

Managing merino weaners



SHEEP CRC

June 2010 © Sheep CRC Ltd 2010 This work is copyright. No part may be reproduced without prior written authorization from Sheep CRC Ltd

Key points:

- Keep weaners growing at more than 1 kg/month over summer - no growth raises the mortality risk.
- Heavier weaners survive summer better - lighter weaners are the part of the mob most at risk.
- Good pastures and ewe nutrition during pregnancy and lactation sets up lambs to have good weaning weights.
- Weaners with poor nutrition are more likely to be affected by worms and other health problems.
- Weaners need both protein and energy to grow - dry pastures quickly lose quality.

Introduction

Merino weaners can be hard to manage over the summer months and most areas of Australia report higher than 6% mortality in 20% of flocks. This represents a poor welfare outcome as well as lost income through fewer replacement animals, lower sale turnoff and poor production in the remaining animals.

The key issue facing Merino weaners is that pasture quality and quantity is at a minimum when they have a high requirement for growth, they are not yet conditioned to handle the many health issues they will face and they typically have low body reserves and so are more susceptible to infection and disease.

Which weaners are most at risk?

The lightest weaners in the mob are at greatest risk. These weaners could be lighter than others due to a number of issues:

1. The nutrition of the ewe in late pregnancy and lactation dictates lamb growth rate and this directly affects weaning weight. Ewes in condition score 2 at lambing have lambs that are lighter at birth and fail to reach similar growth rates to lambs from heavier ewes.
2. Being born as a twin affects weaning weight due to the higher requirements for nutrients for both foetuses.
3. Late born lambs have little chance of making a good weaning weight as they have less time to grow prior to weaning. Having a joining period of more than 2 cycles (5 weeks) exacerbates this issue.

Increasing the weaning weight of the lightest fifth of the mob could lift the survival of this group by 70%. Light wether weaners are 1.3 times more likely to die than lightweight ewe weaners.

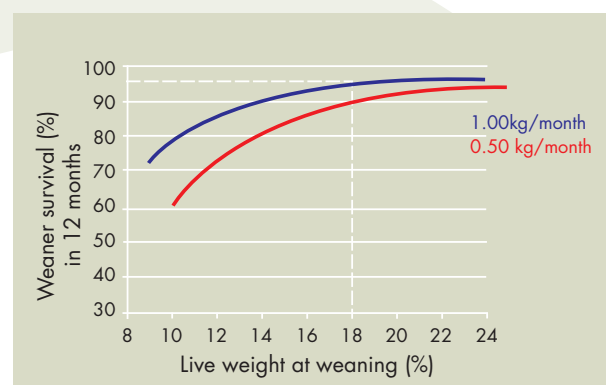


Figure 1. Survival of small frame merino weaners over summer.

Once weaned, if weaners fail to grow over the next 5 months, mortality rates can be high, particularly in the lightest sector of the mob.

Increasing average weaner growth rate from 0.5 kg/month to 1kg/month in the first five months after weaning increased the survival of lightweight weaners by 85%. This is equivalent to decreasing average weaner mortality in a mob from 12% to 2%. Figure 1 shows that the lower the weaning weight the more important post weaning growth rate becomes.

Targets:

There are two key management targets to ensure good weaner survival.

- Weaning weight of at least 20kg and 45% of adult weight by pasture senescence.
- Growth rate of at least 1kg/month after weaning

These targets will also aid in meeting liveweight targets for sale sheep or maiden ewes for the following mating.

In order to achieve the weaning weight and growth rate targets, preparation is required to ensure adequate feed will be available to the ewe during lactation and effective feeding strategies are in place once the weaners are on their own.

Achieving a good weaning weight

Lamb birthweight and growth rate pre-weaning is affected by nutrition during late pregnancy and twin bearing ewes will be most likely to have lower birth weights. Manage twin bearing ewes separately in both late pregnancy and lactation to ensure that they receive the best paddocks and adequate feed for their needs. Aim for ewes 0.3 of a condition score higher in twinning mobs. Figure 2 shows the impact of thin ewes (condition score 2 at lambing) on lamb growth rates and that twin lamb growth rates are considerably lower than singles.

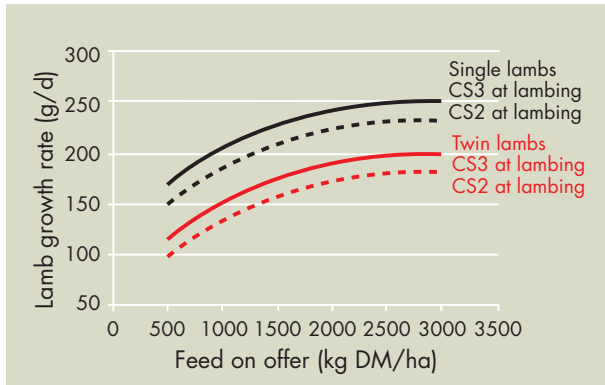


Figure 2. Lamb growth rate prior to weaning for small Merino genotype on high quality pastures. (source: Lifetimewool.com.au)

Setting up lambs for weaning

Weaning is a key time for animal health. Given weaners have little disease immunity or body reserves, an effective plan of controlling worms, dags and flies should be in place. Weaners should receive their booster 5-1 vaccination, have had a worm egg count (WEC) test done and be drenched accordingly. Vitamin E and trace element treatments should be included where appropriate.

Imprinting weaners to recognise supplements prior to weaning will reduce the frustrations of teaching weaners to feed. Feeding the lambs with their mothers four or five times on the supplement most likely to be fed to weaners will help weaners accept supplements in the future.

Supplements for weaners on dry pasture should contain both high energy and protein to ensure growth can occur. A good rule of thumb is at least 12.5% protein for weaners over 20kgs and at least 15% protein in the supplement for weaners less than 20kgs to ensure that adequate levels cover any shortfall in the pasture.

Keep them growing!

Growth rate over the summer months is the single most important thing affecting Merino weaner survival. Even if a good weaning weight is achieved in a Merino weaner (>23kg) a low growth rate can undo all that investment and significantly reduce survival.

A growth rate of at least 0.5 kg per month is critical but a higher growth rate will bring added benefits and the recommended target for weaners is;

- 2 kg/month for weaners weighing < 20 kg
- 1 kg/month for weaners weighing 20-30kg.

Management of light weaners

The lightweight tail of the weaner flock (20%) should be drafted off at weaning for differential feeding and management.

Aim to have weaners at 45% of adult liveweight by the start of summer.

Early born Merino weaners have usually achieved the target weight by summer feed shortage time but still need to maintain or grow slowly. It is still worth drafting of the lightest 20% of weaners and managing them separately to ensure they continue to grow.

Shearing in autumn in winter rainfall areas has been found to increase the mortality of weaners compared to other times of the year, with reports of a four-fold increase in mortality. Low body fat reserves after several months of poor nutrition coupled with the stress of shearing can lead to underweight or lean weaners being susceptible.

For more information:

Consider joining a High Performance Weaner group - visit www.sheepcrc.org.au and www.lifetimewool.com.au for more information or see other sheets in this series on joining length, pregnancy scanning and managing pregnant ewes.

Further Reading:

Management of Merino weaners for optimum survival and production – Harper et al, 2009, DAFWA

Improving Weaner Sheep Survival - Campbell and Behrendt, Livestock Updates 2008

The information contained in this publication is intended for general use only. Care is taken to ensure accuracy, however, the Sheep CRC Ltd cannot accept responsibility for the accuracy and completeness of the information or opinions contained in this publication. Readers are advised and need to be aware that this information may be incomplete or unsuitable for use in specific situations. Before taking any action or decisions based on the information in this publication, readers should seek expert professional, scientific and technical advice.