

Lamb Mortality – Do producers really know?

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Mortality of lambs following birth represents a key area of reproductive wastage in sheep breeding enterprises associated with significant economic losses. Commonly, mortality rates of lambs are 10% in single born lambs and 30% in twin born lambs, whilst mortality has been documented to be up to 70% of all lambs born (Hinch and Brien 2014). With mortality having a significant impact on reproductive wastage the importance of producers to understand mortality rates on farm is high. Producers must be able to determine neonatal lamb mortalities to establish if cost-effective practices can be used to reduce mortality and increase profitability. The objective of this survey was to determine producer estimated lamb mortality rates and compare these mortality rates with published data to understand if producers are likely accurately determining neonatal lamb mortalities.

A 20-question survey was distributed to sheep producers across New South Wales using online and paper versions between May and October 2019 with 178 producers participating in the survey, resulting in 145 usable responses. The survey included questions on lamb mortality rates, causes of mortality and estimated mortality rates between birth to marking and marking to weaning. Data was analysed via descriptive statistics in SPSS to determine distributions with categorical variables examined using frequencies.

Producers identified method/s used to determine the loss of lambs from birth to marking. Of producers surveyed 62% used the number of dead lambs observed, 48% used scanning to marking figures and 22% used their overall general impression. To determine mortality between marking and weaning 68% of producers used marking and weaning rates, with 44% using dead lambs observed and 22% using their general impression. Producers' estimates of mortality rates of lambs between birth and marking are shown in Figure 1a. Of the producers surveyed, 49% estimated mortality of lambs between birth and marking to be less than 10% of all lambs born with only 13% of producers estimating more than 20% mortality. From marking to weaning, 72% of producers estimated mortality to be 2% or less as shown in Figure 1b.

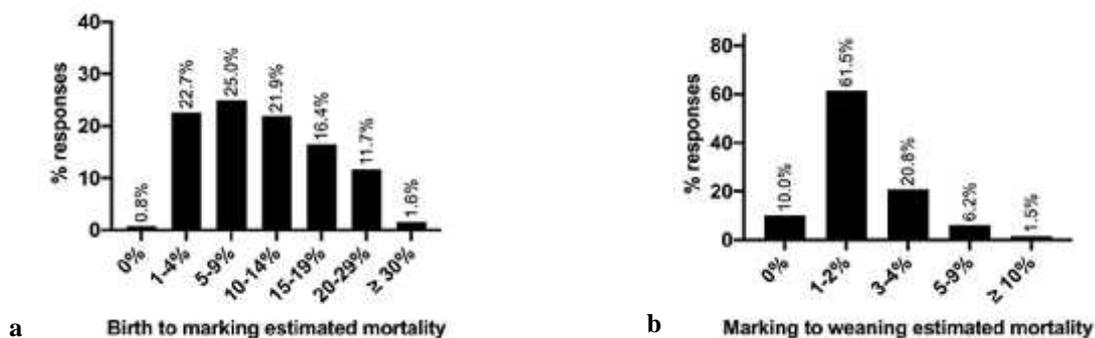


Figure 1. Mortality rates of lambs (a) between birth and marking and (b) between marking and weaning as described by producers

In comparison to the data published in the review by Hinch and Brien (2014), where mortality rates for twins were around 30% for twins and 10% for singles, the mortality estimated by the surveyed producers was lower. While the survey did not account for mortality rates in twins and singles, it is likely the producers considered a mix of birth types. Therefore, the differences in the results could be attributed to either mortality rates in newborn lambs declining since the Hinch and Brien (2014) data were calculated, less twins being considered by the producers, or mortality rates between birth and marking being under-recognised by producers. As a result, if mortality rates are in fact underestimated by producers this may affect the producers' perceived economic losses and therefore, producers may be able to increase production and profitability if lamb mortality rates are better estimated.

References

Hinch GN, Brien F (2014) *Animal Production Science* **54**, 656-666.

Thankyou to Charles Sturt University, Graham Centre for Agricultural Innovation and MLA for funding this research.