

THE AUSTRALIAN ALPACA FLEECE INDUSTRY

There is often a big difference between a good quality alpaca and a good fleece. Many animals have a high value because of their use in breeding programs or their future genetic potential - however these animals may in some cases produce a fleece that is worth very little.

There are many reasons why this is the case: it could be that the animal is older and now only produces a very short fleece, the fleece is from a pregnant female that has put all her energy into producing a cria and because of this the fleece is very short, it could be that the fleece has become quite coarse as the animal has aged, it is a show suri animal and the fleece has been allowed to grow for more than 12 months and is now overgrown, or the fleece could have excessive broad guard hair present.

Other reasons for a fleece not reaching its maximum possible value may be due to how the animal was managed over the fleece growth period. The most common issue here is the presence of significant vegetable matter (VM), the term used to describe contamination by grasses and seeds. Over the past few years with much of Australia in drought we have seen an increase in the number of good fleeces downgraded due to excessive VM. Unfortunately many of these have been the better, finer fleeces and cria fleece because these tend to pick up the most VM. This reduces a potentially high value fleece to a much lower value grade.

The reason why there is such a difference between main fleece grades and the VM grade is that in order to remove VM the fibre has to be put through an extra process called combing. This is not only an extra cost to the manufacturer but it also results in a loss of fibre as when the VM is removed it also takes with it bits of fibre.

A regular comment from growers is that they felt they did not receive enough money for their fleece or that what they got barely covered the cost of shearing. It's important for all growers to be aware that the world price of alpaca fibre, like all products traded internationally, continually fluctuates. Moreover, AAFL's downstream customers will not pay more for fleece than they can buy it for from elsewhere, and there is a ready supply of fleece of nearly all grades available, especially from Peru. This leaves no option for AAFL except to offer fleece prices close to or slightly above prevailing world prices. However, availability of the highest quality fleece grades is quite limited internationally, and thus there are clear opportunities for high prices to be paid for these over the longer term.

Currently alpacas in the most cases are not commercially viable on fleece production alone due to the limited selective breeding that has occurred. Low fleece weights, large variations in micron within one fleece, high level of guard/medulated fibre and micron blow out from year to year are the main reasons for this.

Also with the average number of alpacas owned per breeder at around 12 it cannot be expected that every grower will achieve a viable income from fleece production alone – you only have to look at other livestock industries and more specifically the wool industry to see that a grower must be running many thousands of animals to make a living otherwise the cost of production is greater than the returns.

There are however many positive examples to look upon as we go forward. Other fibre industries have also started from similar base – the original Merino sheep brought into Australia were much different to the sheep of today, now an average 18 micron Merino would produce between 4 and 5 kg of wool annually and a 23 micron Merino would produce 7-8kg of wool with some producing up to 12kg. Importantly in all of these cases only 10-15% of the wool would be considered outsorts or lower value fibre (skirtings and bellies).

Merinos have also been bred to suit every environment in Australia from the harsh dry outback to high rainfall areas of Southern Australia, each adapted to suit its particular environment.

It would appear that alpacas must reach similar levels also to become commercially viable, always keeping in mind however we do not want the negative issues that the wool industry has faced namely the need for mulesing.

Although much more improvement is needed we have seen in just two decades remarkably impressive improvement in the quality of Australian fibre produced. In the last three years alone AAFL has received an increase of around 290% in the amount of the top H1 grade from growers, an increase of 117% of H2 grade and actually a decrease in the lower quality H4 grade of about 8%. These figures alone show that real advancement can be made in short periods of time especially where advantage is taken of programs involving careful recording and measurement of progress such as embryo transplant and AGE for example.

The Australian alpaca industry which currently produces approximately 120,000kg of fleece per year is still in its relative infancy compared to the Australian wool industry which for the 06/07 year produced over 400 million kilograms (interestingly this still only makes up around 2% of the world textile production).

Because of these volumes the wool industry is able to utilise just about all the wool that is produced. The biggest problem for the alpaca fleece industry currently is it doesn't have enough volume and it can be very hard to attract potential customers when volumes are low, especially in the lower grades of fibre. An example of this is the H9 MXD PK grade which has very limited use due to the fibre being short, mixed for colour, generally quite coarse (containing a large percentage of medulated fibre) and as we only have relatively small quantities of it it is not an attractive proposition for potential manufacturers.

Another problem of low volumes is the impact on fleece processing costs. Fleece scouring is a critical issue as all fibre must be scoured before it can be further processed. At present, AAFL only has access to small scale scouring (washing) plants such as the CSIRO in Geelong (now planned to close in 2009) and Agresearch in New Zealand. Both of these have a daily throughput of around 600-800kg. On the other hand a commercial wool scour can process 20-30,000kg a day. But for even these commercial scours to remain viable in today's world they need to be running almost 24 hours a day, 7 days a week, as any down-time for repairs or cleaning in preparation for a new batch is very costly.

These huge throughput requirements mean that we are unable to have alpaca fleece treated in a fully commercial scour because our annual production is less than a week's work for them. There are also potential risks of coloured fibre and medulated fibre contamination during processing. These are very serious issues in the wool industry and have been virtually eliminated so alpaca – as well as other rare fibres - poses a real contamination threat in both of these areas.

For manufacturers to produce good quality products regardless of the specific product it is critical that they receive fibre that is even and consistent for not only micron but also length and colour.

All fibre processing machinery has been set to handle fibre within a range – this range depends on the type of product being made, the higher the quality product the tighter the range. Fibre that does not fit within this range, especially fibre of varying length, can cause major problems. If there are fibres that are longer than the set range there can be problems of tangling around machinery and if the fibre is shorter than the set range the manufacturer will have a high loss as these short fibres fall through the machinery and are unable to be processed.

Because the opportunities to process natural fibres in Australia are steadily reducing each year AAFL felt it needed to be prepared for the future as the volumes of fleece increase and our markets become established. A critical issue has been the need to process raw Australian fleece in Peru because of likely lack of local capability. However, until recently Peruvian government authorities would not allow alpaca fleece from Australia into Peru. After much lobbying with the help of Austrade and the Australian quarantine authority AQIS, AAFL has recently been granted approval to send greasy (un-scoured) alpaca to Peru. This is a major industry breakthrough, as we are now able to have Australian alpaca fleece processed by people with the world's greatest experience in processing alpaca - and with processing plants that are dedicated to handling this unique material.

Overall, AAFL believes it is critical to the future of our industry for our best quality fleece to be made into garments of the highest possible standard. Our vision is to aim toward top end markets directly competing with the best cashmere and other rare natural fibre products - the optimum path for growers to receive a premium for their fleece production in the longer term.

It's important for all growers entering or involved in Australian alpacas today to understand that this industry is still very much in its infancy. We are dealing with an animal that has seen little selective breeding for positive traits prior to the last 20 years. The long-term successful development of the Australian industry requires individual breeders to establish the level they wish to fit into the overall industry. Some breeders see themselves as top level stud stock producers; others may see their future in running large numbers of commercial stock. Many are primarily interested in the competitive and friendly social aspects of showing and judging. Then there are breeders who wish to own alpacas as pets or for producing their own handcrafts. There is of course a legitimate place in the industry for all of these, but the first two breeder groups rely entirely on the establishment of a viable commercial fibre industry, while the existence of a growing market for fleece fundamentally underpins stud alpaca values.

A fleece industry can only succeed if a high proportion of fibre production finds its way as quickly as practicable into the processing system. This in turn will enable markets to be built up in preparation for the foreseeable future when Australia is home to over 1 million alpacas producing 3-4million kilograms of fibre annually.

AAFL, commercial processors and most growers all have a common aim: to establish an industry with a viable long-term future. There is no doubt about the potential bright future for the alpaca industry in Australia, because of the continually increasing customer demand for environmentally friendly natural products. There is a growing international belief that Australia leads the world in animal genetic breeding advancement. We all need to promote and back this belief: to ensure it becomes a reality.

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