

Macalister Demonstration Farm, Dairy Australia, Extension Project

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Macalister Demonstration Farm Update 261 (Week ending Aug 12, 2011)

The Macalister Demonstration Farm is now milking 52 cows, grazing 20 hectares, a stocking rate of 2.6 cows per hectare. The 2 year old heifers started calving on the 1st and the older cows are just starting to calve now, ten days later than last year. Last year at this time, there were 60 milkers, and the stocking rate was 2.8 cows per hectare. The daily allocation for the week is one 50th of the grazing area, and the actual grazing rest time is also 50 days.

Compared to last week, milk production per cow is up from 1.28 to 1.38 kg milk solids (MS) per cow per day. Litres per cow per day are up from 16.3 to 17.1. Milk fat test has risen from 3.89% to 4.01% (fat yield is up from 0.63 to 0.70 kg per cow per day). The protein test has risen from 3.97% to 4.06% (protein yield is up from 0.65 to 0.70 kg per cow per day). This time last year, milk production was 20.1 litres, 1.63 kg MS, 0.90 kg fat, and 0.74 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 10.2 to 10.9 kg DM per cow per day. This time last year, pasture consumption was 32 kg DM per hectare per day, and 11.0 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 \$1.78 per hectare per day. Based on those cash inputs only, the consumed pasture price is estimated to be \$63 per tonne of dry matter, down from \$72.

The MDF used 353 kg per hectare of nitrogen element last season (2010-11), close to an average of 1 kg per hectare per day. This was amongst the highest use in the recently released DPI Monitor results, a survey of 73 dairy farmers across the state. That is lot of N, maybe too much, but it seemed to always get a good response of grass. The farm was amongst the highest pasture consumptions (13.5 tonne DM/ha) for the survey. Interesting to note that the four highest pasture consumptions in the state were irrigated farms in Gippsland.

From the automatic weather station on the farm, rainfall for the last few months has been 34 mm in May, 23 mm in June, 60 mm in July, and 57mm in August so far. The rolling year to date is 806 mm (32 inches for the metrically challenged).

Supplementary concentrates include crushed wheat and minerals totalling 5.4 kg DM per cow per day, at an average price of \$330 per DM tonne. The cows have access to some oaten hay at the dairy, but eat very little.

All the dry cows have stayed on the farm during winter. They are getting grass and Palm Kernal Extract ad lib, and are fattening up well.

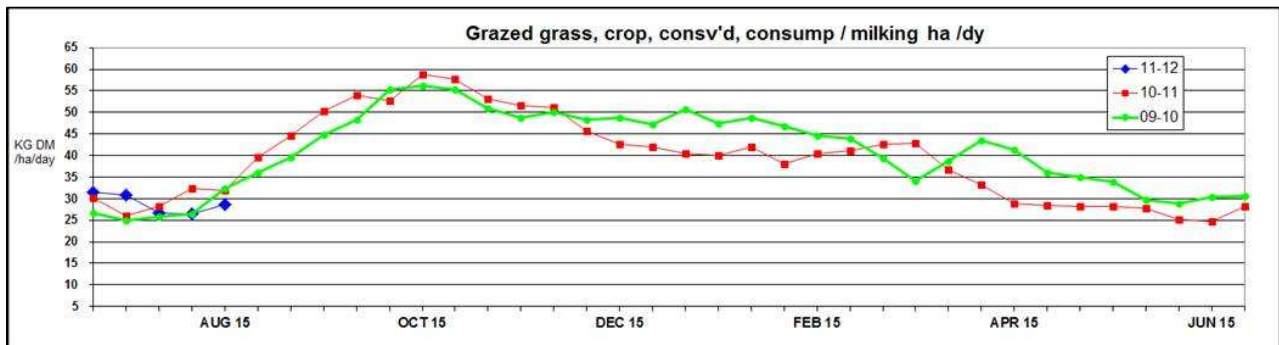
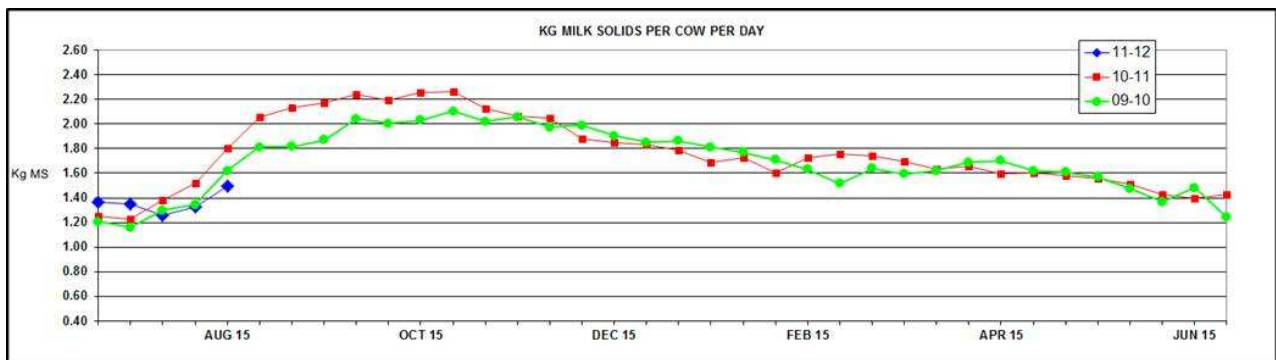
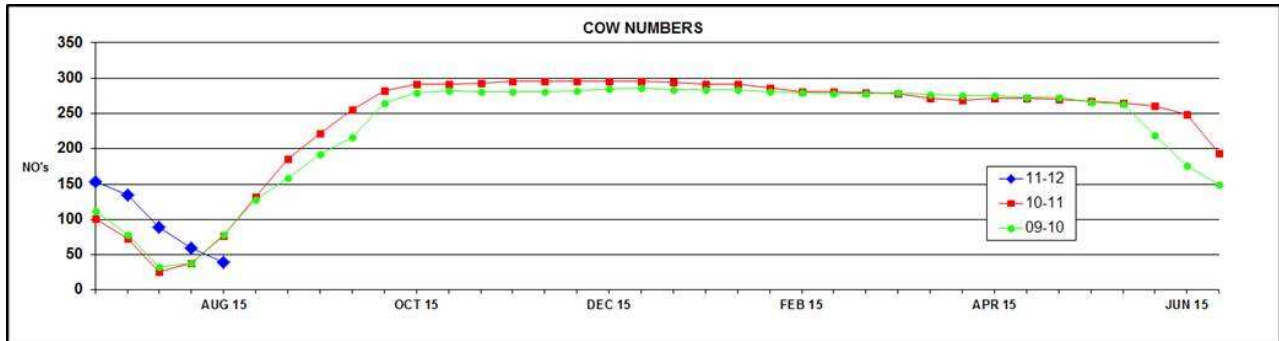
The BMCC has risen from 108 to 123. This time last year the BMCC was 106.

The milk price (less compulsory levies) that the MDF anticipates receiving for the week is \$5.52 per kg milk solids, or 44.7 cents per litre. Milk income per cow per day is up from \$7.58 to \$7.70, made up of \$2.32 for the fat, \$5.83 for the protein, and minus \$0.45 for the litres. This time last year milk income per cow per day was \$8.53.

Feed cost per cow per day (including pasture and supplements) is up from \$2.37 to \$2.47 per cow per day, leaving a Margin over All Feed (MOAF) per cow of \$5.23, up from \$5.21 per day. The margin over

all feed per hectare is \$13.59. The whole farm feed margin is \$268, down from \$339 per day. This time last year the whole farm feed margin was \$378 per day.

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WEEKLY FEEDING PERFORMANCE	Last Year	Last week	This week	Units
Week to date:	13-Aug	05-Aug	12-Aug	
Milker graze area	21	27	20	ha
Milker nos	60	65	52	head
Average days in milk		315	315	days
Stocking rate	2.8	2.4	2.6	cows/ha
Grazing allocation 1/	55	50	50	th of graze area
Average graze rest time	55	50	50	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)	32	25	28	kg DM/ha/dy
Pasture consum'd per cow	11.0	10.2	10.9	kg DM/cow/dy
Daily spend / milking ha	\$2.06	\$1.78	\$1.78	\$/ha/day
Estm'd pasture price	\$66	\$72	\$63	\$/T DM
Conc (incl additives)supp fed/cow	4.5	5.4	5.4	kg DM/cow/dy
Hay/silage supp fed/cow	0.2	0.0	0.0	kg DM/cow/dy
PKE supp fed/cow	0.0	0.0	0.0	kg DM/cow/dy
Estim'd supp waste	4%	3%	3%	%
Conc (incl additives)supp avg price	\$314	\$302	\$330	\$/T DM
Hay/silage supp avg price	\$241	\$0	\$0	\$/T DM
PKE supp price	\$0	\$0	\$0	\$/T DM
Total feed intake/cow	15.6	15.5	16.1	kg DM/cow/dy
Estm'd body cond't'n change	0.14	0.40	0.40	kg LWT/cow/dy
Litres/cow	20.1	16.3	17.1	l/cow/day
Fat test	4.44%	3.89%	4.01%	%
Protein test	3.66%	3.97%	4.06%	%
Fat per cow	0.896	0.634	0.696	kg/cow/dy
Protein per cow	0.738	0.647	0.699	kg/cow/dy
MS per cow	1.63	1.28	1.38	kg/cow/dy
Anticipated final milk price (less levies)	\$5.22	\$5.93	\$5.52	\$/kg MS
Anticipated final milk price (/litre)	\$0.423	\$0.467	\$0.447	\$ per litre
Fat return per cow	\$2.96	\$2.26	\$2.32	\$/cow/dy
Protein return per cow	\$6.10	\$5.75	\$5.83	\$/cow/dy
Volume charge per cow	\$0.53	\$0.43	\$0.45	\$/cow/dy
Milk income/cow	\$8.53	\$7.58	\$7.70	\$/cow/dy
All feed cost/cow	\$2.19	\$2.37	\$2.47	\$/cow/dy
Margin over all Feed/cow	\$6.34	\$5.21	\$5.23	\$/cow/dy
MOAF /ha /day	\$18.26	\$12.55	\$13.59	\$/ha/day
Farm MOAF per DAY	\$378	\$339	\$268	\$/day
MOAF per month	\$11,543	\$10,333	\$8,168	\$/month
Energy density of diet	12.4	12.3	12.3	MJ ME/kg DM
Crude protein % of diet	21.3%	19.8%	19.9%	% CP
NDF Fibre level of diet	32.4%	30.2%	30.5%	% NDF
FCE kg MS per tonne DM food	103	82	86	
Tonne feed /day	0.9	1.0	0.8	tonne DM /day
Milk Return /tonne feed	\$540	\$485	\$473	\$/tonne DM
Average Price of feed	\$140	\$151	\$152	\$/tonne DM
Margin /tonne feed	\$401	\$333	\$321	\$/tonne DM
BMCC	106	108	123	