

UNDERSTANDING LAMBING EASE ASBVs

Lambing ease has an obvious impact on the profitability of a flock. As lambing ease decreases, ewe and lamb mortality increases, which also increases additional labour requirements and veterinary expense.

Though many large studies have consistently shown birth weight to be the most important genetic factor influencing lambing ease, there are also other aspects that need to be considered. For example, lamb shape, pelvic area and lambing “will” all play a role in lambing ease.

LAMBPLAN Lambing Ease (LE) ASBVs are calculated using lambing ease scores recorded at birth. As they are a direct score, they combine all of the factors affecting lambing ease

What Lambing Ease ASBVs are available?

- Lambing Ease Direct (LE DIR)
- Lambing Ease Daughters (LE DTR)

Lambing Ease Direct (LE DIR)

LE DIR ASBVs are estimates of genetic differences in the ability of a sire’s lambs to be born unassisted. LE DIR is reported as the percentage difference in unassisted lambings. Higher, more positive, LE DIR ASBVs are more favourable.

For example, a ram with an ASBV of +5.0% would be expected, on average, to produce 3% fewer difficult lambings than a ram with an ASBV of –1.0% (6% difference between the sires, then halved as they only contribute half the genetics).

Lambing Ease Daughters (LE DTR)

LE DTR ASBVs are estimates of genetic differences in the ability of a sire’s daughters to lamb without assistance. The ASBVs are also reported as differences in the percentage of unassisted lambings.

Higher, more positive, LE DTR ASBVs are more favourable. For example, a ram with an ASBV of +4.0% would be expected to on average produce daughters that have 3% less lambing problems than the daughters of a ram with an ASBV of –2.0%.

Which Lambing Ease ASBV should you use?

When using LE ASBVs to select rams it is important to consider the production system that these rams are to be used in. In a cross-breeding program where rams are being used as terminal sires and all progeny are being slaughtered, the LE DIR ASBV is the appropriate trait to use.

Where rams are being used to breed replacement ewes, it is important to include both LE DIR and LE DTR in the selection process. As the LE DIR ASBV describes how easily his lambs will born and the LE DTR ASBV describes how easily his daughters will have lambs.

Recording information for Lambing Ease

Lambing Ease ASBVs are calculated from three main sources of information – lambing ease score, birth weight and gestation length data. By far the most important of these sources is lambing ease score.

Lambing ease scores should be measured at birth by visually scoring females on the following scale of 0 – 5

Score Code	Description
0	Unobserved
1	Unassisted – Ewe lambled unassisted / No difficulty
2	Easy Pull – Slight intervention is required at birth
3	Hard Pull – Significant human intervention was required to assist birth
4	Malpresentation
5	Veterinary assistance

Note that a blank score or a score of [0] will be interpreted as “unobserved”, indicating that lambing ease was not scored

When recording lambing ease scores, it is important to consider the following

- If you regularly check your ewes (e.g. on a daily basis), it is reasonable to assume that a ewe who lambs without assistance between visits can be considered as unassisted (no difficulty) even though you did not see her lamb.
- Record a score for all lambs rather than just difficult or easy births. Scores should be recorded for dead lambs, if possible.
- If lambing difficulty score is either blank or [0], it is interpreted as no score recorded rather than "no difficulty".
- There needs to be some level of lambing difficulty in the flock for the scores to be used effectively by the LAMBPLAN analysis. That is, simply scoring all births in a flock with a lambing difficulty score of [1] will not identify any genetic differences in ease of lambing.
- A birth management group should be recorded if there are different treatments of the mothers prior to lambing that may affect lambing ease. For example, where one group of ewes have had different feed availability.
- When calculating the LE ASBVs, lambing ease scores of [4] and [5] are excluded from the LAMBPLAN analysis as these problems are considered non-genetic in origin.

Lambing ease information will not be used in the Sheep Genetics analysis if;

- a) There are insufficient lambing ease records from that flock. This is evaluated on a flock and drop basis.
- b) Only one animal is represented in a management group.
- c) There is no variation in lambing ease scores within a group.

In addition to lambing ease scores, birth weight and gestation length information is also included in the calculation of LE ASBVs. Breeders wishing to optimise the accuracy of their LE ASBVs should also consider collecting this information and submitting it to LAMBPLAN.

For more information regarding LE ASBVs, please contact the staff at Sheep Genetics.

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