

Sheep industry facing serious change

By TRINITY GOLDING

DR Alex Ball told producers at last week's LambEx conference that it was time to get serious.

Dr Ball, who is Meat and Livestock Australia's (MLA) sheep research and development manager, said the Australian sheep industry was making genetic changes at twice the rate of beef cattle in Australia.

"We are also making changes genetically at twice the rate of the dairy industry and that is the power of the Australian sheep industry that you have at your disposal," he said.

"We now have two breeds of sheep in Australia, terminal sires and maternal sires.

"Merinos are a part of the maternal industry."

Dr Ball asked producers what heritability was.

"Every trait that we deal with in the Australian sheep industry is heritable," he said.

"The really interesting thing is most of those traits bar one are highly heritable.

"So we are making changes in this industry at a rapid rate."

One of the essential tools that enables lamb and sheep meat to remain competitive with other forms of agricultural and in international markets was efficient genetic evaluation systems that facilitate genetic improvement for key traits of economic significance.

Dr Ball said Australia was well placed in having LambPlan and MerinoSelect as national systems that calculate and supply genetic information to the terminal, maternal and Merino industries respectively.

"Improvements in growth, carcass traits, reproduction and maternal performance will result from careful selection of the right animals within each breed," he said.

"Importantly producers should be aware of all traits in both ram and ewe selection if they are to make improvements

that underpin future production and productivity changes."

Dr Ball said growth rate still remained king for many production systems.

"For this reason any genetic program that is focused on lamb production must have growth rate as a key component," he said.

"It is quite simple, lambs sired by rams with higher ASBV's for growth will be heavier, leaner and will have higher lean meat yields at the same age compared to lambs sired by rams with average or lower growth ASBV's.

"However ram breeders and commercial producers, regardless of breed and sector, should be targeting growth rate at a time when it matters, between birth and eight to 10 months, not at hogget ages and particularly not at adult ages."

Dr Ball believed lambs growing to 500 grams a day was a worthy target, having rams that weighed 170kg at three years was not.

"For terminal sires, there is the range of 34.5kg at post weaning weight (PWWT), which translates into 17.25kg liveweight or 8kg in carcass weight at 200 days of age. This however represents the extreme of availability," he said.

"The real value exists in selection of the top 10pc versus the industry average, which translates into an opportunity to improve carcass weight by 2.5kg or \$12.50 a lamb based on current prices."

Dr Ball said there was another component of growth that should be considered by breeders wishing to improve carcass weight.

"Both LambPlan and MerinoSelect produce ASBV's for maternal weaning weight (MWWT), often called milk," he said.

"While the ranges are not as significant as those for direct growth, ewes sired by rams in the top 10pc will wean lambs



□ Discussing the vast genetic opportunities to improve lamb and sheep meat production at last week's LambEx conference was Dr Alex Ball (left), Meat and Livestock Australia, and NSW producer Tony Schwager, Mareeba, WeeWaa. Mr Schwager said the conference had been very informative. "The speakers so far have been excellent," he said. "MLA and the sponsors have done a fantastic job, now we just need something like this on the eastern seaboard."

1.5kg heavier than the average and therefore could achieve another 0.7kg in carcass weight."

Dr Ball said once growth rates had been determined, it was important to make sure that the muscle and the fat were in the right places.

"Figures have shown that ram breeders have responded to industry market demand of increased growth and reduced fat," he said.

"A balanced approach has also led to significant improvements in lean meat yield.

"Generally, selection for improved growth and leanness will continue to give the greatest response in lean meat yield (LYM).

"Ram and commercial breeders should be aware, however, that LMY is a measure of the total meat yield, it is not a measure of where that meat is located and hence what the value of that meat will be."

Dr Ball said fundamentally

the industry must address marking rates.

"The difficulty is that process in genetic selection for number of lambs weaned (NLW) is slow as a result of the low heritability," he said.

"However it is a trait that offers opportunity for lamb production owing to the fact that purchasing rams with better NLW is a relatively cheap option as genetic selection offers a permanent and cumulative change."

Dr Ball believes increasing Australia's lamb and sheep meat industry competitiveness will be based on the ability to satisfy consumer expectations.

"Now that lamb is a premium product that demand will only increase," he said.

"The key attributes that consumers will relate to in lamb are tenderness, juiciness and flavour, as well as the human health attributes.

"Figures have shown that in general all the new traits for eating quality have a moderate to high heritability."