

## **Macalister Demonstration Farm, Dairy Australia, Extension Project**

**Projects on the farm are funded by Dairy Australia, the Gardiner Foundation, Sustainability Victoria, DPI VIC, Department of Agriculture Food and Fisheries, with support provided by GippsDairy.**

### **Macalister Demonstration Farm Update 295 (Week ending Apr 13, 2012)**

The Macalister Demonstration Farm is milking 275 cows grazing 71 hectares, a stocking rate of 3.9 cows per hectare. Last year at this time, there were 271 milkers, and the stocking rate was 3.7 cows per hectare. The daily allocation for last week was one 36th of the grazing area, and the actual grazing rest time was 29 days.

Paddock 34 was grazed 28 days ago and had 2.2 leaves regrown since grazing. This means the average leaf appearance rate over the 28 days was 12.7 days. It is getting cooler so leaf appearance right now would be longer than 13 days, and it will be getting even longer. On Friday the grazing allocation was set to one 40<sup>th</sup> of the farm, and it will not be long before one 45th will need to be set, if three leaves are to be regrown at the point of grazing. This reduction of daily grazing area is reducing the grass per cow now, but in the long run more grass will be grown compared to staying on say a one 30th allocation rate. All other factors (temperature, nutrient supply, soil moisture) being equal, third leaves can grow as much quantity as the first and second put together.

Compared to last week, milk production per cow is up from 1.62 to 1.64 kg milk solids (MS) per cow per day. Litres per cow per day are the same at 19.7. Milk fat test has fallen from 4.52% to 4.51% (fat yield is the same at 0.89 kg per cow per day). Milk protein test has risen from 3.70% to 3.80% (protein yield is up from 0.73 to 0.75 kg per cow per day). This time last year, milk production was 19.4 litres, 1.63 kg MS, 0.88 kg fat, and 0.75 kg protein per cow per day. It is estimated that the cows are gaining 0.1 kg live weight per cow per day.

The daily pasture consumption from the grazing area is down from 30 to 28 kg dry matter (DM) per hectare per day. The pasture consumption per cow is down from 7.7 to 7.3 kg DM per cow per day. This time last year, pasture consumption was 32 kg DM per hectare per day, and 8.5 kg DM per cow per day.

0 mm of irrigation water, 0.9 kg of nitrogen element, 0.03 kg phosphorus element, 0.15 kg of potassium element, \$0.19 of pasture renovation, and \$0.39 of topping, all per hectare per day, have contributed to the current pasture consumption. The daily spend on these pasture inputs totals \$2.25 per hectare per day down from \$2.31. Based on those cash inputs only, the consumed pasture price is estimated to be \$80 per tonne of dry matter, up from \$77.

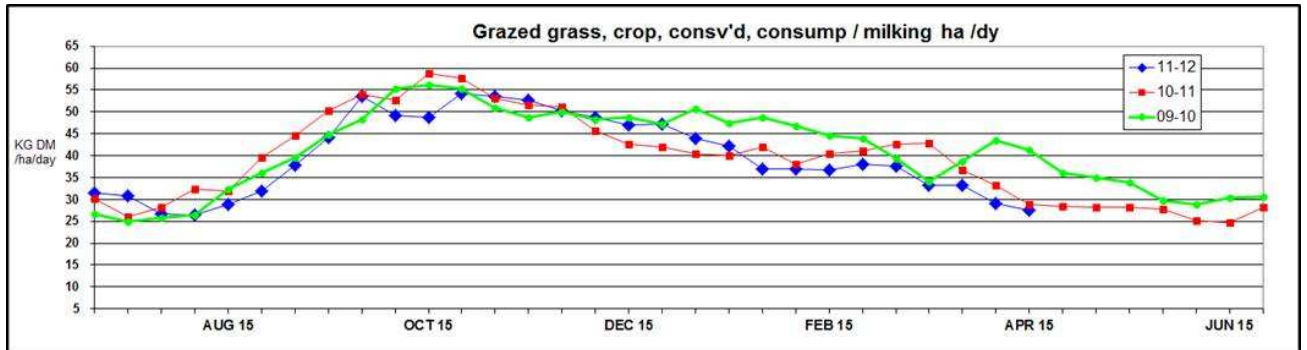
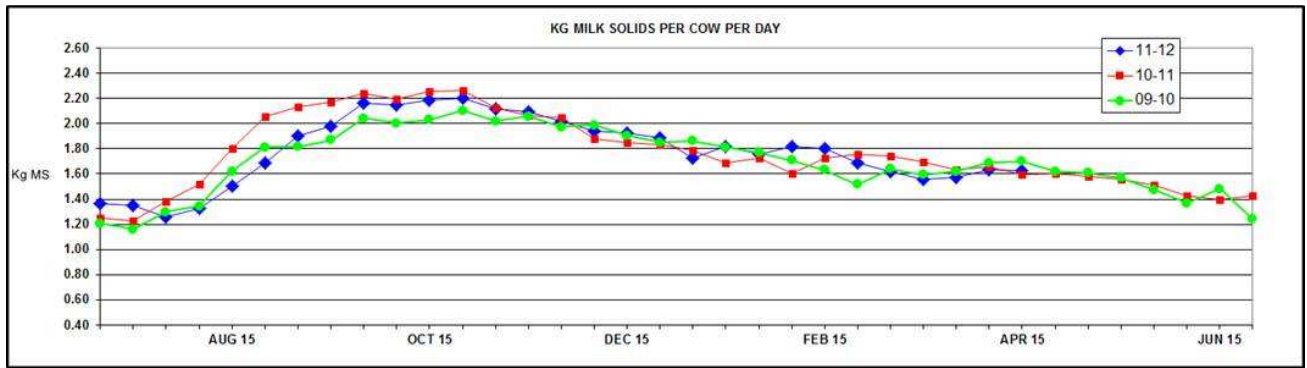
Supplementary feed includes crushed wheat, and a pellet containing 25% protein, minerals, Rumensin, and Tylan, totalling 7.1 kg DM per cow per day (up from 6.9 kg), at an average price of \$333 per DM tonne, and 1.5 kg DM of PKE at \$271 per DM tonne.

The Bulk Milk Cell Count is the same at 162,000. This time last year the BMCC was 107,000. The BMCC average for the ten day period to 10/04/2012 was 171,000, which gave the farm a factory ranking of 51st out of 373 farms.

The milk price (less compulsory levies) that the MDF anticipates receiving for the week's milk is \$6.24 per kg milk solids, or 51.8 cents per litre. Milk income per cow per day is up from \$9.87 to \$10.22, made up of \$3.45 for the fat, \$7.28 for the protein, and minus 0.52 for the litres. This time last year milk income per cow per day was \$10.47.

Feed cost per cow per day (including pasture and supplements) is up from \$3.24 to \$3.37 per cow per day, leaving a Margin over All Feed (MOAF) per cow of \$6.85, up from \$6.63. The margin over all feed per hectare is \$26.53. The whole farm feed margin is \$1,884, up from \$1,823 per day. This time last year the whole farm feed margin was \$1,965 per day.

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<b>WEEKLY FEEDING PERFORMANCE</b>	<b>Last Year</b>	<b>Last week</b>	<b>This week</b>	<b>Units</b>
Week to date:	15-Apr	06-Apr	13-Apr	
Milker graze area	73	71	71	ha
Milker nos	271	275	275	head
Stocking rate	3.7	3.9	3.9	cows/ha
Grazing allocation 1/	35	30	36	th of graze area
Average graze rest time	32	28	29	days
mm irrigation/hectare/day	0.0	0.0	0.0	mm water/ha/day
Element Nitrogen	1.3	0.9	0.9	kg element/ha/day
Element Phosphorus	0.00	0.03	0.03	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	\$0.12	\$0.45	\$0.39	\$/ha/day
Estm'd pasture consmp'n (incl cons'vd forage)	32	30	28	kg DM/ha/dy
Pasture consum'd per cow	8.5	7.7	7.3	kg DM/cow/dy
Daily spend / milking ha	\$2.02	\$2.31	\$2.25	\$/ha/day
Estm'd pasture price	\$64	\$77	\$80	\$/T DM
Conc (incl additives)supp fed/cow	6.9	6.9	7.1	kg DM/cow/dy
Hay/silage supp fed/cow	1.8	0.0	0.0	kg DM/cow/dy
PKE supp fed/cow	0.0	1.3	1.5	kg DM/cow/dy
Estim'd supp waste	6%	3%	3%	%
Conc (incl additives)supp avg price	\$351	\$335	\$333	\$/T DM
Hay/silage supp avg price	\$0	\$0	\$0	\$/T DM
PKE supp price	\$0	\$271	\$271	\$/T DM
Total feed intake/cow	16.7	15.6	15.6	kg DM/cow/dy
Estm'd body cond't'n change	0.20	0.10	0.10	kg LWT/cow/dy
Litres/cow	19.4	19.7	19.7	l/cow/day
Fat test	4.53%	4.52%	4.51%	%
Protein test	3.86%	3.70%	3.80%	%
Fat per cow	0.880	0.893	0.889	kg/cow/dy
Protein per cow	0.749	0.731	0.749	kg/cow/dy
MS per cow	1.63	1.62	1.64	kg/cow/dy
Anticipated final milk price (less levies)	\$6.42	\$6.08	\$6.24	\$/kg MS
Anticipated final milk price (/litre)	\$0.539	\$0.500	\$0.518	\$ per litre
Fat return per cow	\$3.51	\$3.41	\$3.45	\$/cow/dy
Protein return per cow	\$7.47	\$6.98	\$7.28	\$/cow/dy
Volume charge per cow	\$0.51	\$0.52	\$0.52	\$/cow/dy
Milk income/cow	\$10.47	\$9.87	\$10.22	\$/cow/dy
All feed cost/cow	\$3.22	\$3.24	\$3.37	\$/cow/dy
Margin over all Feed/cow	\$7.24	\$6.63	\$6.85	\$/cow/dy
MOAF /ha /day	\$26.98	\$25.68	\$26.53	\$/ha/day
Farm MOAF per DAY	\$1,965	\$1,823	\$1,884	\$/day
MOAF per month	\$59,935	\$55,605	\$57,461	\$/month
Energy density of diet	11.7	12.2	12.2	MJ ME/kg DM
Crude protein % of diet	19.3%	18.7%	18.4%	% CP
NDF Fibre level of diet	30.6%	30.4%	30.4%	% NDF
FCE kg MS per tonne DM food	95	102	103	
Tonne feed /day	4.2	4.4	4.4	tonne DM /day
Milk Return /tonne feed	\$680	\$622	\$642	\$/tonne DM
Average Price of feed	\$210	\$204	\$211	\$/tonne DM
Margin /tonne feed	\$470	\$418	\$430	\$/tonne DM
BMCC	107	162	162	