

## **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 308 (Week ending Jul 27, 2012)**

The Macalister Demonstration Farm is now milking 78 cows grazing 28 hectares, a stocking rate of 2.8 cows per hectare. Last year at this time, there were 90 milkers, and the stocking rate was 2.7 cows per hectare. The dry cows, and the two year old heifers about to calve, are all at home. The daily allocation for the recent week was one 55th of the grazing area, and the actual grazing rest time was 48 days.

Late last week the paddock about to be grazed had been rested 50 days. It had 2.5 leaves re-grown, so an average leaf appearance rate of 20 days. It had re-grown 1,300 kg dry matter per hectare, which is an average growth since grazing of 26 kg DM per hectare per day. If we had been able to give it another ten days rest, it might have got closer to 30 kg DM per hectare per day. The soil in that paddock was quite moist. Other paddocks on the farm are drier, dry enough it seems to be slowing growth. We need a little bit of rain, and are preparing to irrigate from the recycle drain if it stays dry for much longer!

Compared to the previous week, milk production per cow is down from 1.23 to 1.08 kg milk solids (MS) per cow per day. Litres per cow per day are down from 16.5 to 14.2. Milk fat test has risen from 3.58% to 3.81% (fat yield is down from 0.59 to 0.54 kg per cow per day). Milk protein test has fallen from 3.88% to 3.80% (protein yield has fallen from 0.64 to 0.54 kg per cow per day). This time last year, milk production was 14.9 litres, 1.23 kg MS, 0.61 kg fat, and 0.63 kg protein per cow per day. It is estimated that the cows gained 0.35 kg liveweight during the week.

The daily pasture consumption from the grazing area is down from 21 to 20 kg dry matter (DM) per hectare per day. The pasture consumption per cow is down from 7.6 to 7.0 kg DM per cow per day. This time last year, pasture consumption was 26 kg DM per hectare per day, and 9.8 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 \$95 per tonne of dry matter, up from \$91 last week.

Supplementary feed includes crushed wheat, and a pellet containing 25% protein, minerals, Rumensin, and Tylan, totalling 4.5 kg DM per cow per day, at an average price of \$368 per DM tonne, and 2.3 kg DM of PKE at \$268 per DM tonne. The total cow intake is 13.4 kg DM per day.

The farm has just purchased more oaten hay, to feed to springing cows just before calving. Dry matter was 89.3%, energy 7.9 MJ ME, crude protein 7.9%, NDF fibre 60.5% and the DCAD 22.8 meq/100 gm. Springing cows need low DCAD. This hay's DCAD is lower than the previous load (37.5) but not as low as other years (15).

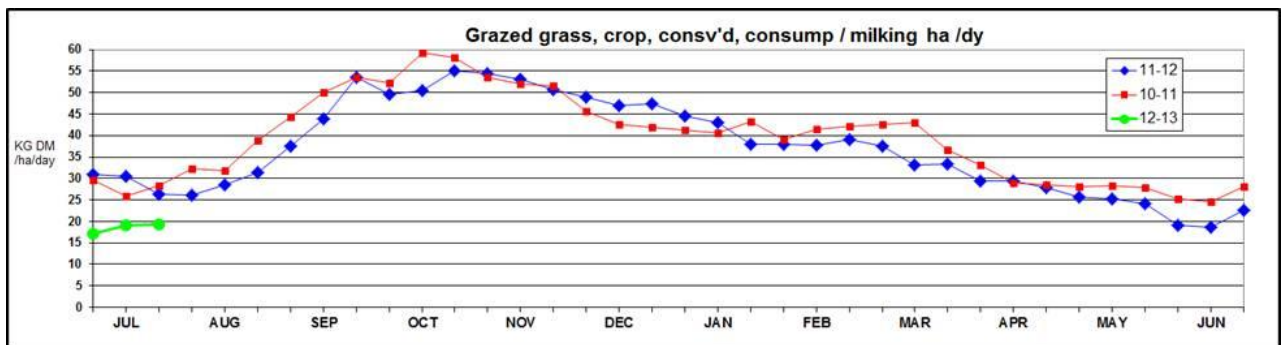
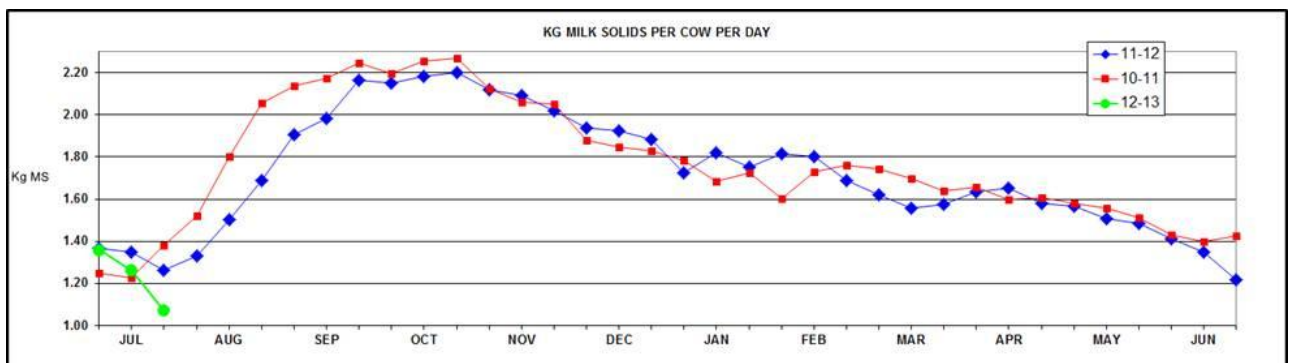
The Bulk Milk Cell Count for the week is down from 175,000 to 134,000. This time last year the BMCC was 123,000.

The milk price (less compulsory levies) the MDF anticipates receiving for the week's milk is \$5.81 per kg milk solids, or 44.2 cents per litre. This price anticipates step-ups to get the final yearly price for the MDF to \$4.72 per kg MS.

Milk income per cow per day is down from \$7.31 to \$6.26, made up of \$1.90 for the fat, \$4.73 for the protein, and minus 0.37 for the litres. This time last year milk income per cow per day was \$8.12.

Feed cost per cow per day (including pasture and supplements) is down from \$3.03 to \$2.91 per cow per day, leaving a Margin over All Feed (MOAF) per cow of \$3.35, down from \$4.29. The margin over all feed per hectare is \$9.57. The whole farm feed margin is \$261, down from \$477 per day. This time last year the whole farm feed margin was \$520 per day.

Frank Tyndall Consultant Sale 0409 940 782 [ftyndall@ozemail.com.au](mailto:ftyndall@ozemail.com.au)



<b>WEEKLY FEEDING PERFORMANCE</b>	<b>Last Year</b>	<b>Last week</b>	<b>This week</b>	<b>Units</b>
Week to date:	29-Jul	20-Jul	27-Jul	
Milker graze area	34	40	28	ha
Milker nos	90	112	78	head
Stocking rate	2.7	2.8	2.8	cows/ha
Grazing allocation 1/	50	55	55	th of graze area
Average graze rest time	50	47	48	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	0.19	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)	26	21	20	kg DM/ha/dy
Pasture consum'd per cow	9.8	7.6	7.0	kg DM/cow/dy
Daily spend / milking ha	\$1.78	\$1.85	\$1.85	\$/ha/day
Estm'd pasture price	\$69	\$91	\$95	\$/T DM
Conc (incl additives)supp fed/cow	5.4	5.3	4.5	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	1.8	2.3	kg DM/cow/dy
Estim'd supp waste	3%	4%	4%	%
Conc (incl additives)supp avg price	\$302	\$356	\$368	\$/T DM
Hay/silage supp avg price	\$0	\$0	\$0	\$/T DM
PKE supp price	\$0	\$268	\$268	\$/T DM
Total feed intake/cow	15.0	14.5	13.4	kg DM/cow/dy
Estm'd body cond't'n change	0.40	0.40	0.35	kg LWT/cow/dy
Litres/cow	14.9	16.5	14.2	l/cow/day
Fat test	4.06%	3.58%	3.81%	%
Protein test	4.21%	3.88%	3.80%	%
Fat per cow	0.614	0.594	0.539	kg/cow/dy
Protein per cow	0.630	0.642	0.537	kg/cow/dy
MS per cow	1.23	1.23	1.08	kg/cow/dy
Anticipated final milk price (less levies)	\$6.53	\$5.92	\$5.81	\$/kg MS
Anticipated final milk price (/litre)	\$0.542	\$0.441	\$0.442	\$ per litre
Fat return per cow	\$2.38	\$2.09	\$1.90	\$/cow/dy
Protein return per cow	\$6.12	\$5.66	\$4.73	\$/cow/dy
Volume charge per cow	\$0.39	\$0.43	\$0.37	\$/cow/dy
Milk income/cow	\$8.12	\$7.31	\$6.26	\$/cow/dy
All feed cost/cow	\$2.30	\$3.03	\$2.91	\$/cow/dy
Margin over all Feed/cow	\$5.82	\$4.29	\$3.35	\$/cow/dy
MOAF /ha /day	\$15.55	\$11.93	\$9.57	\$/ha/day
Farm MOAF per DAY	\$520	\$477	\$261	\$/day
MOAF per month	\$15,871	\$14,548	\$7,972	\$/month
Energy density of diet	12.4	12.4	12.3	MJ ME/kg DM
Crude protein % of diet	19.7%	19.4%	19.7%	% CP
NDF Fibre level of diet	29.9%	32.6%	34.6%	% NDF
FCE kg MS per tonne DM food	82	84	79	
Tonne feed /day	1.4	1.6	1.1	tonne DM /day
Milk Return /tonne feed	\$535	\$497	\$457	\$/tonne DM
Average Price of feed	\$151	\$206	\$213	\$/tonne DM
Margin /tonne feed	\$383	\$291	\$244	\$/tonne DM
BMCC	123	175	134	