



AGE awareness meeting: A personal view

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Earlier in September at the Richmond Club, Allan Casey and Bob Richardson presented the first of the two AGE awareness meetings to be held in NSW. There were about 30 breeders in attendance with good support from H/BM members and only a couple of members from the Central Coast/Hunter and Sydney Coast/Highlands regions. The following report provides my opinion about the meeting and my comments reflect an understanding of animal genetics and my doctoral research into the acceptance of genetic improvement plans in other livestock industries.

Over the day Allan spoke about the AGE (Across-herd Genetic Evaluation) program to be run in conjunction with NSW Ag's specialist breeding unit Advanced Breeding Services. For those members not already aware of the AGE program, it is a plan to fast track the genetic improvement of our animals through the calculation of Estimated Breeding Values for a number of commercially important traits. The program is open to all members who wish to join regardless of the colour and fleece type they breed. RIRDC, a rural research agency of the Federal Government, has agreed to financially support AGE over the next four years.

The aim of AGE is to calculate the genetic value of our alpacas based on the measurement of a number of traits which would be recorded by members of the AGE program. Currently we all make mating decisions based on a mix of show results, an animal's phenotype (appearance of an animal) and limited progeny testing. It is impossible for us to know with any certainty the true worth of an animal's genes.

One of the concerns raised early in the meeting was the issue of unscrupulous members exaggerating either how fine their animals were or how much fleece their animals cut. Allan reassured us that this is a common fear in all the industries that have adopted a program such as AGE. However, as the estimated breeding values are calculated based on the measurement of traits and are linked with the performance of relatives through the pedigree records, it is impossible to cheat the system in the long-term. If a breeder claims a high fleece weight EBV's for progeny of a particular sire, then other breeders would also expect that this superior EBV performance should be reflected in their own progeny by the same sire. If this is not the case, then someone is cheating and it is most unlikely that some breeders are under reporting their fleece weights! So if a member chooses to cheat, they would be found out due to inconsistent performance in other breeder's herds and the dishonest breeder would

sully their reputation.

To encourage entry to the program, the AGE working party specified only four compulsory traits - FD, CV, Comfort Factor and total fleece weight. The compulsory fleece traits are appropriate for fleece wethers but many buyers with a commercial focus will be interested in a wider range of animal traits for breeding stock. A strong case can be made for encouraging breeders to submit to AGE other key animal traits such as body weights at a range of ages, testicular size in males and mating age for females. If you weigh your animals, including cria birth weights, I would strongly recommend that this information be submitted with the compulsory fleece traits.

One of the AGE documents released some time before the meeting stated that EBV's would only be recorded after the second shearing and that breeders might like to submit additional records based on an animal's performance in its fifth and eighth shearing. I must confess, I don't remember reading this before the meeting and as a consequence I was surprised to find out that the 2003 drop of crias will not have any compulsory fleece trait EBV's calculated until their second shearing in 2004.

For breeders concerned with the issue of 'micron blowout' between the first and subsequent shearings, this would be a disappointment. The main difficulty with this decision is that it is too late by the fifth shearing to have confirmed, through AGE, that a particular mating decision you made some six years earlier resulted in an animal that is producing too coarse a fleece! As a breeder, I'm interested in finding out the rate of micron blowout over the first three or four shearings. We all know about certain animal lines that keep their micron with only small increases from year to year. As an industry, one of our challenges is to rapidly increase the number of these desirable animals using appropriate advanced breeding technologies.

There is some genetic basis for this decision as it was discovered in the merino industry that breeders were not confident making selection decisions for rams based on the 1st fleece results as by the time of the second shearing, a ram's ranking may have changed for fleece weight and fibre diameter. However, this problem was overcome by introducing what is known as a 'two-stage' selection process. I would prefer that EBV's be calculated on the compulsory fleece traits for both the first and second shearings. I accept that the animals that I thought were performing well on the fleece traits at the first shearing may not perform as well on the second fleece. I would rather know this than be ignorant of this change. Until further research is undertaken with alpacas, we simply do not know enough about the factors driving 'micron blowout' which is a much more significant problem than experienced in the merino industry. Personally, I feel there needs to be greater discussion in our industry how we can ensure that our animals produce fleeces of significant commercial value for at least five shearings.*

Moving to less controversial matters, the cost of joining the program is \$5.50 per animal. If you enter additional results in subsequent years you will be charged another \$5.50 per animal. An obvious question is what animals should I enrol in the program? Allan's answer was very simple. You enter an animal into AGE if you are interested in knowing the genetic worth of the animal but you must be prepared to enter all the progeny from that animal regardless of whether the animal drops an excellent cria one year and an awful cria another year. So in our herd at Meadow Flat we will choose to enter perhaps only 70% of our breeding females. It really depends on the number of 'old girls' each breeder owns and your level of confidence in the EBV's generated by the AGE program and how you think you can best use the EBV values.

Despite having reservations with a few aspects of the AGE program, I am confident that the use of EBV's will assist our industry to achieve our breeding objectives at a faster rate than without the AGE program.

For breeders a bit ambivalent about whether to enter the program, why not enter your good animals and wait for the first results which should be available at the end of this year. A great thing about the

program is that AGE does not tell you what you should be breeding for, that's entirely your choice. As a safeguard you can choose not to have your EBV's released publicly if you don't want to. I suspect a lot of breeders will choose to have private EBV values until they become comfortable with AGE and can see the significant advantages the program represents.

Many people at the meeting commented on the professional manner in which the program was presented. They were appreciative that Allan and Bob gave generously of their time to provide an informative session and an opportunity for members to clarify issues and give feedback on the AGE program. If you weren't able to attend the meeting, a comprehensive AGE booklet is available free of charge from the National Office or our Regional Secretary.

Postscript

Since the Richmond meeting in 2003, the AGE program has been modified to address the issue of 'micron blowout'. Instead of the requirement that animals be at least 16 months old and on their 2nd fleece, EBVs can be calculated on their fleece performance at a minimum of 10 months of age on either their 1st or 2nd fleece. If 'micron blowout' is important, you will need to record the compulsory fleece trait performance also at the 2nd stage (16-24 months & 2nd fleece) or Adult stage (>25 months). If you have a copy of the AGE booklet issued at Richmond (Edition 2), The current edition is 6B

Ian with his partner Cathi, have been breeding alpacas since 1996. Ian is doing at doctorate examining the adoption of breeding technologies in the sheep industry.

*Patagonia Alpacas
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