

Submission
No 29

**INQUIRY INTO PREVENTION OF CRUELTY TO ANIMALS
AMENDMENT (RESTRICTIONS ON STOCK ANIMAL
PROCEDURES) BILL 2019**

Organisation: AgVet Innovations (AVI)

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**ETHICAL
LIVESTOCK
SOLUTIONS**

AgVet Innovations Pty Ltd
ABN 23 633 609 873
Gate 2 Dennistoun Avenue
(PO Box 266) Guildford NSW 2161

W agvetinnovations.com

AgVet Innovations

AgVet Innovations (AVI) bring ethical livestock solutions to agriculture, enabling livestock enterprises access to animal management solutions that improve animal welfare outcomes coupled with animal production increase to improve the bottom line. Our Sheep Freeze Branding (SFB) solution is the result of over a decade of R&D. The patented technology provides an ethical and cost-effective single application solution for the promotion of sheep breech health for life, reducing the risk factors causing flystrike and promotes ease of crutching and shearing.

Steinfort Agvet

Prior to creating AgVet Innovations, Dr John Steinfort was Managing Director of Development Company - Steinfort Agvet a veterinary focused R&D company based in Warragul Victoria, with a proven record in the conception and development of equipment and processes for livestock, with a specific and defined focus on improving animal welfare and livestock production outcomes. A list of achievements are detailed below:

- 1) AVA Cattle vets publication paper written on "The observations, diagnosis and prognosis of downer cows" and included diagnostics not previously utilised within the veterinary profession globally.
- 2) Pelvic Lifts (more humane lifting product for downer cows)
- 3) Riser Tanks (floatation tanks for cows with 80% recovery rates, compared to industry standard of 50%)
- 4) Enduro Tags (livestock tags including NLIS and management tags that have proven highest retention rate of all livestock ear tags with unique cutting edges that have less impact on the animal during application). Manufacturing plant in Lilydale Vic.
- 5) Initial development of Sheep Freeze Brand process to minimize flystrike susceptibility in sheep.

AWEX

Through their 2019 National Wool Declaration review process, AWEX defines mulesing as the removal of skin from the breech and or tail of sheep using mulesing shears. AWEX define SFB as a Non-Mulesing process.

AWEX will again review in January 2021 after further Melbourne University SFB trial results are published.

The Sheep Freeze Branding Process

SFB has been in development since 2008, when it became clear to innovator Dr John Steinfort that Australia's commitment to cease Mulesing by 2010 could not be met due to a lack of an effective, affordable and scalable solution. Having dedicated his recent working life to the modernisation and development of welfare -considerate livestock systems, Dr Steinfort begun his own R&D into an ethical alternative using liquid nitrogen through a patented cryogenic process.

Please refer to the PowerPoint presentation (attached PDF Appendix 2) for an understanding of the SFB process and its current commercial status. AVI are training contractors on how to utilize the technology and they are switching their customers from Mulesing to the SFB Process. AVI have treated 110K lambs over the last few years.

The Process Methodology In Brief

Liquid Nitrogen is used to freeze the skin in humans (surface skin tumours and warts) as well as the skin of livestock (Branding and Identification).

SFB is based on the practice of Freeze Branding, widely used in the identification of cattle and horse bloodstock around the world with a small variance from using a frozen brand to using a specialized jaw system that tents the skin and applies Liquid Nitrogen from the base of tented skin.

SFB assists in promoting lifetime sheep breech health, providing a transitional stepping-stone for wool growers whilst improvements in animal genetics continue to be made.

A reduced wrinkle score is effective in reducing fly strike risk, decreasing dag accumulation and assists in the ease of shearing and crutching. With current capability and contractor training, Australian wool growers now have an ethical and effective solution to replace mulesing.

Independent Studies

In summary of the technique, further development work continues whilst demand for the process increases. The demand is from wool growers seeking better animal welfare outcomes, which in turn, give better animal production outcomes, as proven by our independent trial study. See Appendix 1. Feedback from producers who have used the SFB process is the lambs appear like nothing has happened to them, "These are the best Weaners we have ever produced". "We have had increased wool clip and increased body weights".

AVI have contracted the University of Melbourne to conduct further independent peer reviewed Animal Welfare evaluation of Liquid Nitrogen application in sheep.

AVI Recommendation to Producers for the use of Pain Relief

AVI as a company believe in the best practice for animal husbandry processes and we are pioneers in this field.

We strongly advice our customers that the use of pain relief using Meloxicam is the gold standard for all lamb marking processes.

This is an extra cost of approximately \$1.00 incl per lamb. The uptake has been 95% because we are able to discuss directly the merits of utilising the injection.

The results are excellent. The lambs exhibit their normal ambulatory functions and actively seek out their mothers. The relief is best seen in the castrated wether lambs where very few of these lambs go down with the castration pain.

Castration pain is probably the most painful aspect of the lamb marking procedure and with SFB will cause some reaction during the application process, but once released from the cradle, they run off and mother up quickly. Weaners will tend to graze almost immediately and their gait is normal. They move easily and are often seen running back to their pastures.

All of our producers have been very impressed by the results and can't believe the benefits that SFB process in conjunction with meloxicam with no set back and subsequent continued growth of the young animals during the important part of their growth phase, they are also impressed by the bloodless process which does not set the animal back.

Animal welfare benefits translate into animal production benefits, where the return on the investment is readily gained.

As a company, we have submitted information to AWEX, asking that they consider acknowledging pain relief not just for mulesing, but for all lamb marking categories. This way producers should be able to be transparent and receive some monetary benefits when selling wool and livestock.

Transitional Steps

World consumers of wool have demanded cessation to mulesing for a considerable time now. I believe most producers understand this demand and many have ceased mulesing in transitional steps.

There continues to be momentum now to consider genetics to minimize flystrike predisposition. Genetics in breeding plainer sheep also changes the wool type, quantity and sheep type. This is a difficult pill for many producers to follow as this changes their many generations of sheep breeding and will no doubt not be for everyone.

This is why a humane alternative in the short to medium term can offer a pathway where genetics can be introduced in a timely manner where profitability can be maintained and where animal welfare standards can also be maintained in relation to flystrike management and fly chemical usage.

There is growing evidence that some of our best fly prevention products are showing breakdown of fly control due to fly larvae resistance to these chemicals. This is a serious concern to the industry and non mulesed growers are much more reliant on fly strike preventative chemicals. Many producers can not readily bring their many mobs of sheep in during a fly wave. SFB can also be a viable tool for Genetic non mulesed wool producers, who may struggle with the increased workload and costs to keep on top of Flystrike and general breech maintenance.

Animal health implications of ceasing Mulesing abruptly.

The difficulty with dag accumulation and increase wool laden skin surrounding the breech and tail are numerous. This leads to increased predisposition to flystrike and difficulties in crutching the breech are leading to skin cuts and injuries.

Some of the difficulties we have encountered in growers is that there are growers who cut short the tail length so that dags and excess tail wool are eliminated. However this can lead to increased dystocia (difficult birth leading to intervention and or ewe/ lamb deaths) also can also lead to prolapses and later in life a significant increase in skin cancers of perineum and vulva.

Cessation of mulesing needs to be transitional and an appropriate introductory time considered, otherwise there will be other counter-productive animal welfare issues.

In considering a deadline to phase out mulesing

A timeline needs to be thoroughly and thoughtfully considered, a deadline of 5 years would allow further transition to SFB and a greater number of mulesing contractors trained in the process, at demonstration days we have significant interest from existing mulesing contractors who want to transition to providing SFB. This timeframe will allow genetics to improve and play their part. The extensive work into fly control products and genome work would have had time to develop and potential gain some traction. The shearer workforce would have had time to develop as non mulesed growers rely heavily on twice a year shearing.

Summary

Our company AVI can offer Australian Wool Producers a transitional pathway to cease mulesing and head towards a genetic plainer sheep. The SFB process creates a plain breeched sheep that provides the sheep with decreased lifetime predisposition to flystrike with decreased dag accumulation and decreased shearing cuts and injuries through excess skin. In our program we are highly recommending the use of meloxicam(systemic target) and local anaesthesia(topical and targeted) as a gold standard for all lamb marking processes, this reinforces to consumers of Australian wool that Australian farmers are serious about ceasing mulesing (as no one likes doing it) and that Australian Wool Producers hold animal welfare standards highly. At the same time Australian Wool Producers expect consumers to reward the extra costs and efforts in maintaining high animal welfare standards and this needs to be acknowledged by our Wool statutory authorities. We do not believe in making anything mandatory, rather there should be reward for effort and appropriate animal welfare standards.