

Mid-Coast Adaptable Dairy Farming Systems Project

Progress report – Day 7 – On farm meeting 4 – March 2017

The Adaptable Dairy Farming Systems project support group gathered for the fourth on-farm group day in March 2017. The main topics for discussion were:

- An update on the current farm position and changes since the last meeting.
- Discuss plans for managing the transition from Kikuyu pastures to ryegrass.

After a dry summer the rain finally arrived in March, the pastures responded rapidly and Pat and Louise have been able to return to a much cheaper diet for the cows. The pasture has also allowed an improvement in the diet quality and the freshly calved cows have responded to that.

The dry conditions have come at a cost to the business. Pat was forced to increase purchased feed use for an extended period and this will impact on annual profit. He needed to increase concentrate use (from about 5 kg/cow up to 8 kg/cow), and also needed to purchase in fodder.

The purchase of fodder created some issues as the quality of this feed was not as good as the home grown feed that could have been provided. As a generalization the quality of available fodder is on the lower end of the scale this season. Purchased fodder is lower in energy and protein, and higher in fibre. The net result of this combination was an increase in feed wastage as the cows were 'full' on the lower quality feed and couldn't consume enough of it. The support group discussed the value of feed as compared to the cost of feed. If feed is a higher quality (but it costs more per kgDM) it may still be better value. Ideally Pat would get feed test results for purchased feeds, but given the seasonal conditions there is a chance that the great majority of fodder on the market is of a lower quality anyway.

Pat and Louise calved down 160 cows over a 6 week period. This is a result of their ability to get a high proportion of cows in calf to hold a tight calving pattern. They have approximately 75 replacement heifers from this calving and this creates plenty of options in terms of additional stock sales and/or herd growth.

Since the rain there has been a big turn-around. Pat has been able to reduce the supplement input down to around 5 kg of concentrate per cow per day - and there is no requirement for purchased fodder. The average production has climbed from 17 litres per cow to 22 litres per cow (with a test at 3.8% fat and 3.5% protein). The pasture growth has arrived at a good time – especially for the freshly calved cows.

The rain also provided Pat with the opportunity to conserve some silage. The herd could not consume all the pasture available and about 20 percent of the farm was mown and made

into round bale silage (approximately 170 rolls or close to 60 tonne, dry). This will be valuable over the coming months as the dry conditions exhausted the spring fodder reserve.

The group spent some time discussing management of the transition from kikuyu dominant pasture to ryegrass. It is a challenging process as no two seasons are the same and the plan needs to adjust to suit. However there were a few key messages for managing the transition:

- The kikuyu residuals must be kept under control prior to sowing. Ideally kikuyu residuals are managed over the whole growing season as this is also the best way to optimize performance of the Kikuyu. The research recommends a residual of 5 centimeters. It is rarely possible to manage the residuals with grazing alone, so some mechanical intervention is usually needed.
- Local research also indicates that the ideal window for sowing the ryegrass is mid-March to mid-April. If it is sown earlier there is a higher risk of strong competition from kikuyu and this is likely to shade out the small, new ryegrass seedlings. There is also a higher risk of armyworm damage. Missing a sowing opportunity in March can mean facing dry conditions through April further delaying establishment. Sowings past this window also means the new seedling will take significantly longer (2-3 weeks) from sowing to the time where the plant is ready to graze. Small seedlings are more susceptible to waterlogging in cooler months. The later the sowing, the longer the wait and the less quality feed from the paddock for the season.
- If base soil fertility is not limiting then you can speed up the sowing process by applying the fertilizer after sowing (rather than putting through the seed drill).
- Treated seed to protect it from pests and an insecticide spray for armyworms is ideal for early sown ryegrass. Failures can set the ryegrass back several weeks and need resowing.

The support group spent time in the paddock observing pastures and the herd, and discussing the plans for the transition. Pat had already started sowing but was cautious about putting in too much at this stage as the recent rain had boosted the kikuyu growth and he was concerned that the new seedlings might struggle. He plans to start to sow paddocks after their next grazing event but will monitor the weather to fine-tune the decision.

The group ended the day by summarizing the discussions into a plan, and each farmer in the group had some key 'take-home' messages to help fine tune their own operations.

