

Macalister Demonstration Farm

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NEWSLETTER 97

April 2015



Your Levy at Work



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The road to recruitment - continued

The search for a new farm manager continues. Advertisements were placed in the Weekly Times, the Gippsland Times, AusdairyL and on the GippsDairy employment portal. Many applications were received with strong claims for the position of farm manager. The Board are now in the process of reviewing these applications and will be inviting potential candidates to interview in the near future.

In the meantime Becky is being very industrious preparing the farm for handover to the new farm manager.

Becky's time at the farm has raced along. When she arrived at the farm on a moment's notice the farm was in need of a lot of care and attention. Becky admits she likes a challenge and this was one challenge she took head on and the results of her hard work are demonstrated through the reports Matt Harms issues fortnightly. As farm manager, Becky was required to source, engage and manage staff. This was a first for her: it was a steep learning curve, but it was a task she achieved and even undertook courses to assist her in performing in her role as staff manager.

Another plus for Becky was the opportunity to work with a diverse range of professional people, from the Board members themselves, to the various service providers associated with the dairy industry. Having

such a valuable resource available to her assisted her to “sanity check” decisions she made regarding farm management.

Another aspect of the job that Becky has said that she really enjoyed was the opportunity to work with transition feeding, tackling milk fever and working on herd fertility.

There are many opportunities to learn and develop skills as farm manager with Macalister Demonstration Farm as can be evidenced by Becky’s time with the farm. We wish Becky well for her future endeavours and hope her sojourn overseas is all she is looking for and more!

Yellow Rag Bit

Maria Rose, Dairy Extension Officer - DEDJTR Maffra

Keeping on top of liver fluke

In this month’s Yellow Rag Bit, we focus on liver fluke and key management practices dairy farmers can do to minimise liver fluke in their herd. The following is a recent interview with Jane Kelley from La Trobe University regarding her research conducted last year in the MID to help farmers minimise losses through liver fluke infection.

What is the key focus and reason for your research on liver fluke?

The key focus is to determine how widespread liver fluke is within the Victorian dairy industry. Liver fluke causes fasciolosis which reduces a dairy cow’s capacity to produce milk and interferes with weight gain and fertility in young stock. I’m also looking at different on farm management practices that can minimise the impact of liver fluke.

What did your recent research on prevalence of liver fluke in the MID show?

In 2014, I worked with the Maffra Veterinary Centre who collected 400 faecal samples from 20 dairy farms in the MID. Noticeable milk production losses occur when the number of cattle infected with liver fluke exceeds 25 per cent of the herd. In Maffra only three farms had an infection level less than 25 per cent. The average infection level across all 20 farms was 72 per cent. Initial estimates suggest that liver fluke is costing the MID region about \$9 million a year in lost milk production. Studies conducted in MID over 2012 and 2013 reported drench resistance to triclabendazole (e.g. Fasinex, Flukazole and Flukare) which is the most effective drench at controlling liver fluke, as it kills both immature and adult fluke. Immature liver fluke can cause extensive liver damage; triclabendazole is the only drug that can kill immature liver fluke in dairy cattle. In the MID, 95 per cent of the farmers surveyed used triclabendazole as their dry-off treatment. Management of liver fluke infections in the future could be difficult if more resistance is identified, as there are not many drenches registered to kill liver fluke in dairy cattle. Researchers are trying to develop a liver fluke vaccine.

What are the implications of these results on management practices to control liver fluke?

There are key management practices that dairy farmers can use to minimise the impact of liver fluke on milk production. These include:

- **Test before you drench** - Clinical signs of liver fluke are not always that obvious in cattle, so testing before you drench will prevent you from wasting your time, labour and money drenching your stock when they are not infected.
- **Be vigilant during high risk periods** - It is better to be aware of the high risk periods for liver fluke infection and test frequently during this period i.e. every 4-6 weeks. The high risk periods are: autumn and spring because the liver fluke snails which pass on the infection are most active during these periods. In drought years cattle are forced to graze areas which used to be wet or submerged with water, these areas are heavily contaminated with infective liver fluke cysts released from the fluke snails. This can cause a spike in the number of infected cows in your herd.

- **Know the weaknesses in the diagnostic tests** - There are only three tests available for liver fluke and it's best to be aware of their limitations.
 - Liver fluke faecal egg counts (FEC): Low sensitivity when multiple faecal samples are mixed together, this is known as a pooled or bulk sample. A higher sensitivity can be achieved by testing 10 individual faecal samples. This test only detects adult liver fluke.
 - Milk or Sera antibody ELISA: Very high sensitivity. Drenched cattle often return a positive result (this is called a false positive) because the milk and sera ELISA cannot distinguish between previous liver fluke infection and current infection. The accuracy of the ELISA can be improved by testing 10 individual samples, and taking into account when they were last drenched. This test detects both immature and adult liver fluke.
 - Coproantigen ELISA: High sensitivity in individual faecal samples and in mixed faecal samples (pooled or bulk samples). Detects immature and adult liver fluke.
- **Develop an economic threshold for drenching**
The recommended way to establish the economic threshold on your farm is to test 10 or 15 individual cattle for liver fluke. If the number of cattle infected with liver fluke exceeds 25 per cent, drenching is worthwhile as you will gain a return on your investment.
- **Drench options**
To minimise drench resistance don't use the same class each time, swap between the following drenches;
 - Triclabendazole (e.g. FASINEX): Kills immature and adult fluke/Milk withholds required.
 - Clorsulon (e.g. IVOMEC PLUS): Kills adult fluke only/Nil milk withhold.
 - Oxyclozanide (e.g. NILZAN LV): Kills adult fluke only/Nil milk withhold.
 Prior to drenching make sure the drench gun is calibrated. Drench according to the heaviest animal in the mob or individually weigh each animal. Follow label instructions and check withholds.
- **Be aware that drug resistance has been reported in liver fluke in the MID**
Drench resistance is easily evaluated by using either a faecal egg count reduction test (FECRT) or a coproantigen reduction test (CRT). If you would like to test your cattle for drench resistance talk to your veterinarian or me about the procedure. The basic procedure is as follows;
 - Day of drenching: Collect 10-15 individual faecal samples. Send samples off to be individually tested using either FEC or the coproantigen ELISA.
 - 21 days later: Collect another 10-15 individual faecal samples (preferably the same animals). Send samples off to be individually tested using either FEC or the coproantigen ELISA.
 - If cattle are negative at 21 days, the drench was successful.
 - If some cattle are positive at 21 days, it could be drench resistance. At this stage, consult with your veterinarian on how to proceed.
- **Management decisions:**
 - Allocate low risk paddocks to calves and heifers i.e. newly sown pasture, pasture cut for hay or silage.
 - Reduce access to water bodies where the fresh water fluke snail lives i.e. irrigation channels, drains.
 - Remove weeds from drains and channels so the water flows faster and the snail habitat is destroyed.
 - Avoid waterlogging or over watering pastures during summer months as such practice increases the rate of liver fluke infection.

Where are you up to on your expanded study this year in north-eastern Victoria planned?

Liver fluke is also a problem in the Upper Murray with an average herd prevalence of 57 per cent and in the Goulburn Valley the average herd prevalence was 23 per cent.

If you wish to find out more about Jane's research on liver fluke, she can be contacted via email on j.kelley@latrobe.edu.au or by phone on 9032 7459.

What's been going on at the MDF?

This time of the year is seen as being critical in setting the farm up for late lactation production, and therefore the herd not only for the remainder of this season but also into next season. As a result, despite growth rates having motored along (40kg/ha/d) for the past few weeks and matched eat rate over the farm (resulting in a stable pasture cover), things are closing down, and possibly quite quickly. Round length needs to shut down as a result, to slow the round and allow for the growth of grass in front of the cows. The effective area is currently only 62ha, with 11ha out for resows. These resows have just received a watering to aid germination and hopefully help to get them back into the round in around 6-8 weeks.

So how do we slow the round, with limited inputs and a tight budget? This is dilemma that everyone faces...does production get sacrificed to save the money on inputs, or do we spend the money to hopefully get the production and justify the expense? At the same time, there is a need to save pasture cover so that the farm still has grass over the next few months.

The production target is running slightly ahead year to date, but is in danger of dropping under target if production continues to slide; the financial budget is tracking on target, but could fall under if production falls or if feed inputs rise; if we don't maintain production, neither the financial or the production targets will be met. With very limited feed on hand (around 15t Almond Hulls, 40 rolls good dry cow hay and 19 rolls of silage) and an effective grazing area of 62 ha (4.3 cows/ha), things are tight.

So, the decisions made at the Focus Farm Support group meeting on 26th March were as follows: allocation would drop to 2ha/24 hours immediately placing the farm on a 31 day round with the aim that this is out to 40 days by early May; two rolls silage per day would be fed on the feed pad giving enough for 10 days, then this would be followed by two rolls per day of pasture hay for fibre; milled Almond hulls would be fed ad-lib on the feed pad with an expected feed rate of around 5kg per cow per day; grain increased to 6kg wheat and 1kg additive pellet, with the inclusion of 0.5-1kg canola per cow per day when the new load arrives next week, with the rate of canola dependant on the pellet composition and price. There will be decisions made in the next couple of weeks as to whether a load of Lucerne will be purchased or whether unmilled Almond Hulls will be bought and the quality in the diet come from grain and canola.

On top of the above feed decisions, other criticals are that urea will be applied at 100kg/ha from next week, resows will be boosted with Pasture Booster at 200kg/ha when they are up and running and a pregnancy test will be shortly followed by a herd test to determine any cull cows to reduce the number of hangers on.

The current numbers for the farm prior to the diet change and based on March milk price is as follows:

	Litres	Solids
Production	16.5	1.5
Components %	5.14%, 3.9%	5.14%, 3.9%
Milk price on current test	53c	\$5.83
Gross milk income less levies	\$8.75	\$8.75
Minus 5.5kg grain (\$335/t) and 1kg pellets (\$541/t) and 2kg Almond hulls (\$180/t)	\$2.74	\$2.74
IOSFC (\$/cow/day)	\$6.01	\$6.01
Minus irrigated grass (\$140/tDM)	\$1.05	\$1.05
Net IOSFC (\$/cow/day)	\$4.96	\$4.96
\$/herd/day		
Net production	11.3	1.03
Supplement cost	5 litres	0.47kgMS

Matt Harms, ONFARM Consulting, 0408 311 118 or matt@onfarmconsulting.com.au

Hassle free calving session at the MDF

Calving time is very stressful for the dairy cow, as she seeks to successfully adapt to the challenges of calving, lactation and re-breeding. It is also very stressful for farmers! 80% of cow health problems occur within 4 weeks of calving

Participants at the Hassle-free Calving workshop will have the opportunity to discuss cow health problems around calving on a case study farm and explore ways that these calving hassles can be reduced.

Farmers who participate in this event will.....

- focus on the various calving hassles (cow health problems) they and other farmers experience each year
- appreciate what levels of each of these calving hassles are acceptable / achievable
- gain an understanding of the link between many of these cow health problems and how cows are managed in the last 3 weeks pre-calving
- gain an understanding of the best way to manage downer cows

The format is powerpoint free and will include a farm walk and a lucky door prize!

When: Thursday May 21

Where: Macalister Demonstration Farm, Riverslea

Time: 10:30am - 1:30pm

RSVP to Sarah Killury, Dairy Extension, DEDJTR Maffra on 03 5147 0845



Fete & Auction

Sunday 24th May

At the Nambrok Recreation Reserve, Auction begins at 10am

**Tim Coleman Trials Display—
the best tricks you'll see on a motorbike!**

**Childrens Entertainment & Art
Show, Zorb Balls, Giant Slide
Pony Rides, Animal Nursery
Cake stall, Hot food, Fairy Floss
Show Bags, Firewood Raffle
Cow Lotto
Live Music by Adrian Cooper**

Mark the date on your calendar
& start looking around the house,
shed or farm for unwanted items that
you would like to sell!

Note: Auction items must be booked in on
Saturday 23rd May at the Recreation Reserve.
BSB & account no. required for
payment.

(10% commission to the school, 5% on
amount over \$1000)

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