

# Macalister Demonstration Farm

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## NEWSLETTER 29

Monday January 18<sup>th</sup> 2010



*Extension projects at the MDF are funded by Dairy Australia, Sustainability Victoria and Department of Agriculture, Fisheries and Forestry, with support from GippsDairy.*

### Healthy Soils, Sustainable Farms Field Day

The day will feature a farm walk to examine selected paddocks used for dairying. Expert speakers, including Graeme Sait of Nutri-Tech Solutions (a recognised leader in sustainable agriculture), and Dr Damian Bougoure and Doug Crawford (from the DPI's Healthy Soils Program,) will examine soil tests and then discuss options for more effective soil management.

**Tuesday February 2<sup>nd</sup> 10-2.30pm at the MDF**

**Numbers are limited so booking is essential - Contact Jenny O'Sullivan on 5663 2386 before 1 February 2010.**

### Yellow Rag Bit

Jason McAinch & Bree Walshe Dairy Advisors DPI Maffra

#### What is the MEG?

This is a group coordinated by the DPI Maffra dairy team. The group meets bi-monthly and consists of service providers and dairy farmers in an attempt to coordinate activities and identify information gaps that need to be addressed.

#### What has the MEG achieved for Dairyfarmers in the Macalister & East Gippsland region for the last 12 months?

1. Continuing support of the Discussion Groups – Denison & Newry
2. Forums on Milk Price step down in February for farmer groups at Newry, Denison, Bairnsdale and Orbost, a service provider group in Maffra and articles produced for How Now Gippy Cow
3. Advocacy for the YDDP program (especially around funding issues)
4. MDF Spring Sessions – 6 sessions
5. Lower Milk price forums held in July at the MDF, Orbost and Bairnsdale.
6. Ongoing production of this MDF newsletter
7. The development of a Water Trading Information Kit (due for release in Feb 2010)
8. Service Provider group to discuss water trading
9. Request for Extended Lactation information
10. Request for the need for a commercial test for IGF (insulin growth factor) so that farmers can identify cows suited to a particular calving pattern.
11. Request for training in Foot Trimming and administration of injections
12. Support of the computer expo ran by Maffra Area International
13. Support towards the MID Tracker Project

#### Would you like to be involved with a Discussion group or YDDP?

The discussion groups are open to all dairyfarmers, employees and service providers in the local region. Currently the groups meet monthly with a meal, with the exception of a couple of 'busy' months. These groups supply a vital networking opportunity to discuss various topical topics in the dairying system.

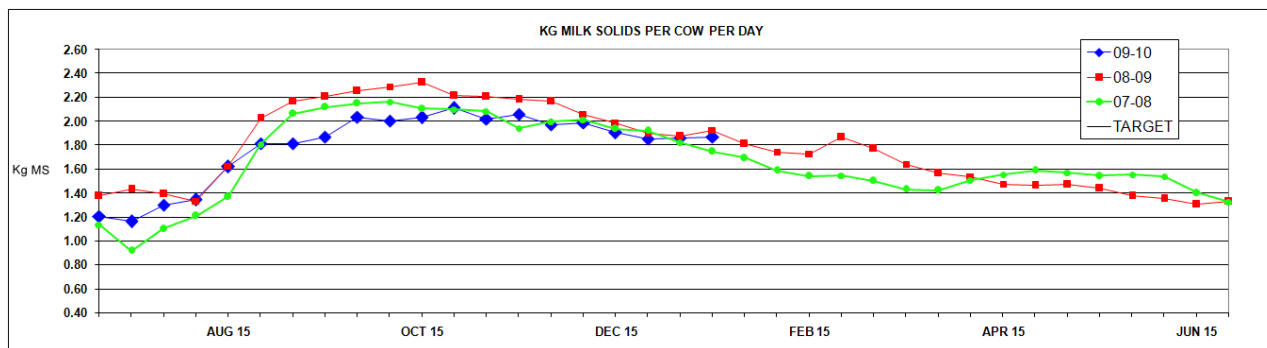
**Denison Discussion Group's** next meeting will focus on the Dairy Shed Water Licensing program, at Tim & Shelley Missen's farm in Denison on Thursday February 4<sup>th</sup> at 11am.

**Newry-Boisdale Discussion Group's** next meeting will be a farm walk and discussion at Wayne & Leah Brunts, Factory Lane, Newry on Wednesday February 10<sup>th</sup> at 7pm.

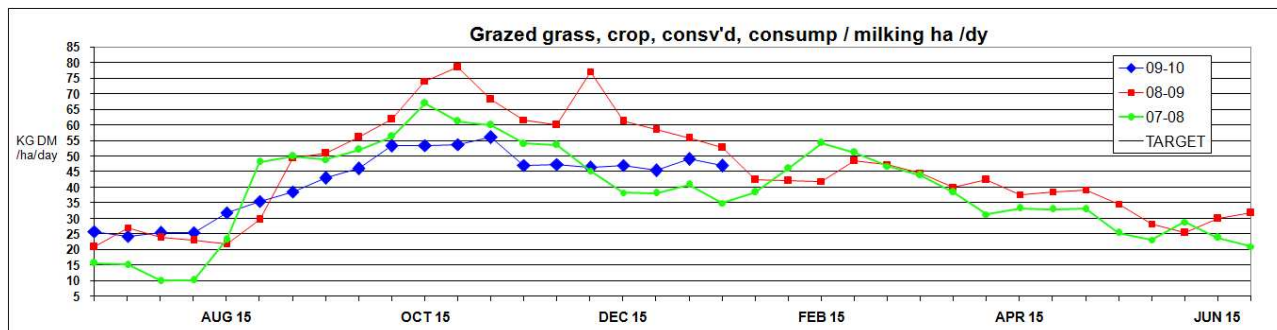
**East Gippsland YDDP** – have a group of keen and enthusiastic young farmers who meet every 6-8weeks to discuss a wide range of dairying topics and issues, whilst combining some social activities. Our next event will focus on 'people on farms' in terms of employment issues and situations (TBA).

We are always looking for keen and passionate people in the dairy industry to come along to the events or join the committee. If you would like to join any of the above groups or would like further information please contact Bree Walshe or Jason McAinch at DPI Maffra 5147 0800.

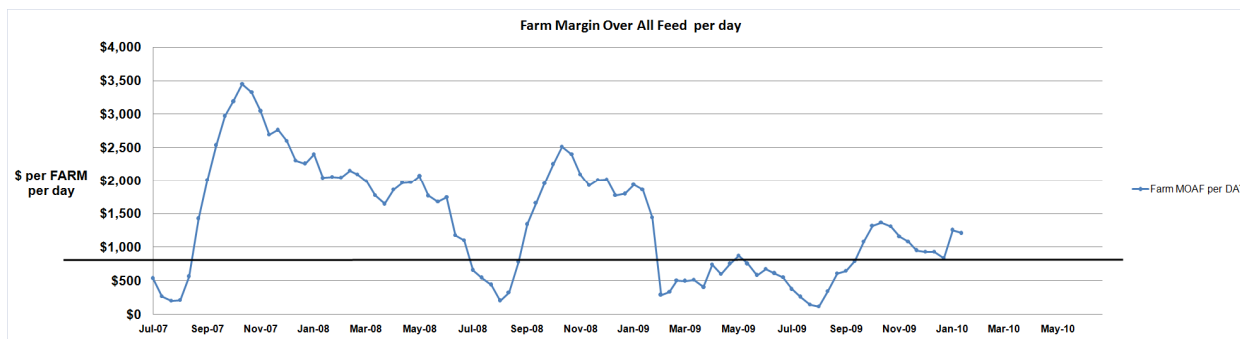
# Macalister Demonstration Farm Profitability Project



The MDF has held per cow production steady in the last few months to be nearly equal to this time last year.



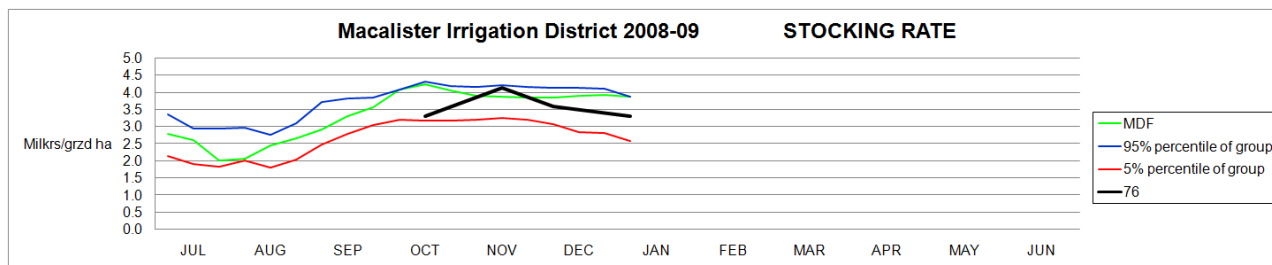
MDF pasture consumption has been fairly steady for months but lower than last year.



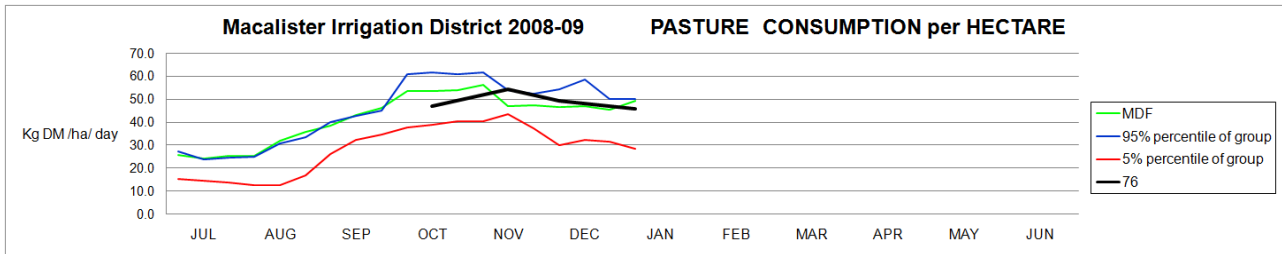
The whole farm feed margin recently got close to \$800 (the amount needed on average per day to cover all non-feed expenses per day) but has kicked up now, largely due to higher January milk prices.

## MID Tracker Project

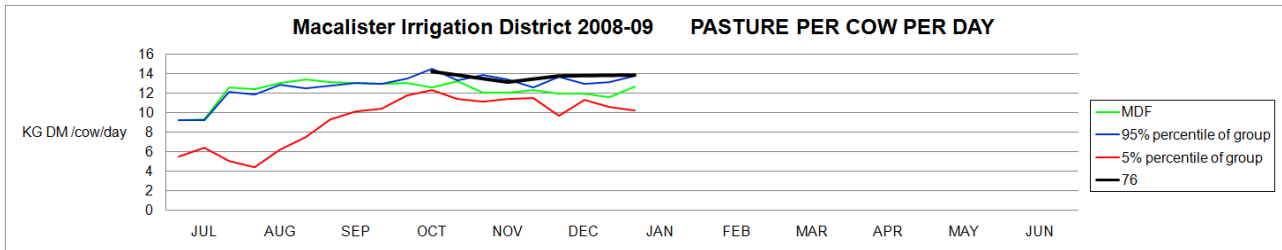
The MID TRACKER PROJECT has started producing reports so it might be useful to include a comparison with the MDF. Below is an example report for one of the farms (No. 76, the black line) that has entered data from October to early January. It also shows how the MDF is travelling, as well as the top 5% and lower 5% of the whole group.



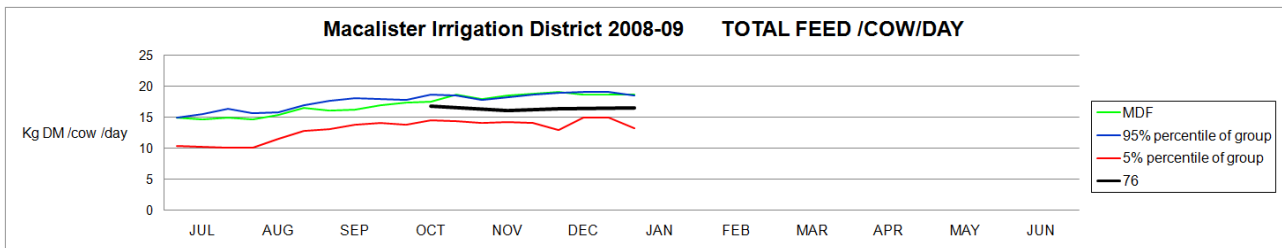
Farmer 76 (the black line) has a stocking rate mid-way between top and bottom. The MDF stocking rate (the green line) is high within the group.



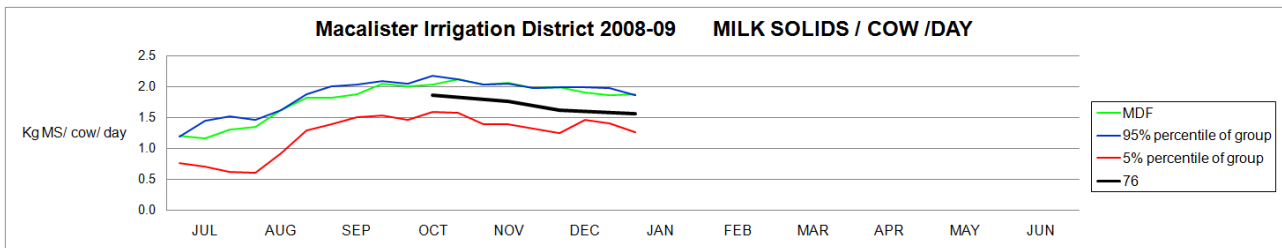
Farmer 76's pasture consumption per hectare is very close to the top of the group, just under 50 kg DM per hectare per day.



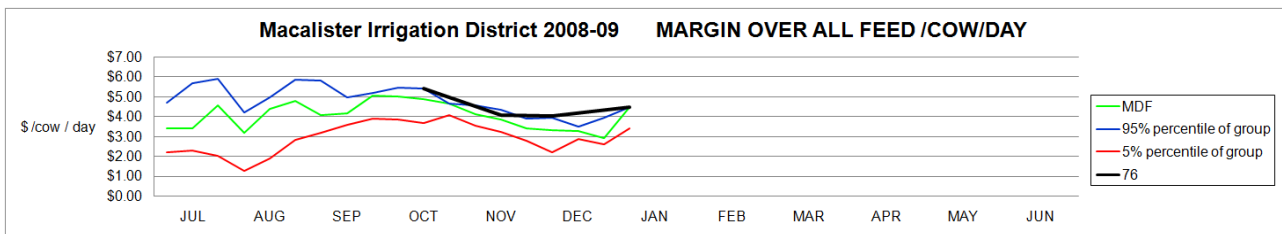
Farmer 76's pasture consumption per cow is the highest of the group and has been for months. The MDF's pasture per cow is mid-way in the group.



Farmer 76 is not feeding a lot of supplement so has a total intake of feed per cow sitting mid-way in the group, whereas the MDF is feeding a lot of supplement so is high for total intake per cow.



The MDF has high milk solids per cow, Farmer 76 is mid-way.



Once the price of feed and price of milk is calculated, Farmer 76 has been tracking at the highest Margin over all Feed per cow. The MDF has been tracking mid-way for MOAF per cow, but has recently lifted.

Every ten days, Farmer 76 gets the graphs above, plus the block of information below, and a set of his own performance graphs, similar to the MDF's, is shown in the Table below.

FARM	MDF	76
Ten day to date:	10-Jan	10-Jan
<b>Stocking rate</b>	<b>3.9</b>	<b>3.3</b>
Grazing allocation 1/	29	30
Average graze rest time	29	30
Element N/hectare/day	1.8	1.0
mm irrigation/hectare/day	4.1	4.0
<b>Estm'd pasture consmp'n (incl cons'vd forage)</b>	<b>49</b>	<b>46</b>
<b>Pasture consum'd per cow</b>	<b>12.6</b>	<b>13.9</b>
Daily spend / milking ha	\$5.30	\$3.77
Estm'd pasture price	\$108	\$82
Conc supp fed/cow	5.9	2.5
Hay/silage supp fed/cow	0.0	0.0
PKE supp fed/cow	0.3	0.0
Estim'd supp waste	3%	3%
Conc supp avg price	\$314	\$233
Hay/silage supp avg price		
PKE supp price	\$222	
<b>Total feed intake/cow</b>	<b>18.6</b>	<b>16.4</b>
Estm'd body cond't'n change	0.30	0.20
Litres/cow	24.7	20.7
Fat test	4.22%	4.49%
Protein test	3.33%	3.06%
Fat per cow	1.042	0.930
Protein per cow	0.821	0.633
<b>MS per cow</b>	<b>1.86</b>	<b>1.56</b>
Anticipated final milk price (less levies)	\$4.15	\$3.97
Anticipated final milk price (/litre)	\$0.314	\$0.300
Fat return per cow	\$2.82	\$2.50
Protein return per cow	\$5.56	\$4.26
Volume charge per cow	\$0.64	\$0.54
Milk income/cow	\$7.73	\$6.21
All feed cost/cow	\$3.29	\$1.73
<b>Margin over all Feed/cow</b>	<b>\$4.44</b>	<b>\$4.48</b>
<b>MOAF /ha /day</b>	<b>\$17.23</b>	<b>\$14.79</b>
Energy density of diet	11.6	11.5
Crude protein % of diet	19.4%	20.7%
NDF Fibre level of diet	32.9%	37.4%
Tonne feed /day	5.3	3.0
Milk Return /tonne feed	\$411	\$378
Average Price of feed	\$175	\$105
Margin /tonne feed	\$236	\$273

## MACALISTER IRRIGATION DISTRICT TRACKER PROJECT

The Macalister Demonstration Farm (MDF) has received funding from GippsDairy to analyse and report on the feeding productivity and profitability of dairy farms in the Macalister Irrigation District (MID).

**This project is available to 20 dairy farms from the MID for free - there are only a handful of places left!!**

The 20 participants will also be offered optional quarterly meetings to discuss the analysis process and the results. As much phone support as required will be available during the project. The project is not recommending any particular feeding system or setting, but simply providing an insight into farm performance.

Regular and current monitoring and comparing with other farmers using a consistent and reasonably technically accurate method can be a useful management tool.

**Contact Frank Tyndall today if you are interested or need more information**

**0409 940 782 [ftyndall@ozemail.com.au](mailto:ftyndall@ozemail.com.au)**

## Healthy Soils, Sustainable Farms – Field Day

Farmers keen to understand how they can tackle soil acidity, build healthier soils and run a profitable business are invited to attend a field day to be held in Maffra at the Macalister Demonstration Farm on 2 February, 2010. The field day is part of the West Gippsland Catchment Management Authority's, Healthy Soils, Sustainable Farms – Tackling Soil Acidification project being funded by Caring for Our Country.

The day will feature a farm walk to examine selected paddocks used for dairying. Participants will be able to examine soil tests carried out in late 2009, as well as soil pits to observe soil structure and root growth. Expert speakers, including Graeme Sait of Nutri-Tech Solutions (a recognised leader in sustainable agriculture), and Dr

## Sub-Surface Drip Irrigation

You might have been following our adventures trying to bring the performance of the sub-surface drip irrigated pastures back up to the level we had last year and we feel like we are having a win! The two soils, the Nambrok clay and the Macalister red soil, behave very differently under trickle irrigation and while we are yet to master the red soil, the Nambrok soil has given up its secrets.

We have tried to link irrigation of the two paddocks much more closely with the water needs of the pasture as measured by ET (evapo-transpiration) but to do this successfully we had to make sure that the soil profile was at capacity first. So we let the water run in a cycle of pulses until we had water at the surface (helped by a little rain) and then tried to manage moisture level to maintain it within the optimum zone. This is reflected in much better growth rates over the past month (graph below).

The Nambrok soil holds the water for much longer and is easier to bring back to optimum level – it's also easy to over water it if you are not careful and we had some problems with waterlogging in November/December that reduced the level of pasture growth. After a couple of good waterings over the last week of hot weather the Nambrok soil has maintained a consistent band of moisture right across the gap between the trickle tapes at a depth of 10cm. It is as good as we have had in some time. We have been surprised by how little water has been needed to maintain this level of moisture in the Nambrok soil – certainly no more than the ET rate. The key is to not let it get dry because you will always be behind the eight ball. At

Damian Bougoure and Doug Crawford (from the DPI's Healthy Soils Program,) will be on hand to give their views about the results and observations, and discuss options for more effective soil management.

The paddock to be viewed is a highly productive, predominantly rye-grass paddock that, until fairly recently, was affected by distichum (water couch). Changes in irrigation management and the use of spinner cuts have transformed the pasture composition, but the affects of laser-grading carried out about 15 years ago can still be seen in the soil structure. This paddock also has quite high levels of phosphorus.

For more information or to register contact Jenny O'Sullivan on 5663 2386 before 1 February 2010.

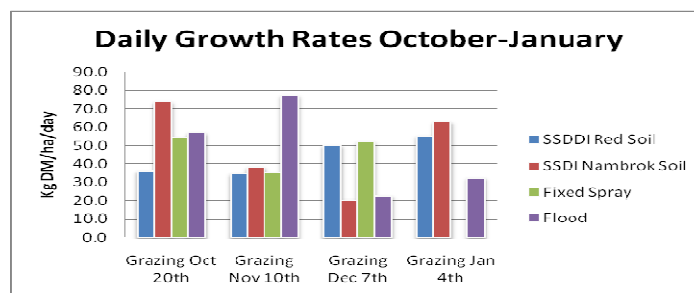
the moment we are putting on 6mm/ha every second night which is then adjusted weekly for ET. Pasture growth under on the Nambrok soil between October and January was 49 kgDM/ha/day.

The best of the red soil blocks are also doing well with the banding that was visible earlier in the season now much harder to see. To get it to this point has taken much more water than expected with strong evidence that there are significant losses to deep drainage. While there is no sign of water stress in the plants, the moisture level between trickle tapes is much lower than on the Nambrok soils and is not as consistent. To bring the soil to capacity we had to add 66mm/ha over seven days when total evaporation was only 37mm. At the moment we are applying 15mm/ha every second night and it is still not quite enough to maintain it in the optimum zone. Pasture growth on the red soil between October and January was 44 kgDM/ha/day.

In the meantime, the flood irrigated paddock used for comparison showed excellent pasture growth in November but this fell dramatically when we had good rain straight after anirrigation and it became a little waterlogged. Average growth from October to January has been at 48 kgDM/ha/day. Pasture growth under the fixed sprays has also been consistent with average growth between October and January at 47 kgDM/ha/day.

System designer, Netafim, has sponsored the installation of a venturi fertigator that will allow us to apply nitrogen through the irrigation system. We will be trialling different rates and different frequencies of application to try and identify any savings in fertilizer costs.

Neil Baker



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