

Macalister Demonstration Farm

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Macalister Demonstration Farm Update 376 (Week ending May 9th, 2014)

What's been going on at the MDF?

As the season draws to a close, the MDF team is looking at making drying off decisions. What are these decisions being based on?

- Production of individual cows;
- BMCC of individual cows;
- Expected calving date of individual cows;
- Feed costs of the herd compared to their production;
- Available feed on the farm for now and for building cover for next season.

With all this taken into consideration, Becky is making the dry off decisions based on all the above factors. Firstly, production needs to definitely cover the cost of supplementary feed (pellets, hay and silage) and should also cover the cost of the pasture the cow is eating, as feed that she eats will be feed that another cow cannot eat and go into production or reduced supplement. Given the cost of feeding a lactating cow this week is \$3.14/cow/day (see below) and milk price is \$6.81/kgMS or 61c/litre, then to cover the costs of the supplement each cow needs to produce $\$3.14/\$6.81 = 0.46\text{kgMS}$ minimum or $\$3.14/61\text{c} = 5.1$ litres. Then, she is eating 4.6kgDM pasture (see below) and if this valued at \$100/t DM or 10c/kgDM (non-irrigated pasture), then there is another 46c that needs to be covered, or $\$0.46/\$6.81 = 0.07\text{kgMS}$ or $46\text{c}/61\text{c} = 0.75\text{litres}$, so the true cost is 0.53kgMS or 5.85litres. There are also the costs of labour, power, shed costs etc that should be considered, but ultimately are not high, so it be fair to say that a cow needs to produce 0.6kgMS or around 6 litres minimum to stay in the herd. It can be also strongly suggested that cows producing below that level shouldn't be milking anyway, due to very low production and BMCC issues!

Given the figures above, the philosophy this season is as follows:

- Cows below 0.6kgMS/day are dried off;
- Cows with low production and high BMCC are dried off;
- Cows within 7-8 weeks of calving date will be dried off;
- Cows to be dried off will get drafted off, receive ad-lib hay, small strip grass and reduced grain for three days (maybe no grain);

A long acting dry cow will be used (49 days) over the entire herd and blanket teat seal used as well. Heifers to calve will also be teat-sealed. They will be kept in a dry clean area for the first week or two after dry off, away from the dairy. The early and late calvers will remain on the farm, cleaning up waste areas and poor grass areas, and the middle "chunk" of around 130-140 will go on agistment.

In pure economic terms, the cost of dry cow feed for any cows dried off early should be taken into consideration in the breakeven scenario above- that is, how much production is the cost of the dry cow feed worth? But, as this year's milk price is so high and the breakeven point so low in terms of production, cows should not be retained in the herd below the production level mentioned above anyway, and so the cost of dry cow feeding is irrelevant. The fact that

they will be cleaning up scrappy areas initially at no cost, also means that the cost can be ignored.

In terms of current goings-on, the resows are still slow, but gradually improving. They have been boosted with 100kg/ha urea or 200kg/ha pasture booster to get them firing. They were assessed about 10 days ago to see if they needed re-drilling due to the poor result (from being too wet over their first three weeks), but it was decided to leave them and top up in spring if required.

Silage feeding has started, and the silage will replace the Vetch when it runs out, and be fed through until dry off of the main chunk of cows.

Urea is being applied at 100kg/ha every 40 or so days, to help lift cover into winter. There will need to be a good pasture level through June and July, as it will be used to feed some late calving cows, some dry cows as well as to build a wedge for early lactation.

And a look at production, inputs and margins:

<u>Production</u>			
Cow numbers			260 in herd and vat
Litres and solids/cow/day			14.4/1.28kgMS
Fat & Protein %			4.9%/4.05%
BMCC			260,000
<u>Grazing and Feeding (kg dry matter per cow)</u>			
Concentrates (Pellets/Grain/Additive) kg DM @	43.6	c/kg DM	5.4
Vetch hay kgDM@	32.4	c/kgDM	1.8
Silage kgDM@	15	c/kgDM	1.4
Pasture (kg DM) /cow/day			4.6
Pasture demand (kgDM/ha/day)			16
			66
Area in rotation (ha)			
Rotation length milkers (days)			28 (with resows out)
Grazing Area (ha per 24 hours)			2.3
<u>Daily Income over Supplementary Feed Costs (IOSFC)</u>			
Milk Price (\$/kg milk solids) and (cents/litre)			\$6.81/61c
**Income/cow			\$8.78
Supplementary Feed Cost/cow			\$3.14
IOSFC/cow			\$5.64
IOSFC/milking ha			\$20.09
Net litres/cow			9.2
Irrigated pasture cost \$/cow/day	14	c/kg DM	No irrigation
Net margin after supplements and irrigated pasture \$/cow/day			\$5.64

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