



The Confused Industry

It has been an interesting month. First we presented a lamb forum with assistance from Sheepconnect and then attended Sheepvention and LambEx. These events provide an opportunity to keep contact with what producers and revealed the confusion I am talking about. The greatest confusion I think is about the direction of maternal genetics. Courtesy of the MLA and SARDI I have had the opportunity of researching this field for about 15 years. Over the past ten years we have had our genetics on numerous properties where they have been compared with other maternal genetics. Prior to this MLA funded the comparison of Border Leicester X merino ewes with Multimeat X merinos in NSW, Victoria and South Australia. The results of this were that on average the Multimeat merinos marked 25-30% more lambs and were 25% more profitable. There have also been a number of large comparative trials done such as the Maternal Central Progeny test and more recently the Elmore trials. Because of this I have a very good idea just how certain genotypes will compare with each other.

My views for what they are worth are these. Firstly self replacing wool flocks or composite flocks are much less profitable than those which utilise a terminal ram on a portion of their ewes. Secondly the simple system of buying merino ewes and joining them all to terminals is very hard to beat. Thirdly to compete with this system you have to have a maternal line which weans in excess of 140% at commercial stocking rates.

This is where it gets interesting because all composites would claim to be able to achieve this and they do under certain circumstances. To get a better understanding of their true potential you have to look at the situations where they have been run together under the same conditions. In these situations there is very little increase in lambing percentages of Coopworth, and other NZ based composites over Border Leicester X merinos but they do have considerably less wool value. A lot of claims have been made for these genotypes but the comparative data does not support them. On the Elmore field day site comparisons of maternal genotypes have been conducted for many years, Search or Google Elmore ewe trials to have a look at this must see data. In the latest trial in which the second lambing has just been completed Multimeat X merinos have been compared with Border Leicester X merinos, Coopworth Composites and three merino strains. They have all been mated to White Suffolk rams. This data is not on the internet yet but soon will be.

In the current Elmore trial the marking percentages of the Border Leicester X Merino and The Coopworth composites were 115% and the Multimeat merinos 160%. It is also of interest the Coopworth Composites cut half the wool value of the Border Leicester and Multimeat merinos. This data is not surprising, it was totally predictable before the trial commenced. It supports the data I have seen on other comparative data on properties where we have different genotypes being used. Of course there are numerous properties where Coopworths and Crossbreds are marking very high percentages. Ewe bodyweight and the month in which you mate will determine what the scanning percentage will be. The high percentages in these cases are more likely to be an indicator of lower than optimal stocking rate or high supplementary feeding costs rather than an efficient profitable system. The only correct comparison is the true profit per hectare and this is what this trial attempts to reveal. If breeding values gave you the correct answers there would be no need for such trials.

I do come across people all the time who want to do their own comparisons and I understand that they are like me and will not believe something until they see it. It is however a very long and expensive exercise and difficult to do properly. I am not saying that you should not do these trials but that the answers you will get are already known. The Multimeat was developed with over \$10 m from the CSIRO, MLA and SARDI to address the principal problem with Australian maternal genetics and that is their comparatively low fecundity of the local genotypes. In many other lamb producing countries of the world prolific genotypes based on prolific genes are available and used. Having said that in Australia they should only be used by producers who are already achieving better than 80% survival from their twin scanned ewes.

The main reason given for using self replacing composite flocks is to reduce the cost of buying replacement ewes. Paying \$250 or more for replacements has a significant effect on profitability. This is why many of our clients have been mating Multimeat rams to their crossbred or composite ewes to breed their replacements. Because of their high reproductive rates this means that only 30% of the ewes need to be mated back to Multimeats to breed the replacements and 70% can be mated to terminals. No lamb production system can be efficient without the use of high ASBV terminals.

Our industry leaders are discouraging the use of these genotypes because of greater lamb losses. It is true that if you have higher percentages you will lose more lambs. In the Elmore trial the 40% increase in marking rates was associated with a 7% increase in lamb loss. These same leaders are encouraging producers to do everything to increase mating weights to increase scanning percentages but when we say you can have 60% increase without reducing stocking rate or supplementary feeding it is somehow wrong.

Summarising, the differences between the genotypes available in Australia are known and if you truly want to increase weaning rates then the only genotype which will deliver a significant increase is the Multimeat. The only other genotype which had the genetics to lift scanning percentages was the Finns and their poor growth characteristics has resulted in their almost complete disappearance from the Australian landscape.

The greater source of confusion in the industry is the recent emphasis on selection for ewe efficiency. This is often expressed by the figure obtained by dividing the weight of lamb produced at 100 days or at weaning by the weight of the ewe at mating or some other point of the breeding cycle. So if a ewe is 70 kgs at mating and she produces 70 kgs of lamb at 100 days then she has an efficiency of 70/70 which is 1 and that is the gold standard.

The first point here is the ability to establish the dam's date of lambing so that the 100 day calculator is accurate is almost impossible on commercial properties without tagging lambs at birth as is done in stud flocks. Some may say that by lambing in tightly constrained lambing spreads that the mean lambing date then becomes the 100 day reference but this still severely penalises the later lambing high productivity ewes and would lead to the culling of ewes completely unnecessarily.

Reproductive traits have a very low heritability and repeatability so the reason a ewe without a major fecundity gene present has twins is almost completely determined by environmental circumstances. Although it might seem correct to select your ewes on a basis such as this it is likely to be very time consuming and deliver little benefit even if you tagged the ewes at birth.

Yes it is true that some of the ewes in your flock are producing much more than others but the cost of identifying them and breeding from them will not be justified for the commercial lamb producer. The low heritability and repeatability of reproductive traits means that it is not the same ewes which are the best producers each year. You have to rely on your ram producer to deliver you genetics which will produce you efficient ewes. The main features which will deliver this are high scanning rates coupled with moderate ewe size.

The underlying problem with maternal genetics relates to ewe size. The indexes have been heavily weighted for growth and since it is highly correlated with adult weight we have seen a large increase in ewe size. (Phil Graham NSW DPI address at Lambex pointed out this very fact) So the more you select for growth the heavier the ewe becomes. The chase for higher figures has seen many of the composites infusing terminal genetics into their flocks to achieve higher breeding values and it has been very successful. In the Elmore trial the composites were 10 kilograms heavier at the same weighing but marked 40% less lambs. The lambs from these ewes will have a greater potential for growth but you can run less of them and they produce a lot less lambs. It is taken to a ridiculous extreme when you see Terminal breeders claiming to have a maternal line.

As a commercial breeder you have the choice of producing a beautiful line of lambs which top the market or making money. It is difficult to do both. You can of course have a finishing system to turn out beautiful lambs but this needs to be assessed as a separate enterprise or your objectives will be confounded. It is my contention that your lamb production system has to be based on prolific ewes of moderate mature weight. Currently in Australia the only genetics which can provide this are the Multimeat genetics. Having said that you need to know that your current system is capable of achieving an 80% survival of twins before taking them on.

There has been a significant increase in demand for rams as these genetics continue to perform so you are advised to contact me early if you want to try these genetics. You can contact me on 0428647457 or at earl.kerami@bigpond.com.

Colin