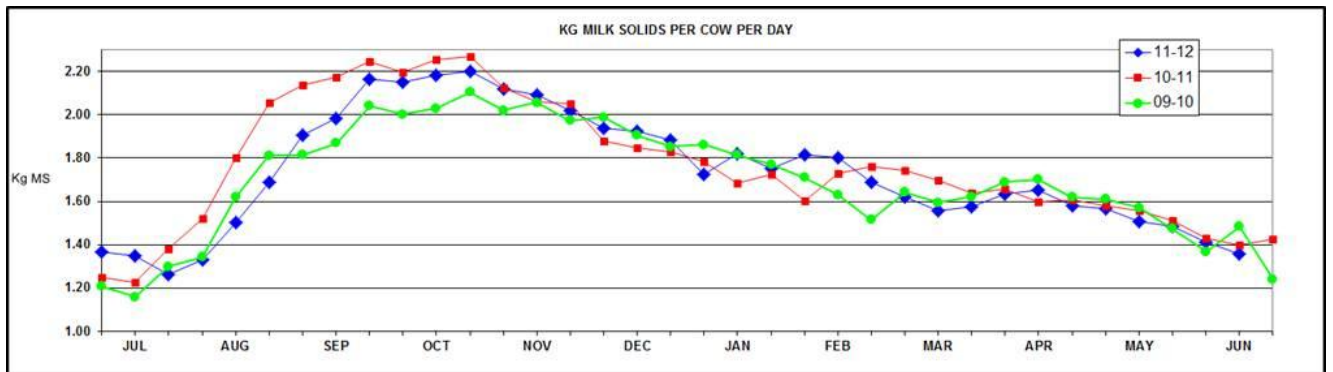
The farm has just purchased some "oaten" hay. Oaten hay usually has a low DCAD rating, so the plan was to feed it to springing cows just before calving. The hay looked pretty good but a sample was cored from a couple of bales on the outside row. The bales looked heavy, and were "thought" to be 600 kg plus. The truckload was weighbridged and the bales averaged only 530 kg. Dry matter was 84.3 % which is fine, but energy was 7.9 MJ ME which is poor. Protein was 10.8%, low, but the hay was not being purchased for the protein. NDF fibre was 63.1%, high but acceptable. But the major problem was the high DCAD of 37.5 meq/100gm. This hay is unlikely to be fed to springing cows. The DCAD of the cereal hay bought for springing cows over the last four years has never been over 14.8. The feed test cost \$110; we should have waited for the results before deciding to buy.

The Bulk Milk Cell Count for the week is up from 156,000 to 193,000. This time last year the BMCC was 117,000. The BMCC average for the ten days ending 10/06/2012 was 168,000, giving the farm a factory ranking of 41 out of 358 farms.

The milk price (less compulsory levies) the MDF anticipates receiving for the week's milk is \$6.87 per kg milk solids, or 55.1 cents per litre. Milk income per cow per day is down from \$9.52 to \$9.45, made up of \$2.77 for the fat, \$7.13 for the protein, and minus 0.45 for the litres. This time last year milk income per cow per day was \$9.43.

Feed cost per cow per day (including pasture and supplements) is up from \$3.51 to \$3.55 per cow per day, leaving a Margin over All Feed (MOAF) per cow of \$5.90, down from \$6.01. The margin over all feed per hectare is \$19.00. The whole farm feed margin is \$1,387, down from \$1,521 per day. This time last year the whole farm feed margin was \$1,526 per day.

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WEEKLY FEEDING PERFORMANCE	Last Year	Last week	This week	Units
Week to date:	17-Jun	08-Jun	15-Jun	
Milker graze area	70	73	73	ha
Milker nos	250	253	235	head
Stocking rate	3.6	3.5	3.2	cows/ha
Grazing allocation 1/	50	53	50	th of graze area
Average graze rest time	44	40	41	days
mm irrigation/hectare/day	0.0	0.0	0.0	mm water/ha/day
Element Nitrogen	1.1	1.0	1.0	kg element/ha/day
Element Phosphorus	0.00	0.05	0.05	kg element/ha/day
Element Potassium	0.07	0.15	0.15	kg element/ha/day
Renovation	\$0.19	\$0.19	\$0.19	\$/ha/day
Topping	\$0.00	\$0.00	\$0.00	\$/ha/day
Estm'd pasture consmp'n (incl cons'vd forage)	25	19	17	kg DM/ha/dy
Pasture consum'd per cow	6.9	5.5	5.4	kg DM/cow/dy
Daily spend / milking ha	\$1.58	\$2.09	\$2.09	\$/ha/day
Estm'd pasture price	\$64	\$112	\$120	\$/T DM
Conc (incl additives)supp fed/cow	7.2	7.1	7.1	kg DM/cow/dy
Hay/silage supp fed/cow	2.5	0.0	0.0	kg DM/cow/dy
PKE supp fed/cow	0.0	1.8	1.8	kg DM/cow/dy
Estim'd supp waste	5%	3%	3%	%
Conc (incl additives)supp avg price	\$337	\$340	\$340	\$/T DM
Hay/silage supp avg price	\$186	\$0	\$0	\$/T DM
PKE supp price	\$0	\$268	\$268	\$/T DM
Total feed intake/cow	16.1	14.1	14.0	kg DM/cow/dy
Estm'd body cond't'n change	0.30	0.03	0.04	kg LWT/cow/dy
Litres/cow	16.1	17.4	17.2	l/cow/day
Fat test	4.72%	3.91%	3.95%	%
Protein test	3.98%	4.04%	4.06%	%
Fat per cow	0.758	0.681	0.679	kg/cow/dy
Protein per cow	0.638	0.704	0.698	kg/cow/dy
MS per cow	1.40	1.38	1.38	kg/cow/dy
Anticipated final milk price (less levies)	\$6.75	\$6.87	\$6.87	\$/kg MS
Anticipated final milk price (/litre)	\$0.588	\$0.546	\$0.551	\$ per litre
Fat return per cow	\$3.17	\$2.78	\$2.77	\$/cow/dy
Protein return per cow	\$6.68	\$7.19	\$7.13	\$/cow/dy
Volume charge per cow	\$0.42	\$0.46	\$0.45	\$/cow/dy
Milk income/cow	\$9.43	\$9.52	\$9.45	\$/cow/dy
All feed cost/cow	\$3.33	\$3.51	\$3.55	\$/cow/dy
Margin over all Feed/cow	\$6.10	\$6.01	\$5.90	\$/cow/dy
MOAF /ha /day	\$21.80	\$20.83	\$19.00	\$/ha/day
Farm MOAF per DAY	\$1,526	\$1,521	\$1,387	\$/day
MOAF per month	\$46,546	\$46,382	\$42,300	\$/month
Energy density of diet	11.7	12.4	12.4	MJ ME/kg DM
Crude protein % of diet	18.0%	17.8%	17.8%	% CP
NDF Fibre level of diet	30.5%	29.9%	29.6%	% NDF
FCE kg MS per tonne DM food	84	96	96	
Tonne feed /day	4.1	3.7	3.4	tonne DM /day
Milk Return /tonne feed	\$569	\$661	\$661	\$/tonne DM
Average Price of feed	\$201	\$244	\$248	\$/tonne DM
Margin /tonne feed	\$368	\$417	\$412	\$/tonne DM
BMCC	117	156	193	