



SEPTEMBER 2017 NEWSLETTER

I have attached Janelle Hocking's presentation on Lamb Survival from our recent lamb forum. I will attempt to interpret what it means for people using Multimeat genetics. The aim of the project was to develop condition score targets for best practise management of Non Merino ewes.

The first graphs are on the effects of birth weight and survival and show the expected relationships. Singles and twins need to be over 4 kgs to achieve acceptable results. Triplets would also benefit from achieving 4 kgs if you could achieve this weight. The thing to note is that for crossbreds there appears to be little penalty for exceeding these weights. This is not true for merino ewes. The biggest problem I see with our clients is in not achieving these target birth weights.

The next table relates to the effect of ewe weight during pregnancy on birth weight. The table shows how much birth weight will be increased by an extra 10 kgs live weight at different stages of pregnancy. This is where mature Multimeat ewes are different. We want mature Multimeat ewes to be mated at lower live weights to control litter size. This is one of the most important factors in managing mature Multimeat ewes successfully. Keep the mating condition score close to 2.5 during joining and this will reduce the number of triplets or higher.

How you manage your ewes between days 0-90 will depend on what decision you have made about the time of lambing. If you have accepted our advice and lamb at a time when there is a high chance of having green feed for a few weeks pre-lambing then it is not so important to have the ewes in high condition scores at this time. It is best to scan as early as you can and identify litter size before you commence supplementary feeding. Ewes will gain 300 grams per day on green feed after the break of the season and this feed contained 23% crude protein when I measured it. It is difficult to increase condition score in multiple bearing ewes in the last few weeks of pregnancy because they are directing their nutrients to foetal growth. You therefore cannot let your ewes get to too low a condition score during this period.

Ewe CS & Lamb survival



- Singles
 - Minimal effects of low CS (2.5-2.7) at lambing
- Twins
 - Improving CS at lambing increased survival with 'near-maximum' at CS 3.2 treatment (3.1 to 3.4)

| <u>Single lambs</u> | CS2.7 | CS2.9 | CS3.4 | CS3.7 | CS tmt |
|---------------------|-------|-------|-------|-------|--------|
| Birth weight (kg) | 5.6 | 5.9 | 6.0 | 6.1 | P<0.01 |
| Survival (%) | 89 | 90 | 89 | 82 | P<0.05 |

| <u>Twin lambs</u> | CS2.6 | CS2.8 | CS3.3 | CS3.6 | CS tmt |
|-------------------|-------|-------|-------|-------|---------|
| Birth weight (kg) | 4.3 | 4.5 | 4.8 | 5.0 | P<0.001 |
| Survival (%) | 68 | 72 | 80 | 85 | P<0.001 |

The table above on Condition Score, birth weight and lamb survival is the one you need to be constantly thinking about. If you are achieving low survival rates it is most likely that you are not achieving these ewe condition scores prelambing. Remember these targets and condition score your ewes.

I am not too worried about the effects of condition score during lactation on weaning weights. If you have achieved your prelambing condition scores what happens after that will be decided by the season. We would all like to have high levels of Food on Offer (FOO) during this period but this is not likely to occur at profitable stocking rates.

No effect of FOO in late pregnancy on birth weight



- No effects of late pregnancy FOO on birth weights
- High birth weights
- Mild lambing conditions and high survival (90% singles and 86% twins)

| FOO | 780 | 980 | 1520 | 1750 |
|------------------|-----|-----|------|------|
| Singles BWT (kg) | 6.1 | 6.2 | 6.1 | 6.2 |
| Twins BWT (kg) | 5.1 | 5.3 | 5.3 | 5.3 |

One of the important findings of this study was that Food on Offer (FOO) (above table) had no effect on lamb birth weight. Think about that for a moment, for years we have been told how important monitoring FOO levels and adjusting supplementary feeding rates in accordance with them has been. Yet here we have it, the most important factor in lamb survival, lamb birth weight and FOO has no effect. It is almost impossible for even an experienced person to tell how much nutrition is available from a pasture. What this means is that the calculations you may have been encouraged to do by assessing the sheep's needs and the amount of FOO and sitting down and calculating the amount of supplement you should feed have been misguided. This is because FOO is a very poor way of estimating the amount of nutrition a ewe can access from a pasture. This has been my unpopular view for over 20 years and I believe it has lowered the profitability of many enterprises by increasing feeding costs unnecessarily. I also believe that encouraging producers to feedlot ewes to build up FOO levels has also been expensive misinformation in many cases. The biggest determinant of the amount of nutrition available from a pasture is pasture growth rate not a single estimate of FOO at some point in time. It makes sense to put your ewes with the highest needs in those paddocks which you think can supply the best nutrition but don't fool yourself about how you think they will perform in that paddock. You must condition score the ewes and observe how they are going and adjust your supplementary feeding accordingly. The question then becomes how much should I feed. The answer is no one can tell you. Every paddock situation is different and can change with a week of sunny weather. So there is no app or table which can give you valid advice. I have conducted trials feeding many varied rates of supplements on dry feed and green grass and the only advice I could give is to watch the condition of the ewes and vary on the side of overfeeding the multiple bearing ewes in the last 6 weeks of pregnancy. The concept that you can assess a pasture and the animal's needs and simply calculate a value of supplement to add is very appealing but as the latest research shows this is very difficult to do.

The lamb industry is being inundated with information of questionable value on many fronts at the moment. My advice is that you be very careful about which bits of it you take on board.

Colin