

BETTER BREEDING – IMPROVING RETURNS THROUGH BETTER RAM SELECTION

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SUMMARY

BETTER BREEDING is an extension project aimed at commercial woolgrowers to enable them to increase their returns through better ram selection. This will be achieved through running fifty workshops and thirty on-farm ram evaluation trials across South Australia.

Independent evaluation has shown the project is exceeding expectations. It is achieving fundamental change in how woolgrowers approach their flock breeding decisions. Woolgrowers indicate that they are now in control of their breeding operation and are seeking more information about the rams they buy.

The project and in particular the workshop module, is tried, proven and suited to all of Australia.

Key words: Merino, breeding, progeny, ram evaluation, extension

INTRODUCTION

Low wool prices are forcing commercial woolgrowers to review all aspects of their wool enterprise to remain in business, including evaluating their ram purchasing decisions. This presents an ideal window of opportunity for industry improvement.

The goal is simply to help woolgrowers pay attention to an area of their farm business that has been under-utilised for years, and often left for others to control. Adoption of improved breeding technology will pay handsome dividends for woolgrowers.

BETTER BREEDING aims to stimulate commercial woolgrowers:

- to understand the importance of ram selection;
- to seek out the genetic information to enable better ram selection;
- to purchase rams with a view to the performance of the offspring and not only on the “looks of the animal”, and;
- to routinely run progeny comparisons on their own farms to evaluate their ram selection decisions.

METHOD

In 1997, Primary Industries and Resources South Australia’s (PIRSA) livestock officers and the Advisory Board of Agriculture (ABA), a strong producer network in South Australia, were successful in obtaining 3 year support funding from The Woolmark Company to run the **BETTER BREEDING** program.

In conjunction with Agricultural Bureau branches and wool producer groups, we are running 50 **BETTER BREEDING** workshops across SA and helping woolgrowers run 30 ram evaluation trials. The emphasis of the program is on "learning through doing".

The Workshops. A cornerstone of our program. We initially tackle the issue of clearly setting flock breeding directions. We ask woolgrowers what their average fleece weight, fibre diameter and lambing percentages are to come up with the group average. These figures are used in conjunction with market reports to calculate the benefit of increasing fleece weight by 0.5 kg, reducing fibre diameter by one micron, or increasing lamb body weight by two kilograms.

We then show woolgrowers the extent of the genetic variation that exists in their flocks and in the national flock by using on farm and local data and results of interstate wether trials. They learn gains of \$7.00 to \$10.00 a head are possible.

The growers are amazed by the opportunity this presents to increase their income. The exercise is all the more powerful because their information is used to calculate the figures. They then begin putting into motion a plan to reach those goals.

Ram evaluations. The final significant step is for participants to see the importance of evaluating the offspring of an alternative source or better grade of ram on their place, before going out and making wholesale changes. Why? To ensure they are getting value for money and that the rams are taking their flock in the direction they want to go.

Woolgrowers are encouraged to run valid trials. The ewes are drafted at random for mating, at least five rams are used per group and the ewes are run together at all times except for mating and sometimes lambing. Offspring are reared together and their performance is compared as required by the woolgrower until at least the hogget shearing.

BETTER BREEDING guidelines on how to set up the ram evaluations and record keeping books are available.

Field days associated with these sites are planned. It is early days for results, but even the few we have demonstrate the importance of this checking stage. One bloodline has produced offspring with slightly heavier wool weights and wool on average 1.2 microns finer than other bloodlines (this is from the first cross offspring - the difference will increase in the purebred stock). This means big dollars if this is the direction the producer wants to head.

Other comparisons have shown differences in liveweight, flystrike resistance, the incidence of black wool and the growth rate between the offspring.

Each woolgrower selected the bloodlines they wished to test.

A **BETTER BREEDING** newsletter is published quarterly and sent to workshop participants and stud breeders. A Technote series helps commercial woolgrowers understand performance records.

RESULTS

The workshops have been enthusiastically received and are having an immediate impact:

- Within 12 hours of a workshop we have had woolgrowers coming in to discuss and commit to setting up a ram evaluation trial;
- Within 24 hours woolgrowers have bought a line of purebred wethers or ewes from an alternative bloodline to compare their production;
- Some woolgrowers have asked their breeders to provide relevant performance records. Performance breeders report increased inquiry, with the workshop named as the catalyst;
- As a direct result of attending a workshop, some breeders have changed their practices. They are now getting fleece weights on their rams to go with the midside samples they routinely take. They plan to run the results through a Rampower index. In one case this involved introducing a lamb shearing; another has delayed shearing so the results are more meaningful. Why? "The workshop confirmed I should go a step closer to providing full Objective Measurement data for my clients", was one response.

EVALUATION

The Woolmark Company has funded an independent consultant to evaluate the program. A summary of her interim report is below (Taylor pers. Comm.). The results are from 465 workshop participants.

*"The **BETTER BREEDING** project team has set out to improve the rate of genetic progress in Merino wool breeding. The first year of the program has focussed on expanding farmers knowledge base, awareness of gains to be made, goal setting and the need to select animals based on performance rather than 'the look of the animal'.*

- *Evaluation results indicate high levels of satisfaction;*
- *There is evidence of active learning and significant attitudinal shifts in the willingness to get involved in flock evaluations and in their ability to ask useful questions of their studmasters;*
- *80% of participants found the workshops to be of high value;*
- *Workshops met or exceeded the expectations of 98% of the respondents;*
- *94% wanted more information about the program;*
- *While only 20% of respondents have undertaken ram evaluations, 95% now think they are a good idea and farmers are now more willing to get involved;*
- *95% of participants indicated they will make more profit as a result of being involved in a **BETTER BREEDING** workshop."*

"Results from a random telephone survey of workshop participants were consistent with the written evaluations. Respondents had excellent recall of key messages, even six months after attending the workshop."

DISCUSSION

Bloodline differences are significant (Coelli *et al.* 1998). An analysis of wether trial data has been regularly published for a number of years, yet very few producers attending the workshops were aware of the results.

As a direct result of the program we expect demand for more productive bloodline rams to increase; a reward for the effort those breeders have put in to get there. Commercial woolgrowers will also become more objective in their ram purchasing decisions and be willing to change studs as necessary. Ninety six percent of workshop participants indicated they would change ram source if necessary to achieve their goals.

Some breeders commented that the workshop made them “think about where they get their rams from.”

Twelve Merino ram breeders have indicated they wish to be involved in the **BETTER BREEDING** ram evaluations. Some of these are prepared to donate rams or negotiate on the sale price, realising being involved will help them benchmark themselves in the industry.

What are the critical success factors?

- Timeliness. The program offers something that woolgrowers have control over in a depressed market and gives them something to look forward to. It is attracting motivated producers who are prepared to act;
- The partnership between a Government extension service (PIRSA) and the ABA, thereby giving members of pre-existing groups the opportunity to participate;
- Simple messages uncomplicated by genetic theory. Producers can clearly see the benefit;
- Relating the concept to something they do in another discipline, eg. the steps they take in changing to a new crop variety;
- Two facilitators at workshops ensure a flexible, lively and interactive learning environment;
- Professional skilled facilitators who respect everyone’s opinion, are able to draw on participants’ experiences and facilitate any discussion on important aspects for the group.

BETTER BREEDING pays handsome dividends. Through the program we have met producers who changed bloodline but didn’t do an evaluation. They now realise they were taking a risk and still really don’t know the result. Another group have jumped into a change without a preliminary evaluation and been disappointed with the results.

BETTER BREEDING will ensure the participating woolgrowers make more money and that the stud breeders with the best rams are rewarded. Stud breeders will have an incentive to use objective measurement in ram selection and in marketing. As a result, the rate of adoption of advanced breeding technology and resultant genetic gain will increase.

REFERENCES

- Coelli, K.A., Atkins, K.D., Casey, A.E., and Semple, S.J. (1998) “*Merino Bloodlines: The Comparisons: 1987-98*” NSW Agnote DAI/52