

Managing scanned ewes – Lambing mob structure (LF-AP-S-3.6)

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Recommended nutritional requirements of both single and twin bearing ewes and the mismothering, desertion, starvation and, ultimately, death of many lambs within the first few days of birth, has been well documented. Interactions among ewes and newborn lambs have been pinpointed as major reasons for lamb loss due to:

- 'stealing' of lambs by ewes close to lambing;
- disturbance of ewe(s) from the birth site; and
- poor bonding between the ewe and her lamb(s).



These interactions are greatest during the 2nd and 3rd weeks of a 6-week lambing period when the majority of lambs (upwards of 70%) are born.

Industry generally recommends separation of ewes based on litter size, prior to and during lambing.

Whether you run singles and multiple bearing ewes separately during lambing or consider a mix of litter sizes, will depend on factors such as:

- paddock number, availability and suitability
 - o watering points, shelter, feed
 - o pasture utilisation etc.
 - o lamb survival/lamb marking paddock history
- mob sizes – industry recommends
 - o twin bearing ewe mobs be half the size of single bearing ewe mobs
 - o maximum twin bearing ewe mobs of 150 (maidens) to 200 (mature ewes)
 - o maximum single bearing ewe mobs of 300 (maidens) to 400 (mature ewes)
- age groups
 - o whether lambing in age groups and/or
 - o lambing maidens separately

- scanning management groups
 - o if foetuses are aged and managed as early/late lambing ewes this may effectively double the required paddock number
- real or perceived benefit to costs ratios when considering paddock subdivision
- farm enterprise mix – area allocated to cropping may limit subdivision options
- labour
- ewe to lamb ratio per mob
- personal preference

It is important that the ewes are well adjusted to any supplements/grain-based rations that they will receive at lambing. Ewes should be introduced to their lambing area prior to lambing commencement. They should establish a pattern of feeding behavior and become acclimatised to your system before the lambs are born. Do not change this pattern or make changes to feed supplements/rations throughout the main period of lambing e.g. changing grain type.

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Lambing management

A National Lambing Density project, undertaken during 2016 and 2017, looked to quantify the effects of mob size and stocking rate on lamb survival.

Findings showed that, on average, the survival of single and twin-born lambs decreased by 0.85% and 2.25% (range 1.1 to 3.5%) for every additional 100 ewes in the mob at lambing, regardless of breed.

Interestingly this effect was not influenced by:

1. stocking rate when ranging from 1.5 to 12.5 ewes/ha;
2. ewe condition score at lambing;
3. Feed On Offer (FOO) at lambing; or
4. the characteristics of the lambing paddock.

A word of caution – the project was conducted across 85 on-farm research sites and, conceivably, industry recommended targets for ewe body condition score and FOO may not have 'mirrored' true industry conditions.

Lamb to ewe ratios

Scanning percentages ultimately determine your lamb (foetus) to ewe ratio.

In a normal year most medium framed, medium woolled Merino enterprises would scan between:

- 5 to 10% dry ewes;
- 60 to 65% single bearing ewes; and
- 30 to 35% twin or multiple bearing ewes.

If, in a 1000 ewe flock, scanned ewe percentages are 5%, 60% and 35% for dry, single and multiple bearing ewes, this equates to:

- 600 singles and 350 multiple bearers;
- lambing percentages of between 125 to 135% (live lambs to ewes pregnant); and
- lamb marking percentages of between 85 to 95% (live lambs to ewes pregnant).

As mentioned earlier, interactions among ewes and newborn lambs have been pinpointed as major reasons for lamb loss. These interactions are greatest during the 2nd and 3rd weeks of a 6-week lambing period when the majority of lambs (upwards of 70%) are generally born.

The likelihood of lamb losses from mismothering, desertion and/or starvation are considerably less for a mob of single bearing ewes when compared to multiple bearing ewes. Single bearing ewes have one lamb to worry about - under most conditions they can be run as dry ewes provided their BCS is 2.7+ at the point of lambing.

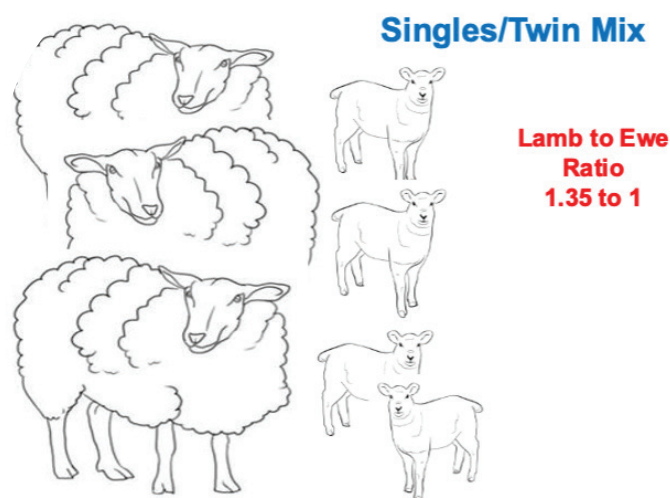
So what do we do if we divide our single and multiple bearing ewes into separate mobs? We may end up with 2 mobs of singles (300/mob) and 2 mobs of multiple bearing ewes (175/mob) respectively.

The lamb to ewe ratio in these mobs during lambing will be 1 to 1 (1 lamb to each ewe) and 2 to 1 (two lambs to every ewe).

This artificially tips improved lamb survival towards the single born lamb and places additional pressures on lambs born as part of a multiple litter of 2 or more lambs!

Why then not consider mixing twin bearing ewes with single bearing ewe counterparts prior to lambing?

If remixed based on the 'average' single to twin bearing ewe ratio of 65:35 then the lamb to ewe ratio is 1.35 to 1 - well below the 2 to 1 ratio within twin bearing ewe only mobs.



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Interactions and, conceivably, losses through mismothering/desertion and starvation should be fewer in such mixed single/twin mobs than twin-only flocks **provided** multiple bearing ewes have reached targeted BCSSs.

Herein lies the major difference between lambing 'mixed' litter size ewes together under current conditions. Historically, producers did not have the benefits of scanning technology to identify and preferentially manage/feed multiple bearers.

Remixing single and twin bearing ewes should increase the efficiency of use of available pastures and paddocks prior to and during lambing. Fewer paddocks are generally required and/or available paddocks can be used to further reduce ewe numbers within each mob.

Splitting into single and twin bearing ewe mobs is likely to be the most effective option if:

- paddock numbers are not limiting and/or
- seasonal conditions necessitate supplementary feeding and/or
- twinning/multiple rates are greater than 50%

Under the scenario above it is recommended that:

- twin bearing ewe mobs be kept as small as possible;
- use of self-feeders be considered (to minimise disruption of the flock during lambing) within multiple bearing ewe flocks; and
- consideration be given to 'aging' of foetuses at scanning with these ewes preferentially managed according to industry best practice.

Summary

Many of the causes of lamb loss prior to the advent of ultrasound technology were due to not meeting the multiple bearing ewes' feed needs. Scanning has enabled producers to identify and manage all ewes based on future physiological needs.

While meeting industry best practice pasture and supplementation targets has enabled a reduction in lamb losses over time, many producers still struggle to implement lambing ewe mob structure and size recommendations and/or obtain significant improvements in lamb survival.

Factors affecting your ability to run single and multiple bearing lambing ewes separately in small mobs will vary between farms and regions. Scanning and preferential management and feeding of the pregnant ewe, however, can help with reducing ewe and lamb losses in 'mixed litter size' mobs.

References

Improving lamb survival by optimising lambing density (AWI) <https://www.wool.com/globalassets/wool/sheep/reproduction/lambing/lambing-density-and-mob-size-final-report.pdf>

National Lambing Density Project (AWI) <https://www.wool.com/sheep/reproduction/national-lambing-density-project/>



For a complete list of Northern Tablelands Local Land Services Land Facts, please visit our website at www.lls.nsw.gov.au/regions/northern-tablelands



- Managing scanned ewes – The basics
- Managing scanned ewes – The benefits
- Managing scanned ewes – Placental development
- Managing scanned ewes – Pre-lambing
- Managing scanned ewes – Lambing

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