Macalister Demonstration Farm

Projects on the farm are funded by Genetics Australia with support provided by GippsDairy

Macalister Demonstration Farm Update (Week ending September 27th , 2013)

The MDF is currently milking 211 cows with 180 in the vat. There are still 28 dry cows, and these are receiving around 0.2ha/day pasture (about 6kgDM) and no hay. There are 37 springers and these are receiving a strip of grass, 3kg lead feed, 100g/cow/day MagC and ad lib oaten hay.

The daily allocation to milkers is now at 2.5ha/24 hours and therefore the round length for milkers is at 28 days. With leaf emergence running at around 8 days per leaf, there is room to shorten round even further. This is happening in reality, as there will be some paddocks dropped out and harvested for silage in this rotation. Residuals are back down to around 1500kg/ha but the aim has been to fully feed cows by offering large amounts of grass to enable a high peak. Pasture quality will be maintained by topping into October and by doing silage. The aim is to harvest around 1.5 bales of pasture silage per cow from the milking area, if possible, to take some pressure off the budget by reducing the amount of purchased supplement in later lactation.

The cows are now being fed 6kg/cow/day as fed Pasture Gold pellets (12.8MJ) and grass at a cost of $375/t or 41.7c/kgDM. Some may ask why so much is being fed in the bail during spring when grass is now in surplus. The reasons are: we are chasing a high peak production; the concentrates this year are worth around the same as milk price (1kg pellets is equivalent to around 1 standard litre of milk) and this may improve further as the season develops; surplus grass will be harvested as silage where ever possible; and this silage will replace some purchased lucerne/vetch or grain in later lactation.

Milk production is at 28.33 litres and rising and solids are at 2.14 kg MS/cow/day. Milk components are at a 4.11% fat and 3.45% protein. The targeted solids peak is 2.2kgMS/cow/day. BMCC is around 200,000 and fluctuating due to high levels of mastitis. This could have been caused by wet conditions in mid-September.

Daily pasture consumption from the grazing area is at 2900 kg DM /day with the milkers consuming 13kg DM per cow per day and the dries 6kgDM/cow/day. This equates to a harvest of 1075kg/ha/24 hours and a total pasture demand of 40kg/ha/day (the total amount of pasture required to be harvested for milkers and dries) and is now less than the pasture growth rate and so a surplus for silage is building.

The milk price on the components is $5.29/kg milk solids or 40.15c/litre.

Gross milk income per cow per day is $11.38/cow/day. Supplementary feed cost $2.30/cow/day (concentrates), leaving an Income Over Supplementary Feed Cost (IOSFC) of $9.08/cow/day or 22.6 net litres/cow/day, or $1634/day for the farm. Now that irrigation has started, I am including the daily cost of irrigated pasture in the calculation. This pasture cost for the MDF has been put at $140/t (14c/kgDM). Therefore the daily net margin after supplements and pasture is $7.26/cow or $17.90/ha.

Soil tests have been taken on three key areas of the farm, and the results showed high levels of P,K and S, slightly low but adequate pH, and one area with slightly high Aluminium. As a result, all areas have now received a dose of Pasture Booster to apply small amounts of P,K and S with Nitrogen, and other areas received effluent. Nitrogen will follow milkers at 1kgN/ha/24 hours, as urea. Silage paddocks may receive a light blend of NPKS after harvest.

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