



MAY 2018 Newsletter

## Feeding Non Merino Ewes

Over the past ten years consultants have been employed on the LTEM project to provide nutritional advice on ewe management. I and others were critical of the advice provided to producers regarding non merino ewes. The proponents of LTEM have conducted feeding trials of non merino ewes and it turns out that the advice was indeed faulty resulting in significant errors in feeding recommendations for these ewes. The report is attached and you can read it in full if you have a day to spare. Their conclusions are as follows.

### **Conclusions**

**The analysis of the experimental data showed that intake was being consistently under estimated and this analysis shows that potential intake has a large effect on the optimum LW profile for maternal ewes. This makes potential intake a high priority for further investigation. The other components identified in this analysis as being important to the calculation of the optimum profiles are relative intake associated with quantity of feed on offer, energy required for maintenance and the efficiency of energy use for maintenance and the energy content of the weight gain and loss.**

**Unfortunately this analysis and the other calculations have not narrowed down the list of traits that need to be quantified for maternals as it appears that both intake and energy requirements are important to determining the optimum profiles for maternal ewes.**

**This means that for 10 years incorrect advice has been promulgated to prime lamb producers at great expense despite many raising serious questions about the validity of that advice. Now that it has become evident that the advice was wrong no steps have been made to inform producers of this unfortunate failing apart from the attached report which very few producers would know how to access.**

The advice provided was excellent in confirming the necessary condition score required at the point of lambing for successful results but failed in identifying least cost methods to reach these condition scores. The main error being an overestimate of food on offer (FOO) levels needed to reach these condition scores. They are conducting further trials to determine why their estimates of feed requirements were incorrect.

Non merino ewes perform a lot better than their models predict possibly because they consume more or process the feed better than predicted. There are also other possibilities. Maybe in a few years the model will be corrected and new recommendations given.

My reason for doubting the advice in the first place was because in my feeding trials I was amazed at the capacity of crossbred ewes to gain weight after the break of the season and also after the lambs were weaned from the ewes. They were able to do this at FOO levels way below the levels promoted by the LTEM program. Attempts to draw their attention to this were not welcomed.

It has always been my belief that to attempt to predict ewe performance on the basis of subjective assessments of FOO was always likely to be faulty because of the ability of sheep to selectively graze pasture and their ability to consume more than was thought possible. You can see or you can condition score the sheep to inform you of what the sheep are getting from the pasture and base your feeding on this information. Attempting to judge what the level of nutrition a pasture will supply subjectively can lead to overfeeding as in the advice I have seen given in LTEM.

In my opinion the findings of the recent studies reinforce the advice I have been giving for Mediterranean environments for 25 years. That has been to time your lambing to start 4-6 weeks after the time you would normally expect the break of the season in 80% of years. Doing this means that the ewes can regain condition before lambing from pasture and they have not had to be at higher weights throughout the dry period. The LTEM model underestimated the ability of non merino ewes to regain weight possibly because of incorrect predictions of intake or the nutrient value of that intake. For this reason they strongly supported keeping ewes in better condition throughout mid pregnancy than I think is necessary. If you are lambing early then you have little option but to maintain your ewes in better condition because they will not be able to regain condition on dry feed. Scanning as early as possible will determine which ewes carry singles and which have multiples. Very limited feeding should take place before scanning because single bearing ewes require very little feeding if any. Multiple bearing ewes should be in condition score 3.5 at the point of lambing or at least gain 10 kgs in the last month of pregnancy. Everything in sheep production is a compromise. It is a trade-off between goals and production maximisation is not always profit maximisation. With a late break achieving a condition score of 3.5 for multiples may not be possible but the ewes must gain 10 kgs in the last month to avert high losses.

It is very difficult to improve the condition score in multiples over the last month of pregnancy but they can gain 10 kgs when fed enough feed of high nutritional density.

No discussion of sheep profitability can be taken without reference to stocking rate and time of lambing. The decisions about stocking rate are the most difficult because of the year to year variation in feed supply. You have to decide what stocking rate is appropriate for your property for at least a 10 year period based on what has happened in the past years. There is plenty of data which shows the importance of stocking rate on profitability and the highest levels of profitability are most often achieved at higher stocking rates. Producers have chosen their stocking rate based on their own experience and attitude to risk. They are therefore reluctant to make changes so the industry has seen little advances in productivity for a long time apart from that associated with improved pasture production.

**With normal ewes there is little evidence that higher reproductive rates improve profitability because of the extra costs involved in achieving these higher rates.**

This is exactly the reason that prolific genotypes were considered a priority by the MLA, CSIRO and SARDI who invested many millions of dollars in the project to develop a genotype which could conceive many more lambs without increasing inputs. This has been done and the results are there for all to see on 60 properties using the Multimeat genetics in southern Australia.

Colin