

Macalister Demonstration Farm, Dairy Australia, Extension Project

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Macalister Demonstration Farm Update 254 (Week ending June 24, 2011)

The Macalister Demonstration Farm continues to dry off cows and is now milking 220 cows, grazing 61 hectares, a stocking rate of 3.6 cows per hectare. Last year at this time, the stocking rate was 3.0 cows per hectare. The daily allocation for the week is one 50th of the grazing area, and the grazing rest time is 45 days.

Compared to last week, milk production per cow is up from 1.40 to 1.47 kg milk solids (MS) per cow per day. Litres per cow per day are up from 16.1 to 17.2. Milk fat test has fallen from 4.72% to 4.53% (fat yield is up from 0.76 to 0.78 kg per cow per day). The protein test has risen from 3.98% to 4.02% (protein yield is up from 0.64 to 0.69 kg per cow per day). This time last year, milk production was 15.9 litres, 1.30 kg MS, 0.66 kg fat, and 0.64 kg protein per cow per day.

The daily pasture consumption from the grazing area is up from 25 to 28 kg dry matter (DM) per hectare per day. The pasture consumption per cow is up from 6.9 to 7.7 kg DM per cow per day. This time last year, pasture consumption was 31 kg DM per hectare per day, and 10.3 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 \$55 per tonne of dry matter, down from \$64.

Supplementary concentrates include crushed wheat, and a wheat, PKE, copra, Rumensin, Tylan and mineral mix, totalling 7.2 kg DM per cow per day, at an average price of \$337 per DM tonne. 2.5 kg DM per cow per day of hay, at \$186 per tonne DM, is being fed also.

The BMCC has fallen from 117 to 110. For the ten days to June 20, the MDF was ranked 5th out of 356 suppliers. This time last year the BMCC was 133.

The milk price (less compulsory levies) that the MDF anticipates receiving for the week is \$6.88 per kg milk solids, or 58.9 cents per litre. Milk income per cow per day is \$10.15, up from \$9.50, made up of \$3.30 for the fat, \$7.30 for the protein, and minus \$0.45 for the litres. This time last year milk income per cow per day was \$7.90.

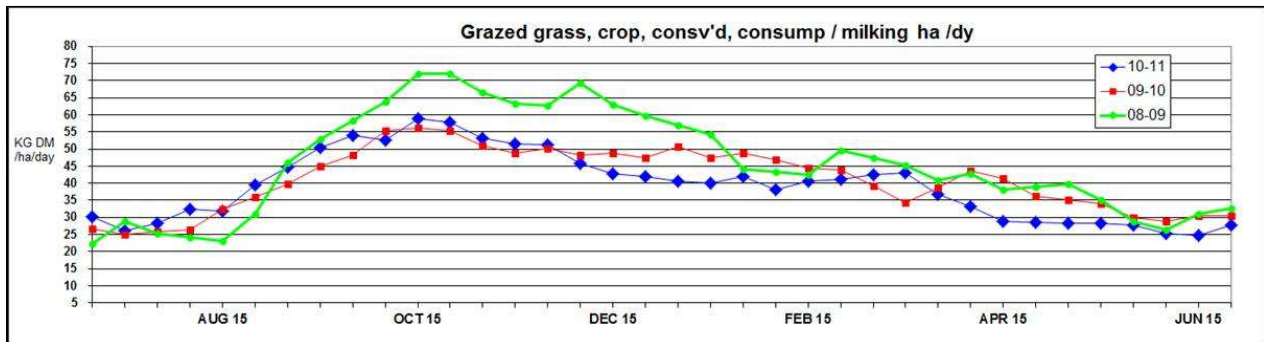
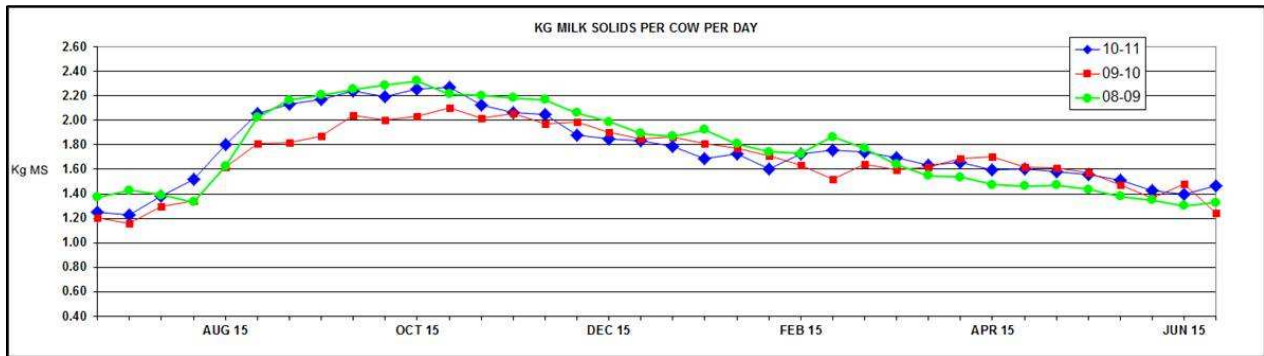
Feed cost per cow per day (including pasture and supplements) is down from \$3.33 to \$3.31 per cow per day, leaving a Margin Over All Feed (MOAF) per cow of \$6.84, up from \$6.17 per day. The margin over all feed per hectare is \$24.55. The whole farm feed margin is \$1,499, down from \$1,544 per day. This time last year the whole farm feed margin was \$952 per day.

All cows being dried off are being treated with dry-cow antibiotic. All cows, and the 2 yr old heifers about to calve for the first time, are being treated with teat seal.

Irrigation water use was down significantly this season: 2010-11, 327 MI; 2009-10, 480 MI; 2008-09, 491 MI; 2007-08, 472 MI; 2006-07, 412 MI.

Soil temperature is currently around 10°C. All sorts of weather data (soil temperature, rainfall, evaporation, wind speed) is stored at the MDF weather station website www.agua.com.au/DPIVic/

The soil moisture level on the farm is currently very good; perhaps a little dry at depth in some paddocks and wetter in the paddocks that are heavily protected from drying winds by tree belts.



IRRIGATION WATER USE

	2006-07	2007-08	2008-09	2009-10	2010-11
BORE	187	195	160	179	99
WHEELS (incl fixed sprays)	225	277	331	301	227
WHEELS AND BORE	412	472	491	480	327
FROM RUNOFF	25	64	39	50	60
Hectares	68	68	72	73	73
USED PER HECTARE	6.1	6.9	6.8	6.6	4.5

WEEKLY FEEDING PERFORMANCE	Last Year	Last week	This week	Units
Week to date:	25-Jun	17-Jun	24-Jun	
Milker graze area	55	70	61	ha
Milker nos	166	250	220	head
Average days in milk		296	302	days
Stocking rate	3.0	3.6	3.6	cows/ha
Grazing allocation 1/	50	50	50	th of graze area
Average graze rest time	47	44	45	days
Element N/hectare/day	1.2	1.1	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	25	28	kg DM/ha/dy
Pasture consum'd per cow	10.3	6.9	7.7	kg DM/cow/dy
Daily spend / milking ha	\$1.76	\$1.58	\$1.52	\$/ha/day
Estm'd pasture price	\$56	\$64	\$55	\$/T DM
Conc (incl additives)supp fed/cow	4.9	7.2	7.2	kg DM/cow/dy
Hay/silage supp fed/cow	0.0	2.5	2.5	kg DM/cow/dy
PKE supp fed/cow	0.7	0.0	0.0	kg DM/cow/dy
Estim'd supp waste	4%	5%	5%	%
Conc (incl additives)supp avg price	\$293	\$337	\$337	\$/T DM
Hay/silage supp avg price	\$0	\$186	\$186	\$/T DM
PKE supp price	\$228	\$0	\$0	\$/T DM
Total feed intake/cow	15.7	16.1	16.9	kg DM/cow/dy
Estm'd body cond't'n change	0.50	0.30	0.37	kg LWT/cow/dy
Litres/cow	15.9	16.1	17.2	l/cow/day
Fat test	4.15%	4.72%	4.53%	%
Protein test	3.99%	3.98%	4.02%	%
Fat per cow	0.660	0.758	0.782	kg/cow/dy
Protein per cow	0.635	0.638	0.693	kg/cow/dy
MS per cow	1.30	1.40	1.47	kg/cow/dy
Anticipated final milk price (less levies)	\$6.10	\$6.80	\$6.88	\$/kg MS
Anticipated final milk price (/litre)	\$0.497	\$0.592	\$0.589	\$ per litre
Fat return per cow	\$2.44	\$3.19	\$3.30	\$/cow/dy
Protein return per cow	\$5.87	\$6.73	\$7.30	\$/cow/dy
Volume charge per cow	\$0.42	\$0.42	\$0.45	\$/cow/dy
Milk income/cow	\$7.90	\$9.50	\$10.15	\$/cow/dy
All feed cost/cow	\$2.17	\$3.33	\$3.31	\$/cow/dy
Margin over all Feed/cow	\$5.72	\$6.17	\$6.84	\$/cow/dy
MOAF /ha /day	\$17.32	\$22.05	\$24.55	\$/ha/day
Farm MOAF per DAY	\$952	\$1,544	\$1,499	\$/day
MOAF per month	\$29,048	\$47,084	\$45,708	\$/month
Energy density of diet	12.2	11.7	11.8	MJ ME/kg DM
Crude protein % of diet	20.9%	18.0%	18.2%	% CP
NDF Fibre level of diet	33.7%	30.5%	30.9%	% NDF
FCE kg MS per tonne DM food	81	84	85	
Tonne feed /day	2.7	4.1	3.8	tonne DM /day
Milk Return /tonne feed	\$495	\$573	\$584	\$/tonne DM
Average Price of feed	\$136	\$201	\$191	\$/tonne DM
Margin /tonne feed	\$359	\$372	\$393	\$/tonne DM
BMCC	133	117	110	