

Macalister Demonstration Farm

PO Box 87 MAFFRA VIC 3860

Ph. (03) 5145 1650 Fax (03) 5145 1650

Email: mdf@wideband.net.au Web: <http://mdf.mistro.ag/>

NEWSLETTER 2

Monday, May 12, 2008



The Macalister Demonstration Farm is a community resource, managed to make a profit. We endeavor to run the farm using what might be called "best practice". What we do and our performance is public.

This newsletter shows how one farm in the Macalister Irrigation District is travelling. You can visit the farm if you like. Book in for the one hour farm walk, Monday mornings, 11am; ring Frank Tyndall 0409 940 782. Your contributions and comments are welcome. Visit the website at <http://mdf.mistro.ag/>



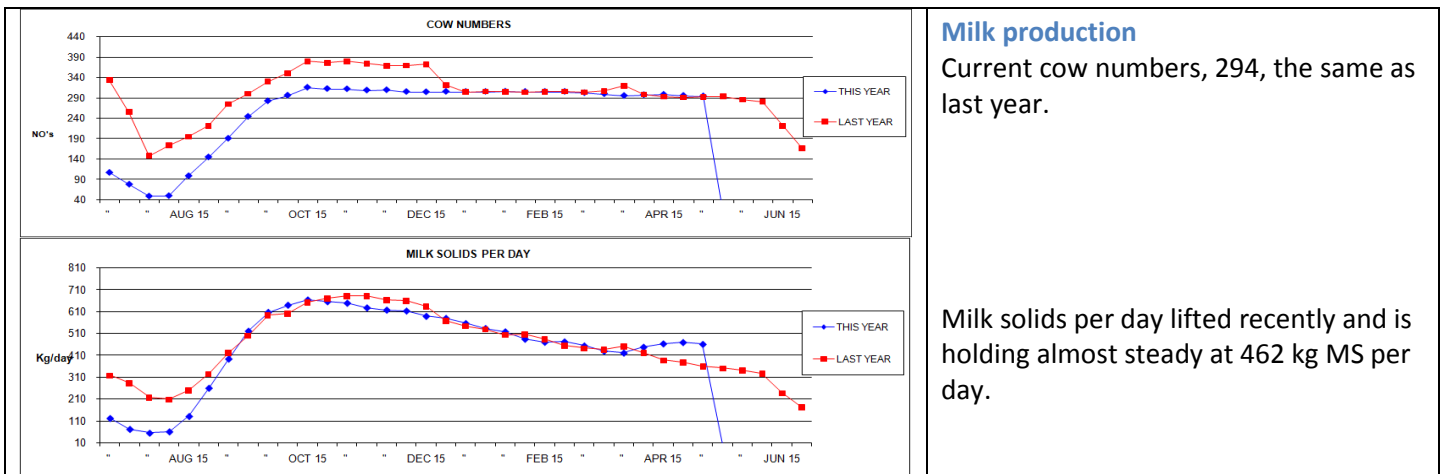
Extension projects at the MDF are funded by Dairy Australia and the Gardiner Foundation with support from GippsDairy. If you prefer the newsletter emailed, please contact the MDF Board Secretary, Andrea Killeen, at the above email address.

Last week, we made a major decision. We set the cow numbers to milk, or stocking rate, for next season. We used the following process:

1. The farm will have a grazing area of 72 hectares.
2. We plan to consume 16 tonne grass per hectare. That is an ambitious target but we have lifted from 10 tonne to 13 this year, and hope to lift by the same amount next season.
3. A well set up cow, offered plenty of high quality grass, can eat 4 tonne of grass DM per year. Because grass is cheaper feed, the aim is to have cows eat that limit. But this season, the cows will eat only 3.1 tonne of grass, so we will budget on 3.8 tonne grass consumed per cow next season...
4. 72 ha times 16 tonne equals 1,152 tonne of grass; divide 1,152 tonne grass by 3.8 tonne grass per cow equals 303 cows.
5. So we will calve down 330 cows. This will allow us to cull early in the season to settle on 300 or 4.2 per hectare.

GRAPHS AND COMMENTS

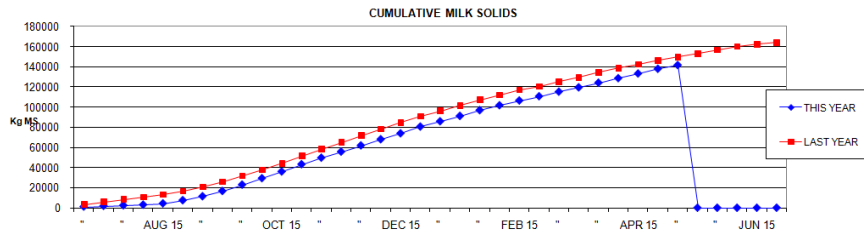
Each dot in the following graphs represents a ten day period, blue this year, red last year.



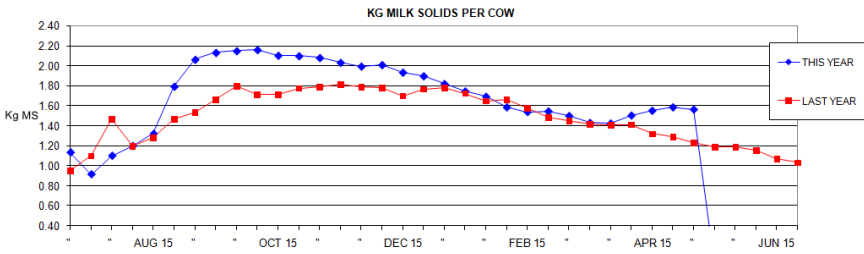
Milk production

Current cow numbers, 294, the same as last year.

Milk solids per day lifted recently and is holding almost steady at 462 kg MS per day.

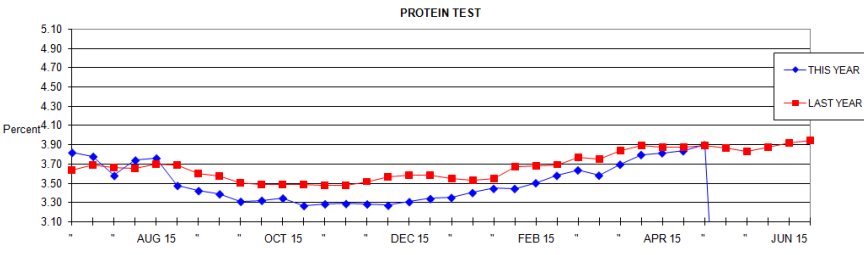


We are slowly closing the gap on last year total milk solids



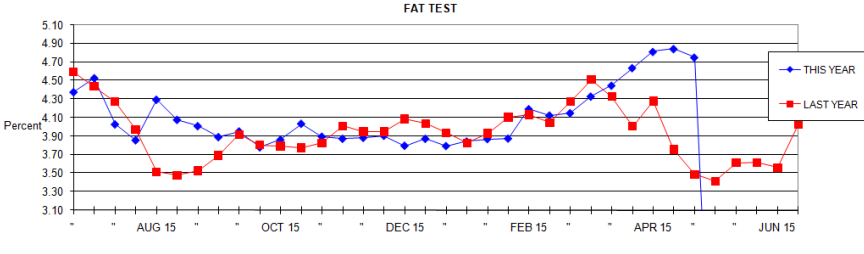
Milk production per cow

Milk production per cow is 18.1 litres or 1.57 kg MS per cow.

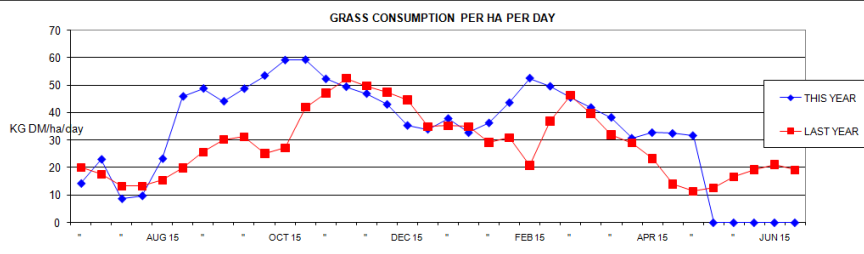


Milk composition

Protein test has lifted slightly.



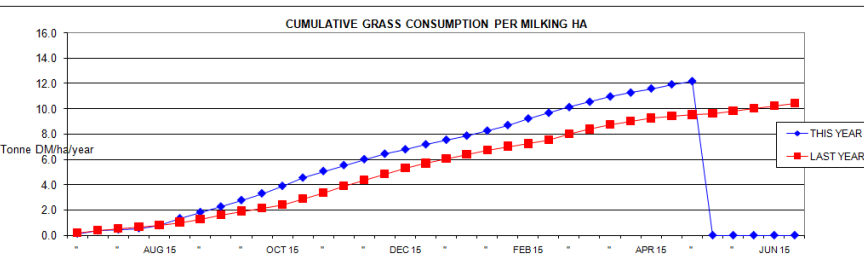
Fat test has fallen slightly.

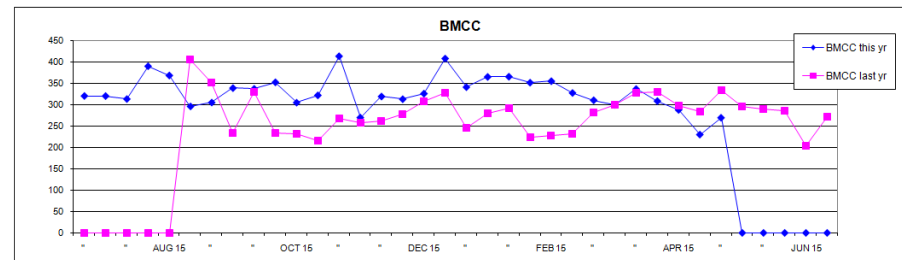
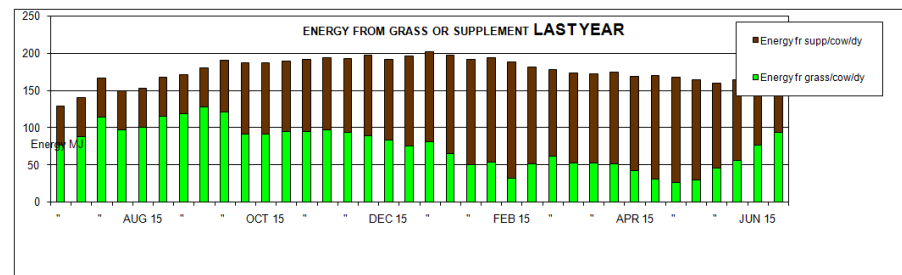
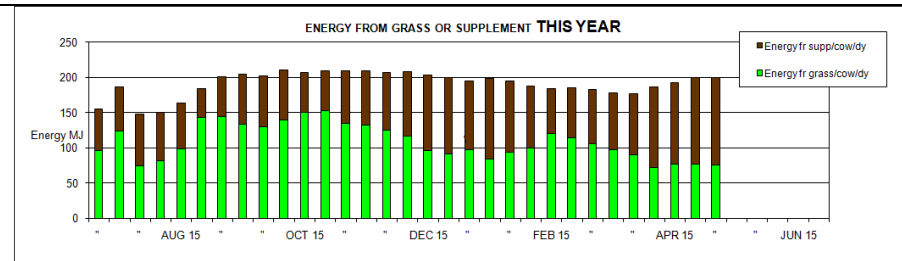


Grass consumption

Grass consumption is 29 kg DM/ha per day.

The newly laser graded area (11 ha) has just been watered for the first time. Because of the light showers in the previous weeks, the ryegrass was about to emerge anyway, so we have a green tinge immediately. Our co-ordination of contractors has not been the best, so from the last old grazing to the first new one, we will have been out of production for twelve weeks. Over that period the rest of the farm averaged a daily grass consumption of 39 kg dm/ha. In effect we have lost 36 tonne of grass dry matter. We replaced it with purchased feed at \$500 for dry matter. That's \$18,000.





Grass and supplements

The green bar is grazed grass, the brown bar is supplement.

We are holding total intake of feed per cow steady, with the amount of grass per cow steady also.

These graphs are strong indicators of how profitable the feeding is.

1. The total intake is a big driver of how efficiently the cow is using food.
2. The proportion of supplement or grass is a big driver of food price.

Mastitis

The Demonstration Farm has had a mastitis problem for a long time, with the Bulk Milk Cell Count hovering around and above 300. From 6 weeks ago, the cell count slowly declined from 330 to 230, but has kicked up again recently. Cows in late lactation usually rise in cell count. A few cows with persistent mastitis have been culled, but there are still plenty of problem cows in the herd. Recently Mike has ensured that everyone in the dairy works toward better cup removal, by breaking the vacuum and letting them fall; better teat spraying, by ensuring the whole surface of all teats all the time are sprayed; and better cow flow. The better cow flow in a swing-over dairy means the next row of cows are ready for the cups when the other side is finished, so cups do not remain on for too long. The better cow flow has been achieved by working calmly and consistently, allowing the cows to come in themselves, and shifting a particular light that was casting a shadow that cows sometimes balked at.

THE NUMBERS

	2 weeks ago	Last week	
To date:	26-Apr-08	10-May-08	
Milker graze area	61	61	ha
Milker nos	297	294	head
Stocking rate	4.9	4.8	cows/ha
Grazing allocation 1/	45	45	th of graze area
Average graze rest time	37	42	days
Estm'd pasture consmp'n	30	29	kg DM/ha/dy
Pasture consum'd per cow	6.3	6.0	kg DM/cow/dy
Estm'd pasture price	\$127	\$128	\$/T DM

Grazing

The grazing allocation is still one 45th of the farm. The actual grazing rest time is 42 days.

Pasture feed

The average daily pasture consumption is 29 kg dry matter per hectare.

The current stocking rate is high, resulting in the cows getting only 6 kg grass DM each.

Conc supp fed/cow	7.7	7.7	kg DM/cow/dy
Forage supp fed/cow	2.6	1.1	kg DM/cow/dy
Other supp fed/cow	1.4	2.8	kg DM/cow/dy
Estim'd supp waste	5.4%	5.4%	%
Conc supp price	\$521	\$573	\$/T DM
Forage supp price	\$369	\$369	\$/T DM
Other supp price	\$394	\$394	\$/T DM
Total feed /cow	17.2	16.9	kg DM/cow/dy

Supplement feeding

The concentrates include triticale and a high protein mineral pellet. The "other" supplement is Palm Kernel Extract. As the silage is wound back the cows are eating more PKE.

Estm'd body cond't'n change	0.40	0.40	kg LWT/cow/dy
Litres/cow	18.2	18.1	l/cow/day
Fat test	4.85%	4.73%	%
Protein test	3.79%	3.90%	%
MS per cow	1.57	1.57	kg/cow/dy

Cow body condition

The cows are estimated to be gaining 0.4 kg body condition per day.

Milk composition

Fat test has fallen slightly.

Protein test has lifted slightly.

Milk production per cow

Milk solids per cow has remained the same as two weeks ago.

Anticipated milk price	\$7.34	\$7.64	\$/kg MS
Anticip'd milk price	\$0.634	\$0.659	per litre
Milk income/cow	\$11.53	\$11.96	\$/cow/dy
All feed cost/cow	\$6.27	\$6.67	\$/cow/dy
Margin over all Feed/cow/day	\$5.26	\$5.29	\$/cow/dy
MOAF /ha /day	\$25.62	\$25.51	\$/ha/day
Farm MOAF per DAY	\$1,563	\$1,556	\$/day
MOAF per month	\$46,879	\$46,692	\$/month

Feeding profitability

Recently had a discussion with Craig McCrae, our new Murray Goulburn field officer to ensure that the milk price being used was accurate. As you all know, with base, seasonal, additional seasonal, productivity, quality, Milkcare, etc, milk price is a complex calculation.

Milk price has lifted because it is now May, to \$7.64 per kg MS or 66 cents per litre.

The feed profitability indicators are very steady.

				Response to feed
				The top two lines show how much milk we are getting from food overall.
Avg Litre response	1.05	1.07	litres milk/kg DM	Currently about 7.5 kg of food is going to maintenance and body condition, something that has to happen. It is interesting to then calculate (the bottom four lines) how well the rest of the food (9.5 kg) is performing to produce milk.
Avg MS response	91	92	kg MS/tonne DM	
Feed going to body condition	1.56	1.54	kg DM/cow/dy	
Feed going to maintenance	6.0	5.9	kg DM/cow/dy	
Avg MS response, above BC & M	140	142	kg MS/tonne DM	
Avg Litre response, above BC & M	1.62	1.65	litres milk/kg DM	

If you would like the above feeding profitability analysis done for your farm, bring your current milk production, cow numbers, and daily supplementary feed to a Monday morning walk at the MDF.

Field Day

A “Healthy, Wealthy & Wise” field day to promote farm safety and farmers health awareness will be conducted at the MDF, Boggy Ck Rd, Wed 11th June, 10.00am to 2.00pm; free lunch and safety items; speakers include John Mulvany, “Balancing health, time off, finances & work”, Jakob Malmo, “Health risks on the farm”, and John Curtis, “Safety with the “5” Under 5 & over 55”; get your blood pressure, skin spots, and hearing checked. Contact Andrea 5145 1650.

No indicator, by itself, tells the complete story!

From 7 weeks ago, milk solids per cow have increased from 1.42 to 1.57 kg, a 10.4% increase. The litres are exactly the same at 18.0 litres per cow, so the extra MS have come from only increased fat and protein composition. However, more of the extra solids are fat rather than protein. The fat composition has moved from 4.32% to 4.87%, or 0.78 kg to 0.88 kg of fat per cow, a 13% increase. The protein composition has moved from 3.61% to 3.87%, or 0.65 to 0.70 kg protein per cow, only a 7.4% increase. For April, \$4.65 is paid for a kg of fat, and \$11.54 is paid for a kg of protein. So as we produced 10 % more milk solids, our milk solids price decreased slightly, by 0.8% from \$7.46 to \$7.40. The increase in milks solids is welcome, but this little excuse once gain shows that no single indicator of performance (in this case an increase of MS/cow) tells the complete story. As one indicator improves another one may deteriorate and take some of the shine.

Frank Tyndall, MDF Project Manager 0409 940 782 ftyndall@ozemail.com.au

SENDER:

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