

Macalister Demonstration Farm

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NEWSLETTER 28

Monday December 21st 2009



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

Yellow Rag Bit

Jason McAinch Dairy Advisors DPI Maffra

At the completion of the spill period, it is time to assess our irrigation water situation. Last season the spill occurred at the last possible date (December 15, 2008) and resulted in irrigators having a remaining allocation of approximately 85%. Inflows throughout the remaining part 2008/09 season resulted in an increase to 100% until a further increase in mid April. Last years situation resulted in many farmers having to budget out their irrigation water use.

This year the spill had finished on October 27th 2009. With the announcement on completion of the spill period - December 16th 2009, an allocation of 95% resulted. Therefore most irrigators would have used at least two if not three irrigations between Oct 27 and Dec 16. By my calculation, this would mean the average irrigator would have 5 to 6 full irrigations remaining. If this is correct, will this get you through the season?

If your current irrigation budget indicates the situation of being "short" of water, what are your options?

1. Hope for more in flows to increase allocations.
2. Decrease the area irrigated - water short or preferably drop out poor performing paddocks or high water use areas.
3. Purchase water - make an Allocation transfer (keeping an eye on your Annual Use Limit)

Before you ask - How much is irrigation water worth?

Answer: How long is a piece of string!

There are a lot of factors that determine how much you could pay for water, some things to consider are (and rough rules of thumb):

4. How much people are willing to sell it for?
5. How much feed can I grow from a ML of water? This will differ on each farm and you need to consider when the water is to be used.
 - a. Water used in the heat of summer on pasture, flood irrigation, will grow (not consumed) an average of 0.7tDM. (Range 0.3 – 1.5tDM/ML)
 - b. If used on a summer crop it may grow 2 - 3tDM.
 - c. Wastage
 - i. soil type - free draining verse heavy clay,
 - ii. run-off - with or without a reuse dam
 - d. If you consider the purchased water is to be used late in the season (May). This ML could have an effect on growth into October, if there is a dry winter. If a wet winter, your purchase strategy has not been very effective.
6. Consider the price of alternative feeds.
7. Cost of renovating (or recovery) of a non-irrigated area.
8. Your assessment of the inflows and increased allocation

Nothing quite matches quality pasture, but let us assume that you have enough pasture in the diet without purchasing water to satisfy the cows diet for protein. Therefore, we can compare irrigation water against grain for simplicities sake.

Grain at \$220/t, add wastage, crushing and convert to DM equates to \$255/tDM.

If we grew 0.7tDM from 1 ML of water, add 30% wastage (only 70% consumed by cows), also adjust for energy differences (pasture being 11MjME verse 12MjME grain) 1ML resulted in 0.45tDM consumed by the cows.

0.45tDM multiplied by \$255 translates to each ML applied is worth \$115.

Is \$115 the price on this farm you would purchase water for – well no, not if you are comparing to grain at \$220/t. You need to consider, labour, possibly pumping costs, plus SRW will charge you \$9 for the purchased water going through the meter.

As you can see it can be complicated to calculate the price for irrigation water, or you could just wait for the adverts in the paper and pay the price someone else has set! It is important to think about how much water you will need for the rest of the season and potentially what you are willing to pay for it!

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!!

Each farmer participant will need to email the following data every ten days

- Milker numbers.
- Milk fed to calves.
- Supplements fed (purchased and own, quantity, quality, price, waste estimate)
- Fodder conserved.
- Change in body condition and stage of pregnancy of milkers.
- Grazing area and grazing rest time.
- Fertiliser and irrigation applications.

With the participant's permission, milk production will be collected directly from the milk company.

Then, every ten days for a year (that is 36 times), each farmer participant will get:

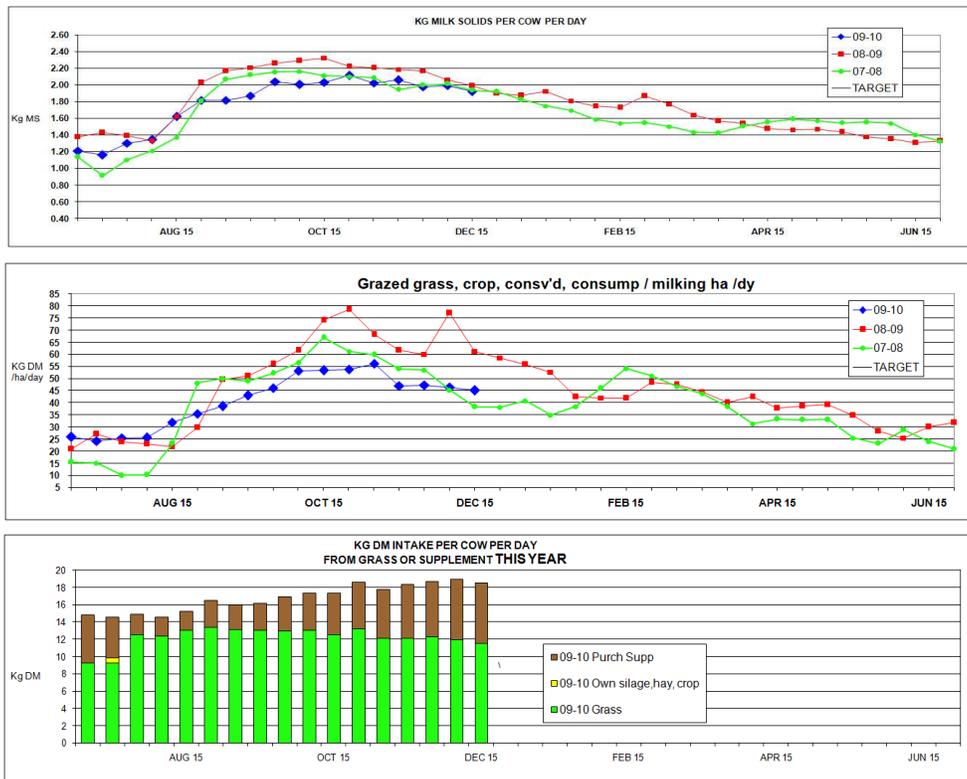
- A table with all their own data analysed.
- Their own performance data presented as graphs
- Group performance data and graphs, showing the top performing farms, their settings and what they are achieving that will let them to compare their performance against the MDF and other farms in the project.

The analysis method and report format (graphs and tables) will be the same as the regular reports on the MDF.

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

The group results will be published, regularly in the MDF newsletter, for all in the MID to make use of. No identifying information, such as farm size or cow numbers will be published. Each individual farmer will be able identify only themselves in the published group graphs and data.

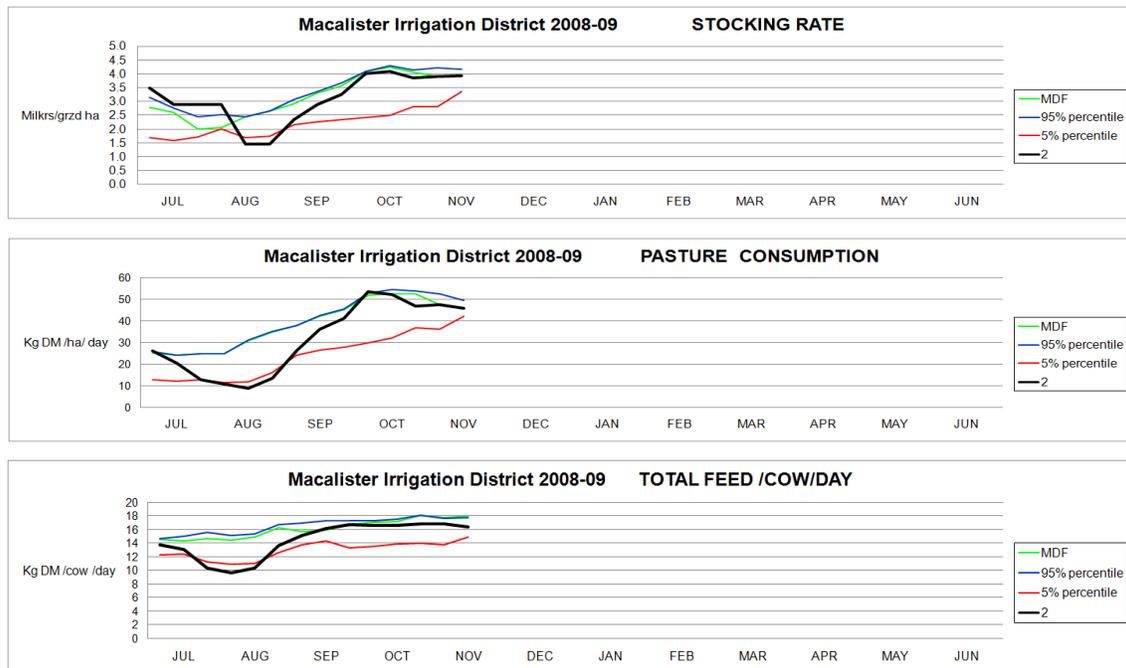
The following are example graphs (in this case the MDF's) that will be sent to individual participating farmers:

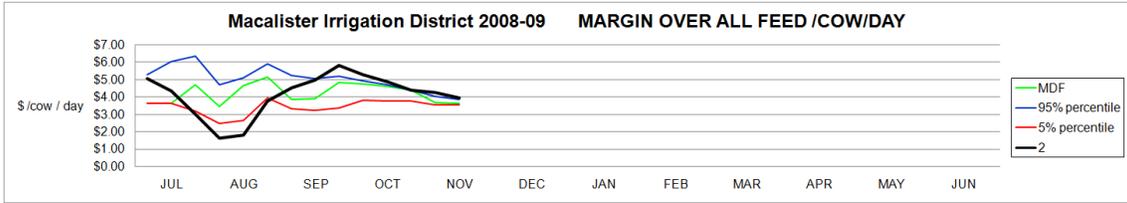
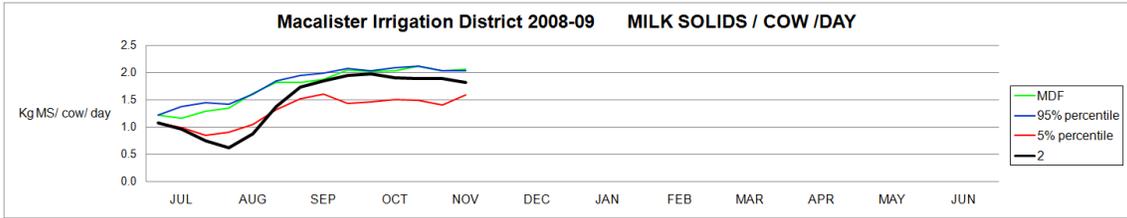


The following is an example of the group data in table form that will be sent to participating farmers and published in the MDF newsletter:

FARM	MDF	13	4	2	26	9	16	Units
Ten day to date:	20-Nov							
Stocking rate	3.9	4.3	4.1	3.9	3.8	3.1	3.3	cows/ha
Grazing allocation 1/	30	30	25	0	0	30	30	th of graze area
Average graze rest time	28	30	27	0	0	28	28	days
Element N/hectare/day	1.4	1.1	1.0	1.2	0.0	0.0	1.2	kg element/ha/day
mm irrigation/hectare/day	3.0	3.0	3.0	2.0	3.0	3.0	4.0	mm water/ha/day
Estm'd pasture consmp'n (incl cons'vd forage)	48	50	56	46	42	41	53	kg DM/ha/dy
Pasture consum'd per cow	12.0	11.8	13.4	11.6	11.3	13.0	13.5	kg DM/cow/dy
Daily spend / milking ha	\$5.12	\$4.15	\$4.75	\$4.32	\$1.05	\$2.59	\$5.54	\$/ha/day
Estm'd pasture price	\$108	\$83	\$86	\$94	\$25	\$64	\$104	\$/T DM
Conc supp fed/cow	5.6	5.7	2.5	4.5	1.4	1.4	3.6	kg DM/cow/dy
Hay/silage supp fed/cow	0.0	0.0	0.0	0.0	0.0	0.0	0.0	kg DM/cow/dy
PKE supp fed/cow	0.2	0.0	0.5	0.0	0.0	0.0	0.0	kg DM/cow/dy
Estim'd supp waste	3%	3%	4%	3%	3%	3%	2%	%
Conc supp avg price	\$304	\$351	\$239	\$237	\$333	\$356	\$313	\$/T DM
Hay/silage supp avg price	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$/T DM
PKE supp price	\$253	\$0	\$253	\$0	\$0	\$0	\$0	\$/T DM
Total feed intake/cow	17.7	17.4	16.3	16.5	12.7	14.3	17.0	kg DM/cow/dy
Estm'd body cond'n change	0.00	0.00	0.00	0.00	0.00	0.00	0.00	kg LWT/cow/dy
Litres/cow	27.3	28.0	24.4	23.8	13.0	20.2	26.9	l/cow/day
Fat test	4.11%	4.00%	4.02%	4.31%	5.20%	4.07%	4.01%	%
Protein test	3.30%	3.15%	3.21%	3.34%	3.90%	3.28%	3.15%	%
Fat per cow	1.120	1.121	0.981	1.028	0.674	0.821	1.078	kg/cow/dy
Protein per cow	0.901	0.883	0.783	0.797	0.505	0.662	0.847	kg/cow/dy
MS per cow	2.02	2.00	1.76	1.83	1.18	1.48	1.92	kg/cow/dy
Anticipated final milk price (less levies)	\$3.33	\$3.31	\$3.32	\$3.41	\$3.34	\$3.26	\$3.30	\$/kg MS
Anticipated final milk price (/litre)	\$0.247	\$0.236	\$0.240	\$0.261	\$0.304	\$0.240	\$0.236	\$ per litre
Fat return per cow	\$2.47	\$2.47	\$2.16	\$2.33	\$1.49	\$1.78	\$2.37	\$
Protein return per cow	\$4.98	\$4.89	\$4.33	\$4.52	\$2.79	\$3.59	\$4.68	\$
Volume charge per cow	\$0.71	\$0.73	\$0.64	\$0.62	\$0.34	\$0.53	\$0.70	\$
Milk income/cow	\$6.73	\$6.62	\$5.85	\$6.23	\$3.94	\$4.84	\$6.35	\$/cow/dy
All feed cost/cow	\$3.06	\$2.99	\$1.86	\$2.28	\$0.76	\$1.30	\$2.53	\$/cow/dy
Margin over all Feed/cow	\$3.67	\$3.64	\$3.99	\$3.95	\$3.18	\$3.53	\$3.82	\$/cow/dy
MOAF /ha /day	\$14.33	\$15.49	\$16.49	\$15.57	\$11.92	\$11.08	\$12.49	\$/ha/day
Energy density of diet	11.9	12.3	11.8	12.0	11.9	12.0	12.0	MJ ME/kg DM
Crude protein % of diet	21.9%	19.4%	23.8%	19.9%	24.6%	22.8%	23.1%	% CP
NDF Fibre level of diet	30.2%	33.0%	34.2%	32.9%	34.5%	36.1%	32.4%	% NDF
Milk Return /tonne feed	\$377	\$377	\$357	\$375	\$310	\$337	\$371	\$/tonne DM
Average Price of feed	\$171	\$170	\$114	\$138	\$60	\$91	\$148	\$/tonne DM
Margin /tonne feed	\$205	\$207	\$243	\$238	\$250	\$246	\$223	\$/tonne DM

The following are examples of the group graphs that will be sent to participating farmers and published in the MDF newsletter. In this example the black line is farm number 2's performance.





If you would like to participate, please email or contact Frank Tyndall. 0409 940 782 ftyndall@ozemail.com.au

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