

# Macalister Demonstration Farm

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## NEWSLETTER 43

Monday December 6<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.*

### DRAINWATCH -a new water quality monitoring program

**Improved water quality is important to the health of local waterways and is an on-farm asset for irrigators.**

Please join us for an information session on the Drainwatch program and hear from DPI on what's happening in the world of irrigation.

The Drainwatch project will provide landholders with information to help understand what is being transported into irrigation drains through runoff. Data collected through the program will give landholders extra information to help maximise water quality for re-use, reduce nutrient waste through run-off and assist in productivity.

Landholder and community volunteers will be:

- trained to conduct monthly water sampling and testing;
- provided with equipment to test for salinity, turbidity and nutrients.

**Date: Wednesday 15<sup>th</sup> December Time: 11am – 1pm**

**Venue: Macalister Demonstration Farm, Boggy Creek Rd, Riverslea**

RSVP: Monday 13<sup>th</sup> December for catering purposes

**BBQ lunch will be provided**

RSVP to Nicole Russell – Waterwatch [Tel:1300 094 262](tel:1300094262) or [0408 355 541](tel:0408355541) [nicoler@wgcm.vic.gov.au](mailto:nicoler@wgcm.vic.gov.au)

### Yellow Rag Bit

Bree Walshe, Dairy Advisor DPI Maffra

#### Rain & Heat

I am quite excited to write an article focussing on managing issues associated with rain, as I look back in the article archive, we are normally discussing irrigation budgets and how to best manage water use efficiency this time of year!

The recent down pour saw most parts of the MID record at least 45-65mm of rain, soaking pastures, crops, laneways and filling reuse dams. As fantastic as this is, it also reminds us of some issues that rainfall brings.

**Lameness** – our laneways have been drenched, with many becoming boggy and exposing stomes and rocks. Not only are the cows hooves softened from the moisture they are likely to be walking on sharp muddy laneways. To manage and decrease the amount of lameness, allow your cows to walk slowly so that they can choose themselves a path to minimise bruising. If possible, decrease the distance they walk whilst their hooves are softer. Take the time to examine cows feet if they are showing signs of lameness to remove any potential stones etc, before they become infected and require further treatment. Finally, there are feed additives to assist with hoof hardness, however, these take a while to work – two good additives are biotin and protected zinc (e.g avala zinc).

**Mastitis** – the rain has brought mud as well as mild temperatures resulting in perfect conditions for environmental mastitis (Strep. Uberis) to flourish. Good teat hygiene is imperative to keep mastitis levels at bay.

**Effluent** – most effluent ponds around the district will now be very close to, if not already full. Remember, it is your legal responsibility to ensure that effluent does not leave your property. To help reduce effluent volume, at your next opportunity irrigate with your effluent, either straight or shandy with irrigation water.

**Sunburn** – cows, like us, get sunburnt. However, sunburn is a common symptom of **Photosensitivity (photo)** and conditions are right for this at the moment. There are two forms of Photosensitivity, one from too much green grass and the other from liver disease. Firstly, cows eat a lot of green grass (chlorophyll) this time of year, which contains phyllyerythin, which the liver clears from the bloodstream. The second is when the liver is not functioning efficiently due to liver disease and cannot remove the phyllyerythin from the blood. Therefore, during spring the excess phyllyerythin (too much green grass) produced by the cow reacts with the UV rays causing sunburn. It can be treated via nutrition and the veterinarian.

**Harvest** – keep in mind that the whole state also has been receiving good rainfalls – when making or purchasing fodder, try to make the highest quality you can. Rain damage can cause mould, reducing quality as well as potential combustion.

For further information you can call your trusted local veterinarian, nutritionist, consultant or alternatively a dairy extension officer at Maffra DPI on 5147 0800.

### Macalister Demonstration Farm Profitability Project & Ten day Tracker Project

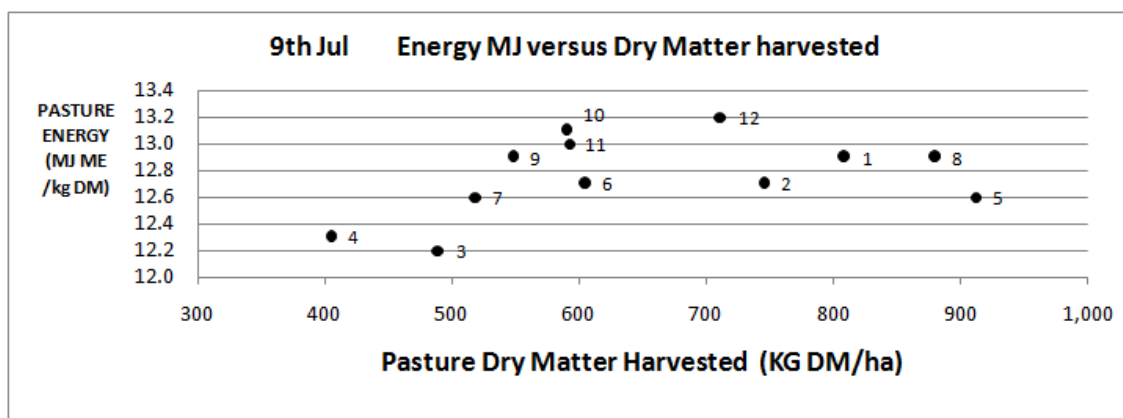
The Incitec Pivot trial at the Macalister Demonstration Farm is mainly concerned with finding out what type of nitrogen works best. In the process a great deal of pasture quality feed test data is being generated. How pasture quality changes during the year, and how quality is affected by nitrogen application, has already been reported on, as results have come to hand over the 18 months.

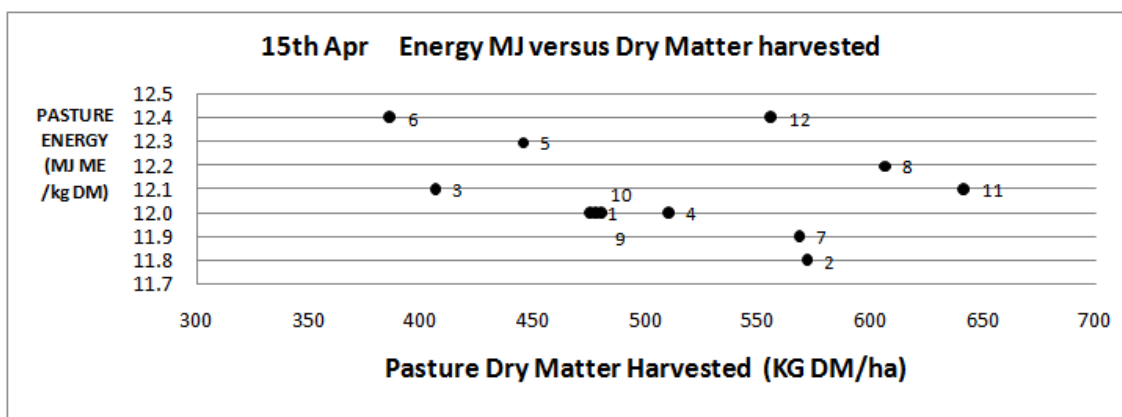
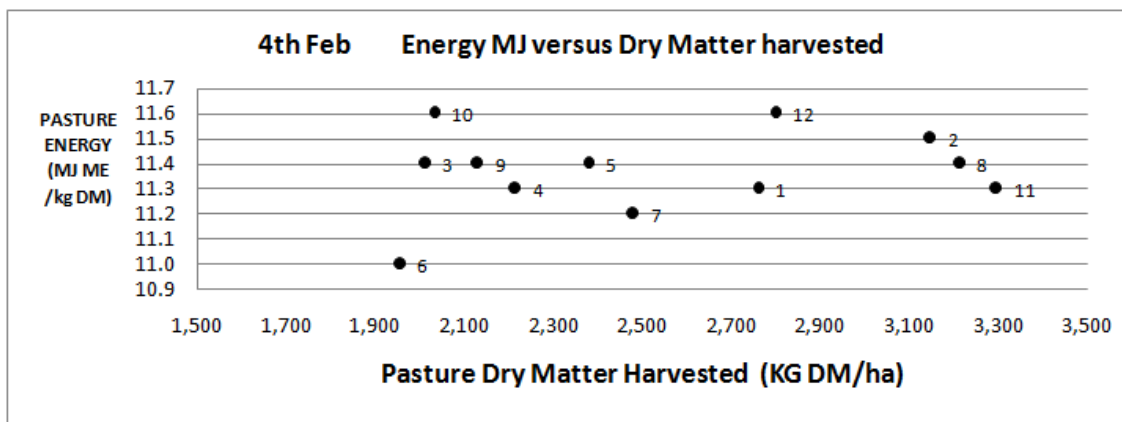
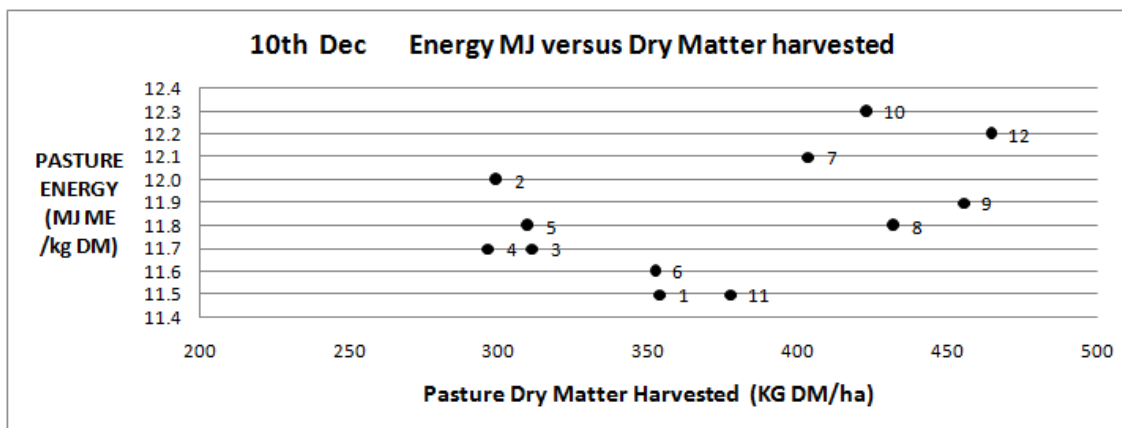
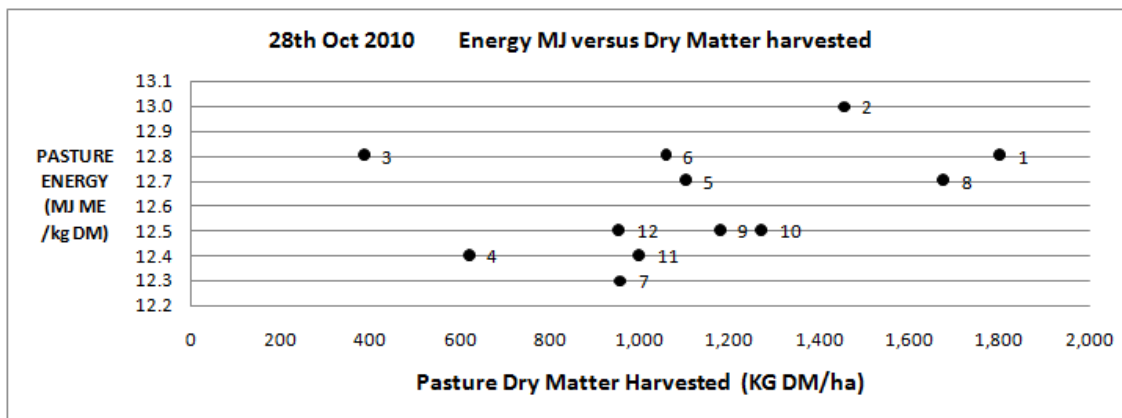
Usually the **quality** of the harvested grass has been very good, even when sometimes very high **quantities** have been harvested. There is a general belief that as quantity goes over say 1,500 kg DM per hectare harvested, the quality falls off significantly.

The graphs below show the energy levels of the grass against the amount harvested. Each of the 12 dots represents a feed test. Each dot has its plot number next to it.

Daily appl'n N kg/ha	Treatment	Plot no.
0.00	Control+PG	3
0.00	Control	4
0.34	EasyN 30+PG	6
0.34	EasyN 30	7
0.67	Urea55+PG	5
0.67	EasyN 60+PG	8
0.67	Urea55	9
0.67	GrUrea55	10
0.67	EasyN 60	11
0.67	GrUrea55+PG	12
1.34	EasyN 120	1
1.34	EasyN 120+PG	2

This table shows how much N is applied to each plot, ordered with the lowest N at the top. Plots 1 and 2 get the most N and generally you can see in the graphs they have high amounts of grass harvested. Plots 3 and 4 never have any N applied and they generally have lower amounts harvested.





It is perhaps surprising that the graphs show that generally the energy level in the grass holds up very well, even when the amount harvested goes over 3,000 kg DM harvested. A 3,000 kg DM harvest means 4,500 kg DM on offer, which is a lot of grass.

At each harvest, usually the higher quantity is being created by more nitrogen, not by longer grazing rest time. At each harvest, all plots are harvested at the same time after the previous harvest, roughly at the same grazing rest time of the farm, around 28 days in spring, 30 days in summer, 40 days in autumn, and 55 days in winter.

To get the feed sample for testing, a section of each the plot is harvested with a lawn mower. After the sample has been taken, the cows graze the remainder of the plot. Then all the plots are mown to a 5 cm residue, **every time** a harvest occurs. All plots are close to **100% ryegrass**.

It may be unrealistic to manage a normal paddock as these plots are. However, it seems that if everything above the graze height is removed and not allowed to die, decay and drag down the quality at the next harvest, pasture quality can be maintained, even when large quantities of grass are harvested.

Frank Tyndall 0409 940 782

**The MDF Newsletter is taking a Christmas break and will be back on January 10 2011**

**Merry Christmas to all!**

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**SENDER:**



Macalister Demonstration Farm  
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