

## **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 307 (Week ending Jul 7, 2012)**

The Macalister Demonstration Farm is now milking 135 cows (down from 201) grazing 50 hectares, a stocking rate of 2.7 cows per hectare. Last year at this time, there were 155 milkers, and the stocking rate was 3.4 cows per hectare. The daily allocation for the recent week was one 55th of the grazing area, and the actual grazing rest time was 47 days.

The plan is keep all the dry cows at home, feeding them grass and PKE, as has been done for the previous four years. It is much easier to keep an eye on them, particularly ensuring they get a good feed each day, and not having to deal with health problems and early calvers at a distance. And there is no cost, no work, nor risk associated with a herd of cows on two truck trips.

Compared to the previous week, milk production per cow is up from 1.20 to 1.38 kg milk solids (MS) per cow per day. Litres per cow per day are up from 14.9 to 17.8. Milk fat test has fallen from 3.92% to 3.84% (fat yield is up from 0.60 to 0.68 kg per cow per day). Milk protein test has fallen from 4.16% to 3.96% (protein yield has risen from 0.64 to 0.70 kg per cow per day). This time last year, milk production was 16.9 litres, 1.36 kg MS, 0.67 kg fat, and 0.69 kg protein per cow per day. It is estimated that the cows gained 0.37 kg liveweight during the week.

The daily pasture consumption from the grazing area is down from 24 to 18 kg dry matter (DM) per hectare per day. The pasture consumption per cow is down from 8.0 to 6.5 kg DM per cow per day. This time last year, pasture consumption was 31 kg DM per hectare per day, and 9.1 kg DM per cow per day.

No irrigation water, 0.8 kg of nitrogen element, 0.05 kg phosphorus element, 0.19 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 \$1.85 per hectare per day. Based on those cash inputs only, the consumed pasture price is estimated to be \$105 per tonne of dry matter, up from \$76 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 \$335 per DM tonne, and 1.8 kg DM of PKE at \$268 per DM tonne. The total cow intake is 15.1 kg DM per day.

The Bulk Milk Cell Count for the week is down from 213,000 to 185,000. This time last year the BMCC was 123,000. The BMCC average for the ten day period ending 29/06/2012 was 198,000 giving the farm a factory ranking 73rd out of 314 farms.

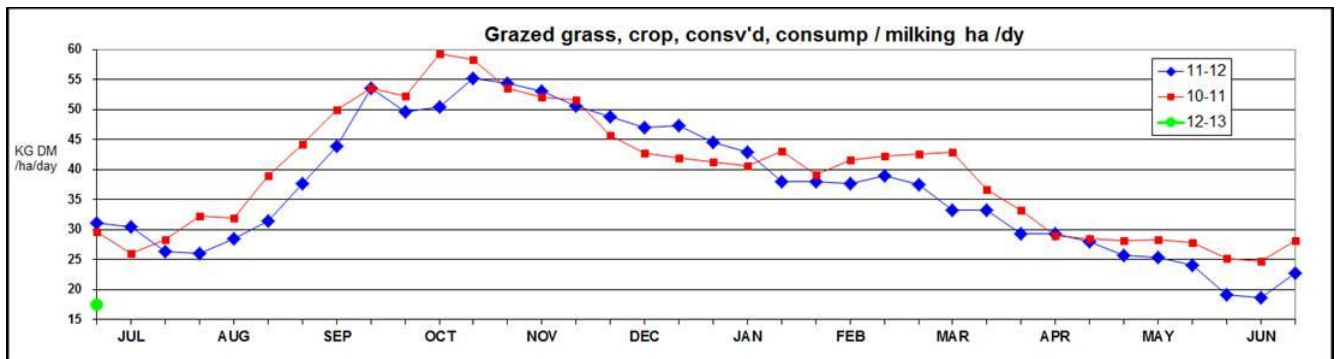
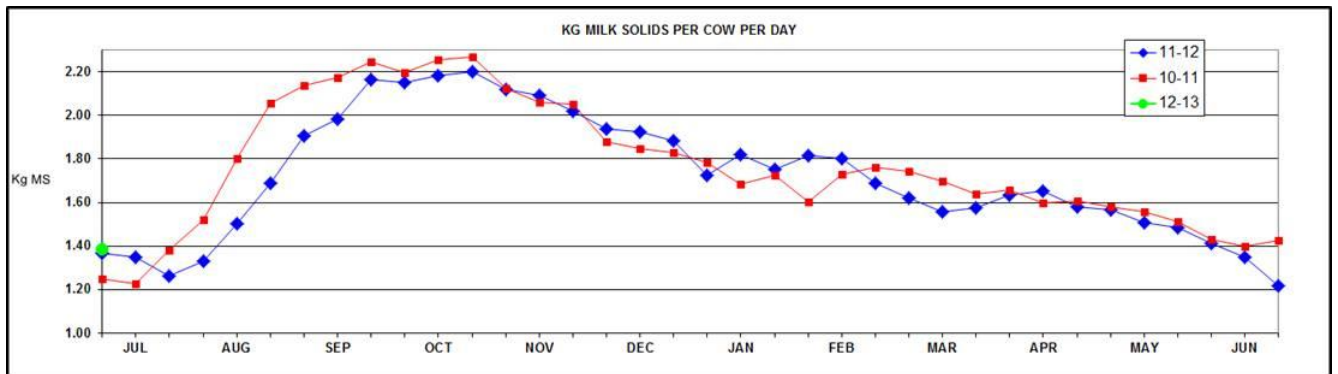
The milk price (less compulsory levies) the MDF anticipates receiving for the week's milk (with one day of the week's milk in June) is \$5.87 per kg milk solids, or 45.8 cents per litre.

This price uses the recently announced opening price and anticipates step-ups of \$0.24 for fat and \$0.60 for protein. Last year, 2011-2012, announced step-ups have amounted to \$0.28 for fat and \$0.70 for protein; 2010-2011 step-ups were \$0.46 for fat and \$1.15 for protein.

Milk income per cow per day is down from \$8.53 to \$8.13, made up of \$2.40 for the fat, \$6.19 for the protein, and minus 0.46 for the litres. This time last year milk income per cow per day was \$8.86.

Feed cost per cow per day (including pasture and supplements) is up from \$2.64 to \$3.55 per cow per day, leaving a Margin over All Feed (MOAF) per cow of \$4.57, down from \$5.89. The margin over all feed per hectare is \$12.34. The whole farm feed margin is \$617, down from \$1,152 per day. This time last year the whole farm feed margin was \$932 per day.

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WEEKLY FEEDING PERFORMANCE	Last Year	Last week	This week	Units
Week to date:	08-Jul	29-Jun	06-Jul	
Milker graze area	45	67	50	ha
Milker nos	155	201	135	head
Stocking rate	3.4	3.0	2.7	cows/ha
Grazing allocation 1/	50	55	55	th of graze area
Average graze rest time	48	46	47	days
mm irrigation/hectare/day	0.0	0.0	0.0	mm water/ha/day
Element Nitrogen	1.0	0.8	0.8	kg element/ha/day
Element Phosphorus	0.00	0.05	0.05	kg element/ha/day
Element Potassium	0.07	0.15	0.19	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)	31	24	18	kg DM/ha/dy
Pasture consum'd per cow	9.1	8.0	6.5	kg DM/cow/dy
Daily spend / milking ha	\$1.70	\$1.79	\$1.85	\$/ha/day
Estm'd pasture price	\$54	\$76	\$105	\$/T DM
Conc (incl additives)supp fed/cow	6.9	5.1	7.1	kg DM/cow/dy
Hay/silage supp fed/cow	0.0	0.0	0.0	kg DM/cow/dy
PKE supp fed/cow	0.0	1.3	1.8	kg DM/cow/dy
Estim'd supp waste	3%	3%	3%	%
Conc (incl additives)supp avg price	\$341	\$333	\$335	\$/T DM
Hay/silage supp avg price	\$0	\$0	\$0	\$/T DM
PKE supp price	\$0	\$268	\$268	\$/T DM
Total feed intake/cow	15.9	14.2	15.1	kg DM/cow/dy
Estm'd body cond't'n change	0.40	0.35	0.37	kg LWT/cow/dy
Litres/cow	16.9	14.9	17.8	l/cow/day
Fat test	3.95%	3.92%	3.84%	%
Protein test	4.09%	4.16%	3.96%	%
Fat per cow	0.667	0.599	0.682	kg/cow/dy
Protein per cow	0.691	0.635	0.702	kg/cow/dy
MS per cow	1.36	1.20	1.38	kg/cow/dy
Anticipated final milk price (less levies)	\$6.53	\$6.92	\$5.87	\$/kg MS
Anticipated final milk price (/litre)	\$0.525	\$0.558	\$0.458	\$ per litre
Fat return per cow	\$2.59	\$2.45	\$2.40	\$/cow/dy
Protein return per cow	\$6.71	\$6.48	\$6.19	\$/cow/dy
Volume charge per cow	\$0.44	\$0.40	\$0.46	\$/cow/dy
Milk income/cow	\$8.86	\$8.53	\$8.13	\$/cow/dy
All feed cost/cow	\$2.85	\$2.64	\$3.55	\$/cow/dy
Margin over all Feed/cow	\$6.01	\$5.89	\$4.57	\$/cow/dy
MOAF /ha /day	\$20.70	\$17.48	\$12.34	\$/ha/day
Farm MOAF per DAY	\$932	\$1,152	\$617	\$/day
MOAF per month	\$28,411	\$35,142	\$18,822	\$/month
Energy density of diet	12.3	12.4	12.5	MJ ME/kg DM
Crude protein % of diet	19.2%	19.1%	18.2%	% CP
NDF Fibre level of diet	28.4%	31.9%	30.1%	% NDF
FCE kg MS per tonne DM food	84	85	90	
Tonne feed /day	2.5	2.9	2.1	tonne DM /day
Milk Return /tonne feed	\$551	\$590	\$527	\$/tonne DM
Average Price of feed	\$178	\$183	\$230	\$/tonne DM
Margin /tonne feed	\$374	\$407	\$296	\$/tonne DM
BMCC	123	213	185	

