

Macalister Demonstration Farm, Dairy Australia, Extension Project

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Macalister Demonstration Farm Update 274 (Week ending Nov 11, 2011)

The Macalister Demonstration Farm is milking 303 cows grazing 70 hectares, a stocking rate of 4.3 cows per hectare. Last year at this time, there were 294 milkers, and the stocking rate was 4.1 cows per hectare. The daily allocation for last week was one 31st of the grazing area, and the actual grazing rest time was 30 days.

Throughout spring the MDF holds quite a long grazing rotation, in the high twenty days. One reason for this is to ensure that a high quantity of grass leaf is grown. We are heavily stocked and grass leaf quantity is crucial. The seed heads do get a chance to develop on the long rest time but so do the leaves. In most paddocks, at any one time, some ryegrass clumps are seed heading, while some are growing only leaves. The leaves are high quality, and the seed heads low. On a quick rotation the seed heads will still be present, although not as well developed, but on a quick rotation there will be less leaves. With plenty of leaf available the cows are not forced to eat all the seed heads.

Another major advantage of a longer rotation during October is that once the seed heads are waning in late November, and mostly removed by silage making or topping, the really difficult process of lengthening the grazing rotation again is avoided.

This method, that is, to go for max grass leaf quantity, may not be necessary, even not appropriate, with a low stocking rate.

Compared to last week, milk production per cow is down slightly from 2.14 to 2.13 kg milk solids (MS) per cow per day. Litres per cow per day are the same at 29.0. Milk fat test has fallen from 4.10% to 4.03% (fat yield is down from 1.19 to 1.17 kg per cow per day). The protein test has risen from 3.29% to 3.31% (protein yield has risen from 0.95 to 0.96 kg per cow per day). This time last year, milk production was 27.8 litres, 2.07 kg MS, 1.15 kg fat, and 0.92 kg protein per cow per day. It is estimated that the cow are losing 0.10 kg live weight per cow per day.

The daily pasture consumption from the grazing area is the same at 53 kg dry matter (DM) per hectare per day. The pasture consumption per cow is the same at 12.3 kg DM per cow per day. This time last year, pasture consumption was 52 kg DM per hectare per day, and 12.5 kg DM per cow per day.

1.2 kg nitrogen element, 0.02 kg potassium, no phosphorus, no irrigation water per hectare per day, 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 \$2.12 per hectare per day. Based on those cash inputs only, the consumed pasture price is estimated to be \$40 per tonne of dry matter, up from \$38.

Supplementary concentrates include crushed wheat, and a wheat-canola-mineral mix totalling 5.5 kg DM per cow per day, at an average price of \$325 per DM tonne. The cows have access to PKE (0.5 kg DM per day) at the dairy. On the two rainy days they were given some silage.

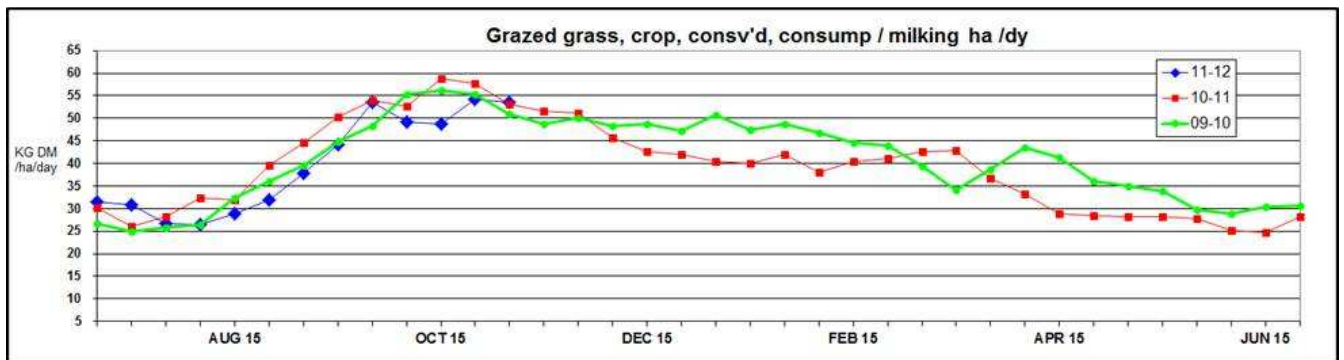
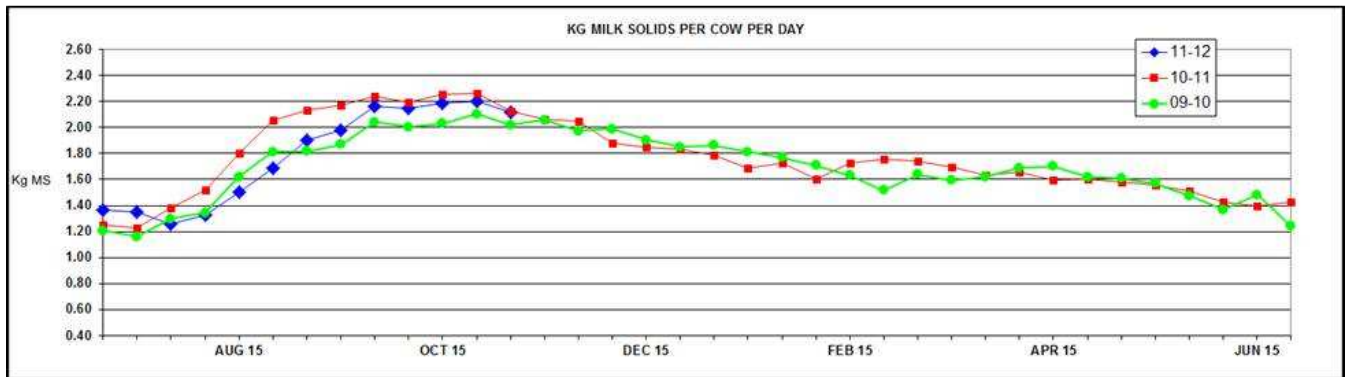
The Bulk Milk Cell Count has fallen from 106,000 to 97,000. This time last year the BMCC was 80,000.

The milk price (less compulsory levies) that the MDF anticipates receiving for the week's milk is \$4.71 per kg milk solids, or 34.6 cents per litre. Milk income per cow per day is down from \$10.05 to \$10.03,

made up of \$3.53 for the fat, \$7.25 for the protein, and minus \$0.76 for the litres. This time last year milk income per cow per day was \$10.05.

Feed cost per cow per day (including pasture and supplements) is up from \$2.38 to \$2.45 per cow per day, leaving a Margin over All Feed (MOAF) per cow of \$7.58, down from \$7.68. The margin over all feed per hectare is \$32.81. The whole farm feed margin is \$2,297, down from \$2,339 per day. This time last year the whole farm feed margin was \$2,047 per day.

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WEEKLY FEEDING PERFORMANCE	Last Year	Last week	This week	Units
Week to date:	12-Nov	04-Nov	11-Nov	
Milker graze area	71	70	70	ha
Milker nos	294	305	303	head
Stocking rate	4.1	4.4	4.3	cows/ha
Grazing allocation 1/	30	32	31	th of graze area
Average graze rest time	26	27	30	days
Element N/hectare/day	1.2	1.2	1.2	kg element/ha/day
mm irrigation/hectare/day	1.1	0.0	0.0	mm water/ha/day
Estm'd pasture consmp'n (incl cons'vd forage)	52	53	53	kg DM/ha/dy
Pasture consum'd per cow	12.5	12.3	12.3	kg DM/cow/dy
Daily spend / milking ha	\$2.60	\$2.02	\$2.12	\$/ha/day
Estm'd pasture price	\$51	\$38	\$40	\$/T DM
Conc (incl additives)supp fed/cow	6.0	5.4	5.5	kg DM/cow/dy
Hay/silage supp fed/cow	0.0	0.3	0.3	kg DM/cow/dy
PKE supp fed/cow	0.0	0.5	0.5	kg DM/cow/dy
Estim'd supp waste	3%	4%	4%	%
Conc (incl additives)supp avg price	\$408	\$326	\$325	\$/T DM
Hay/silage supp avg price	\$0	\$0	\$0	\$/T DM
PKE supp price	\$0	\$289	\$289	\$/T DM
Total feed intake/cow	18.3	18.1	18.4	kg DM/cow/dy
Estm'd body cond't'n change	-0.06	-0.24	-0.10	kg LWT/cow/dy
Litres/cow	27.8	29.0	29.0	l/cow/day
Fat test	4.14%	4.10%	4.03%	%
Protein test	3.30%	3.29%	3.31%	%
Fat per cow	1.153	1.190	1.169	kg/cow/dy
Protein per cow	0.918	0.953	0.958	kg/cow/dy
MS per cow	2.07	2.14	2.13	kg/cow/dy
Anticipated final milk price (less levies)	\$4.85	\$4.69	\$4.71	\$/kg MS
Anticipated final milk price (/litre)	\$0.361	\$0.346	\$0.346	\$ per litre
Fat return per cow	\$3.60	\$3.60	\$3.53	\$/cow/dy
Protein return per cow	\$7.17	\$7.21	\$7.25	\$/cow/dy
Volume charge per cow	\$0.73	\$0.76	\$0.76	\$/cow/dy
Milk income/cow	\$10.05	\$10.05	\$10.03	\$/cow/dy
All feed cost/cow	\$3.09	\$2.38	\$2.45	\$/cow/dy
Margin over all Feed/cow	\$6.96	\$7.68	\$7.58	\$/cow/dy
MOAF /ha /day	\$28.83	\$33.41	\$32.81	\$/ha/day
Farm MOAF per DAY	\$2,047	\$2,339	\$2,297	\$/day
MOAF per month	\$62,432	\$71,334	\$70,044	\$/month
Energy density of diet	12.1	12.2	12.2	MJ ME/kg DM
Crude protein % of diet	21.2%	20.1%	20.2%	% CP
NDF Fibre level of diet	32.0%	33.4%	33.3%	% NDF
FCE kg MS per tonne DM food	112	117	114	
Tonne feed /day	5.4	5.5	5.5	tonne DM /day
Milk Return /tonne feed	\$544	\$557	\$548	\$/tonne DM
Average Price of feed	\$167	\$132	\$134	\$/tonne DM
Margin /tonne feed	\$377	\$425	\$414	\$/tonne DM
BMCC	80	106	97	