

# Macalister Demonstration Farm

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## NEWSLETTER 5

Monday, July 14, 2008



*The Macalister Demonstration Farm is a community resource, managed to make a profit. This newsletter shows how it is travelling towards that goal, and hopes to contribute to the discussion, particularly illustrating with detailed feeding analysis and performance graphs.*

*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.*

Three courses at the MDF:

1. Dept Primary Industry/National Centre for Dairy Education Australia, 2day '**Irrigation for Dairy Pastures**' course; at Macalister Demonstration Farm, 10am to 5pm Tuesday 29th July and 9am to 3pm Wednesday 30th July. The course has been run many times over the last ten years. This one is set up to suit service providers; farmers can attend if it suits. It's free. Need to register, places limited, Gavan Lamb, DPI, or Frank Tyndall. Helping the industry grow quality grass with efficient irrigations systems and management is the goal of this course.
2. National Centre for Dairy Education Australia, "**Soils and Fertilisers**" starting July 17<sup>th</sup>.
3. National Centre for Dairy Education Australia, "**Grazing Dairy Pastures**" starting September 4<sup>th</sup>.

The MDF meeting room is available free for dairy farming group activities. Book with Frank Tyndall

A couple of the better growing paddocks checked on July 9th revealed: Pdk 20, 44 days rested, 2.4 leaves re-grown, 18 day leaf appearance, 3,200 kg DM/ha on offer, 1,800 DM/ha likely residue, therefore growth 1,400 kg DM/ha, or 32 kg DM/ha per day; Pdk 7, 40 days rested, 2.3 leaves re-grown, 18 day leaf appearance, 3,000 kg DM/ha on offer, 1,800 DM/ha likely residue, therefore growth 1,200 kg DM/ha, or 30 kg DM/ha per day. Soil temperature was 10°C. (May 24th it was 13°C). Soil moisture is getting low, 40 to 60 Kpa suction, so we have been irrigating some paddocks, spraying from the bore or flooding from the recycle drain. We are not worried about it getting too wet if it now rains because the paddocks we are irrigating will not be grazed for quite a while and are well drained with spinner cuts.

We are about to plant some trees at the front of the farm. Part of the planting will be a strip, 10 metres wide, to meet the carbon trading guidelines.

Congratulations to Mike and Sarah O'Brien, the MDF farm managers, who have brought Katlyn Rose into the world, a sister for Zoe.

**Upcoming issues:** Jason McAinch, Dairy Advisor DPI Maffra

With calving almost upon us, my mind is overwhelmed by which mob of cows needs how many bales of hay and transition diets. But what about the basics and how much money do I lose in these areas?

**Calf area:** Do I have plenty of pens, lots of bedding and isolation pens? Just one bobby calf may mean a dinner at the pub.

**Spray delvers:** the first irrigation is a lot easier if drains are sprayed in July, therefore irrigation occurs on time (10 days late meaning a loss of pasture growth of 10kg/Ha over 40 Ha equals 4TDM or maybe 8000 litres of milk).

**Strategies for down cows** – have you costed the vet, self treatment or the knackery?

**MDF Johne’s disease Test:** Jack Winterbottom, DPI Maffra:

The Macalister Demonstration Farm had its annual bovine Johne’s disease Test and Control Program blood test on 27 May 2008. One hundred and forty-one animals aged 4 years and older were sampled. No samples had a positive reaction. This is an excellent result but it does not mean that the herd is free from Johne’s disease. This gives the **MDF herd a base score of 5 points in the National Dairy BJD Assurance Score (Dairy Score)**. Animals born before 2003 are Score 5. Animals born since 2003 and reared under the Johne’s disease Calf Accreditation Program (JDCAP) have an extra 3 points because of their method of rearing. Although 5 and 3 make 8, dairy animals are only allowed a maximum of 7 points. Thus the herd is composed of animals of two scores; 5 and 7.

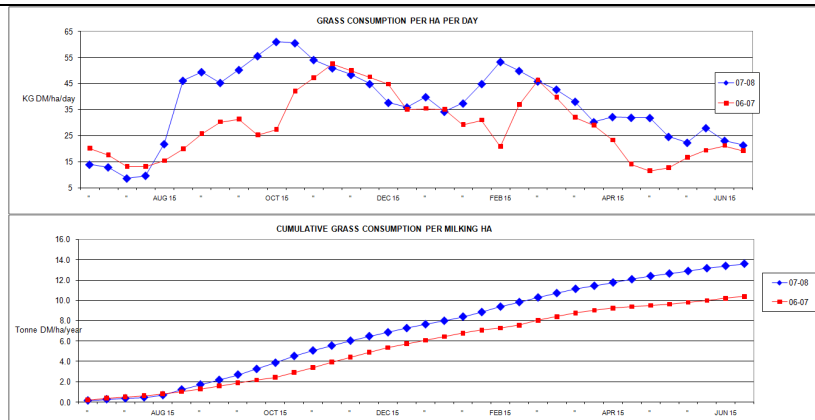
## BUDGETS

In Newsletter 2, I mentioned that we will try to consume 16 tonne of pasture this season. Below is the discussion how that might translate into profit for 2008-09, compared to previous years. (The 07-08 budget is not fully accurate yet, with the final step-up only estimated).

<b>MDF BUDGETS</b>	05/06	06/07	07/08	08/09	
Milking area	110	67	68	72	Hectares
Milkers	380	350	305	300	
Stocking rate	3.5	5.2	4.5	4.2	Cows/ha
Total pasture consumption	897	519	876	1,153	Tonne DM
Pasture consumption per ha(DM)	8.2	7.7	12.9	16.0	Tonne DM/ha
Pasture consumption per cow	2.4	1.5	2.9	3.8	T DM/cow

### Milking area and pasture consumption

After having 13 ha out for laser grading in 07-08 for a few months, 72 ha are now available to grow grass in 08-09. However, the installation of sub-surface drip irrigation will take 7 ha out for some time. If 16 tonne is achieved, pasture consumption per cow increases to 3.8 tonne.



### Pasture consumption

16 tonne pasture consumption is an ambitious target but we have lifted from 10 tonne to 13 in 07-08, and hope to lift by the same amount in 08-09. 16 tonne for the year requires an average of 43 kg per day. If we can manage the summer growth trough, 16 tonne looks possible.

<b>MDF BUDGETS</b>	<b>05/06</b>	<b>06/07</b>	<b>07/08</b>	<b>08/09</b>	
Total purchased feed (DM)	950	1,319	834	572	Tonne DM
Purchased feed per cow	2.5	3.8	2.7	1.9	T DM/cow
Estimated purchased feed wastage			4%	4%	percent
Total feed per cow	4.9	5.3	5.6	5.7	T DM/cow
Total Milk Solids	160,162	163,959	161,248	167,955	Kg MS
MS per tonne DM	87	89	94	97	MS/t DM
MS per cow	421	468	529	560	kg MS/cow
Litres/cow	5,546	6,202	6,942	7,417	litres /cow

### Purchased feed

This is where the pasture consumption has its big effect. With 3.8 tonne of grass available per cow, and even with the cows eating more tonne overall (5.7 t), the purchased tonnes per cow falls to 1.9 tonne, saving a lot of money. If the cows can eat 5.7 tonne, up a bit on last season, their feed efficiency increases to 97 MS /tonne of food, and they will produce 560 kg MS, up 30 on 07-08.

<b>MDF BUDGETS</b>	<b>05/06</b>	<b>06/07</b>	<b>07/08</b>	<b>08/09</b>	
Purchased DM feed price	\$241	\$344	\$563	\$460	\$/T DM
Spent on pasture consumption	\$125,342	\$73,802	\$91,713	\$111,113	\$
Total spent on pasture /ha	\$1,139	\$1,102	\$1,349	\$1,543	\$/ha
Pasture price per tonne	\$140	\$142	\$105	\$96	\$/T DM
All feed price per tonne	\$192	\$287	\$328	\$217	\$/T DM
Total milker feed costs	\$354,292	\$527,514	\$561,367	\$374,148	\$

### Feed prices and costing

More will be spent on each hectare to grow grass (mainly fertiliser price increase) but the increased pasture consumption reduces the overall price of pasture, to under \$100 per tonne. The average price of all feed falls because not as much purchased feed is in the diet, and so total feed cost falls considerably.

<b>MDF BUDGETS</b>	<b>05/06</b>	<b>06/07</b>	<b>07/08</b>	<b>08/09</b>	
Milk price per kg MS	\$4.40	\$4.31	\$6.55	\$6.60	\$/kg MS
Milk Income	\$704,711	\$707,083	\$1,056,694	\$1,108,129	\$
MOAF	\$350,419	\$179,568	\$495,327	\$733,980	\$
MOAF/ha	\$3,186	\$2,680	\$7,284	\$10,194	\$/ha
MOAF/cow	\$922	\$513	\$1,624	\$2,447	\$/cow

### Feeding profitability

Punting for a slightly higher milk price might be a bit ambitious, but if achieved total milk income rises a bit, leaving a margin over all feed about \$200,000 up on 07-08.

<b>MDF BUDGETS</b>	<b>05/06</b>	<b>06/07</b>	<b>07/08</b>	<b>08/09</b>	
non-feed costs (incl replacmnts, labour & dep'n)	\$357,840	\$408,107	\$340,641	\$381,343	\$
Livestock trading, rebates	\$83,612	\$0	\$48,341	\$48,341	\$
EBIT	\$76,191	-\$228,538	\$203,027	\$400,978	\$/farm
EBIT/ha	\$693	-\$3,411	\$2,986	\$5,569	\$/ha
EBIT/cow	\$201	-\$653	\$666	\$1,337	\$/cow
TURNOVER (tonnes fed)	1,847	1,838	1,710	1,725	T DM
Milk \$ return/tonne fed	\$382	\$385	\$618	\$642	\$/T DM
Average feed price	\$192	\$287	\$328	\$217	\$/T DM
MARGIN (\$/tonne fed)	\$190	\$98	\$290	\$426	\$/T DM

### Profit

All costs other than feed are budgeted to increase a bit, but EBIT (Earnings Before Interest and Tax) climbs to \$400,000.

Total feed use (feed turnover) will be about the same as last year but the margin per tonne has increased by more than \$100 per tonne.

Many assumptions and ambitious goals are in this budget. It will be revisited as we travel through the season.

The Monday morning farm walk (see details at top) shows and explains these figures. Frank Tyndall, MDF Project Manager 0409 940 782 [ftyndall@ozemail.com.au](mailto:ftyndall@ozemail.com.au)

**SENDER:**

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