

# MUMBLEBONE

The striking benefits of breeding an overall healthier sheep

## Better breeding choices to protect lambs and their mothers

This case study explores the efforts of Chad Taylor who owns Mumblebone, a dedicated Australian wool grower, and his commitment to breeding healthy sheep, making mulesing obsolete and significantly reducing lamb mortality. Mulesing and lamb mortality are two of the largest animal welfare issues in the biggest wool producing country – Australia.

Mulesing is the most severe surgical intervention over 10 million lambs are subjected to annually<sup>1</sup>. It was invented over 100 years ago to prevent flystrike. Luckily thousands of Australian wool growers have switched to breeding flystrike-resistant sheep types which are not dependent on mulesing. These breeding strategies can not only mitigate flystrike, but further improve the overall health and robustness of sheep, resulting in reduced lamb and ewe mortality. Such holistic breeding efforts are vital since Australia has one of the worst lamb mortality rates, with an estimated 10 million lambs dying each year before weaning<sup>2</sup>.

With six generations of sheep breeding in the Taylor family, Chad and his wife Louise have found a way to end mulesing on their farm, and to better protect lambs and their mothers by combining their experience with modern breeding choices and technologies. This case study is shedding light on Chad Taylor's experiences, motivations, challenges, and benefits in achieving these welfare-driven goals.



“ The more we align our goals, the sooner we will see positive change. ”

— Mumblebone

### FOUR PAWS on mulesing: What was your motivation to phase out mulesing, and what challenges and benefits did you encounter?

Chad Taylor: To be honest, the sheep themselves gave us the last nudge to finally go fully mulesing-free. We had already bred wrinkle-free sheep through selective breeding. For them, flystrike was no issue any longer. As we saw that the remaining sheep with slight remnants of wrinkles were the ones causing issues, we decided to refine our selection even further. Together, with growing pressure from animal welfare groups and changing consumer perceptions, we decided to completely cease mulesing by 2006. Not only was this a huge improvement for the wellbeing of the sheep, breeding modern and resilient sheep that don't require mulesing provides numerous advantages, including improved reproduction rates, faster growth, higher condition score, enhanced lamb survival, and reduced ewe mortality. We highly recommend this approach to other wool growers and actively encourage them to follow suit.

### FOUR PAWS on lamb survival: What are the biggest drivers to increase lamb survival rates, and what would you recommend to other wool growers?

Chad Taylor: Our goal was to produce a physically healthy sheep that could thrive in its environment. This kind of sheep needs to have high fat and muscle content and a thinner skin so it's diverting energy to the right places – not just towards wool production which simply isn't sustainable. This makes lambs and

their mums fitter to deal with the birthing process and the first crucial days afterwards.

Due to our meticulous genetics and care for our pregnant sheep, we achieve a birth rate between 86% and 89% compared to the industry average of mere 60%. Furthermore, our ewe survival rate is around

99%. Our success can be attributed to precise genetic selection and diligent management. To enhance lamb survival rates, we stress other wool growers to work on creating strategic breeding programmes, collecting and evaluating data, and following best practices in flock management.



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#### **FOUR PAWS: What were the overall benefits of not needing to mules the sheep?**

Chad Taylor: There are many benefits in breeding an animal that doesn't need to be mulesed, not only to the animal but also to the wool growers, because mulesing is a lot of work!

#### **Since we eliminated mulesing, we have witnessed:**

- More robust lambs and better cared by healthier ewes led to higher lamb survival rates (= reduction in weaner mortality from 5% to 1-2% and an increase in marking rates from 100% to 135%)
- Less complications during birth and more robust ewes result in higher survival rates of ewes (= reduction in ewe mortality from 3-4% to 1%)
- Healthier and more fertile ewes (increase in conception rates from 145% to 160% and increase in foetus conversion – which means successful births – from 70% to 86-89%)

Moreover, we no longer need to worry about flystrike. Our sheep are now resilient, eliminating the need for labour-intensive preventive measures and chemical use.

#### **FOUR PAWS about the animal welfare benefits of sustainable breeding choices: What opportunities do you see in breeding 'plain-bodied' sheep that do not require mulesing?**

Chad Taylor: Sustainable breeding decisions open up new opportunities to improve both animal welfare standards and economic objectives by using data and strategic selection. There is a wonderful synergy created when our on-farm production goals align with the welfare needs of our consumer. Breeding a sheep that doesn't need to be mulesed is a great example of this synergy where a more resilient animal can be bred, with a higher quality fibre that, importantly, doesn't need to be mulesed.

Plain-bodied sheep with better resilience to parasites and extreme weather, as well as higher maternal



instincts, can be specifically selected and lead to better animal welfare and business benefits. We advise wool growers and brands to refine their breeds that balance animal welfare and production goals, so that we can all work together to achieve positive change in the industry. We collect supporting data from our stud flock, which we also supply to clients who want to use our genetics.

**FOUR PAWS: Is there anything you would like to share with fashion brands on how they can support efforts to increase animal welfare at the farm level?**

Chad Taylor: We advocate for a clear strategy in which fashion brands support growers or brands that actively promote animal welfare and ethical standards within the industry. Numerous wool growers are already leading the way. By assisting these growers, brands can help to generate progressive improvements that connect both customers, welfare and ethical aspirations and growers' production goals. The more we align our goals, the sooner we will see positive change.

**Chad Taylor's case study highlights the vast advantages of increasing animal welfare on sheep farms through holistic breeding choices. Benefits for both – the animals and the wool growers. By phasing out mulesing and breeding more resilient sheep, Mumblebone is an example that ending mulesing and reducing lamb mortality with a higher quality fibre is possible and benefits the entire farm. Taylor's experiences and recommendations serve as a case study for other growers and fashion brands looking to enhance animal welfare practices in the industry. Only together can we create a more sustainable and compassionate future.**

1. Lawyers For Animals. Mulesing. [accessed 2023 Jul 21]. <https://lawyersforanimals.org.au/mulesing/>
2. Ipsen M. World's best practice in Lamb Survival. Nuffield Australia Project No 1316. 2014 Apr:42.
3. Shiels D, Loughrey J, Dwyer CM, Hanrahan K, Mee JF, Keady TWJ. A Survey of Farm Management Practices Relating to the Risk Factors, Prevalence, and Causes of Lamb Mortality in Ireland. *Animals*. 2022;12(1):30. doi:10.3390/ani12010030

The FOUR PAWS Case Study series are designed to shine a spotlight on producers that have overcome particular challenges and to share their learnings with other brands. The inclusion of a producer as a case study subject does not mean FOUR PAWS endorses the overall performance of the brand in relation to animal welfare.

**Mulesing:** a mutilation practice of 6–12-week-old lambs where large skin folds around their buttocks are cut off with shears and without the necessary pain relief.

**Flystrike:** a form of fly infestation resulting from a combination of the Australian humid climate, blowflies and overbred sheep with excessive wrinkles. Flies like to lay their eggs in these sheep's wrinkles.

**Lamb mortality rate:** the number of lambs that die before the natural weaning age (a minimum of 3 months)<sup>3</sup>. AU has one of the biggest lamb mortality rates with an estimated 10 million lambs dying each year<sup>2</sup>.

**Flystrike-resistant breeding:** breeding plainer-bodied sheep without the excessive skin wrinkles as well as less wool around their buttocks and overall, more healthy body fat vs wrinkle ratio.

**Ewe:** a mature female sheep (not necessarily an animal that gave birth, but due to the production type, it usually is a mother as soon as it is mature)

**Conception rate over 100%:** means that ewes can have more than one lamb at a time. FOUR PAWS does not recommend breeding of animals that have more young than they have teats. Proper maternal care should always have priority over number of animals born.

**Weaning:** a process by which the lambs are removed from any source of milk (switching from mother's milk to solid feed)



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**For more information on certified and next-gen materials and what to consider in your animal welfare policy, please refer to the [FOUR PAWS Policy Guidelines for Fashion Brands and Retailers](#).**