

UNDERSTANDING LAMBING EASE ASBVS

Poor lambing ease has a significant impact on the profitability of a flock. Both ewe and lamb mortality increase as a direct result of reduced lambing ease. Difficult birthing also requires additional labour, and possibly veterinary assistance. There are two Australian Sheep Breeding Value (ASBV) traits for lambing ease. An animal that has a more positive breeding value for a lambing ease trait(s) is expected to have fewer lambing difficulties on average.

Lambing Ease Direct (LE_DIR)

The lambing ease direct (LE_DIR) ASBV describes how inherited characteristics of the lamb affect the ease with which it is born. Lambing ease ASBVs are expressed as a percentage (%), with a higher, more positive lambing ease ASBV being more favourable.

i.e., As rams contribute half the genetic make-up of the lamb, a ram with a LE_DIR of +3%, is expected, on average, to produce 2% fewer lambs experiencing difficult lambing, than a ram with a LE_DIR of -1%.

Lambing Ease Daughters (LE_DTR)

The lambing ease daughters (LE_DTR) ASBV represents the genetic difference between animals for the ease with which their daughter's lambs are born. LE_DTR includes both direct and maternal genetic contributions to lambing ease. Lambing ease daughters is expressed as a percentage (%), with a higher, more positive lambing ease ASBV being more favourable.

i.e., A ram with a LE_DTR ASBV of +1% is expected, on average, to produce daughters that have 1.5% less lambing problems, compared to the daughters of a ram with an LE_DTR ASBV of -2%.

WHICH LAMBING EASE ASBV SHOULD YOU USE?

When using lambing ease ASBVs to select rams, it is important to consider the production system that these rams are going 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 breeding value 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.

RECORDING INFORMATION FOR LAMBING EASE

As with all traits, ideally all animals in a contemporary group would receive scores for LE. However, lambing ease needs to be observed at the time of birth, or within 24 hours of lambing (e.g., daily lambing rounds), for lambs to receive a LE score. Even with twice daily lambing rounds, many ewes and lambs will be unobserved at the lambing event but would generally be observed within 24 hours of lambing. Therefore, if you are doing daily lambing rounds lambing ease should be scored (1-5) even if the birth itself is not directly observed.

A score of 1-5 should be recorded for each lamb based on the following scale:

Score	Description
1	Unassisted – lambing occurred unassisted and without difficulty
2	Easy pull – slight intervention is required
3	Hard pull – significant intervention is required to assist the birth
4	Malpresentation
5	Veterinary assistance

Note: a blank score indicates the lambing ease was not scored.

Detailed breakdown of scores (with examples)

Score 1: No operator intervention is required to assist the lambing ewe and/or there are no indications that it was a difficult birth for a lambing that was otherwise unobserved in the past 24 hours.

i.e., The ewe gave birth with ease and the lamb(s) have no indicators of experiencing any birthing difficulty (swollen head, dopey demeanour, etc.)

Score 2: Where lambing is observed – the ewe was assisted; however, intervention was only slight. See the below lamb position images and table for recommendations on how to score.

i.e., Minimal effort is required to assist the ewe with lambing, possibly only requiring straightening of a lamb's leg, or a slight pull to assist the ewe with lambing, etc.

Where lambing is not directly observed – there are indicators that the ewe has recently (i.e., within 24 hours) given birth and there are indicators that there was some difficulty during birth.

i.e., If the lamb has a swollen head or has a dopey demeanour, or if the lamb has other indicators that suggest difficulty during birth.

Score 3: Significant intervention is required to assist in lambing, where the ewe would more than likely not have given birth to a lamb herself naturally.

i.e., Significant intervention was required from the operator when assisting with an individual birth, or a ewe was assessed with severely depleted energy due to a long lambing.

Score 4: Malpresentation is when the lamb's birthing position differs from the normal position - the lamb presents in a way where it does NOT have both front hooves pointed upwards, oriented to the vaginal opening with the lamb's head in between the two front legs.

i.e., Malpresentation positions include breech, head back, both forelegs back, tangled limbs of multiple lambs. Examples provided below. Malpresentation significantly affects the ease with which lambs can be delivered.

Score 5: If the ewe dies during lambing, or Veterinary assistance is required, or a c-section is performed, or the ewe is required to be euthanised.

i.e., The ewe has struggled significantly through lambing to the point that a veterinarian is required to assist with the lambing, or the ewe's struggle has been significant enough to result in death or requires euthanasia.

LAMB POSITION EXAMPLES, AND HOW TO SCORE EACH POSITION FOR LAMBING

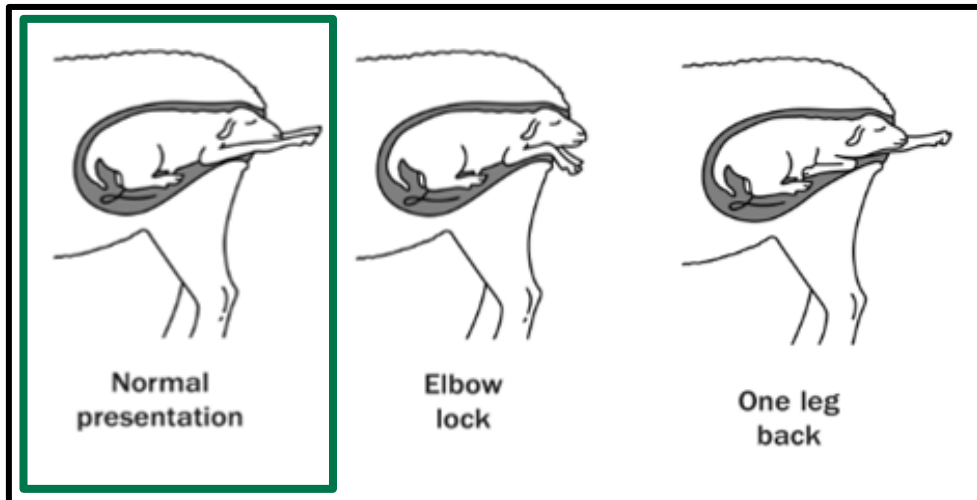


Image sourced from Ontario: <https://www.ontario.ca/page/assisting-ewe-lambing>

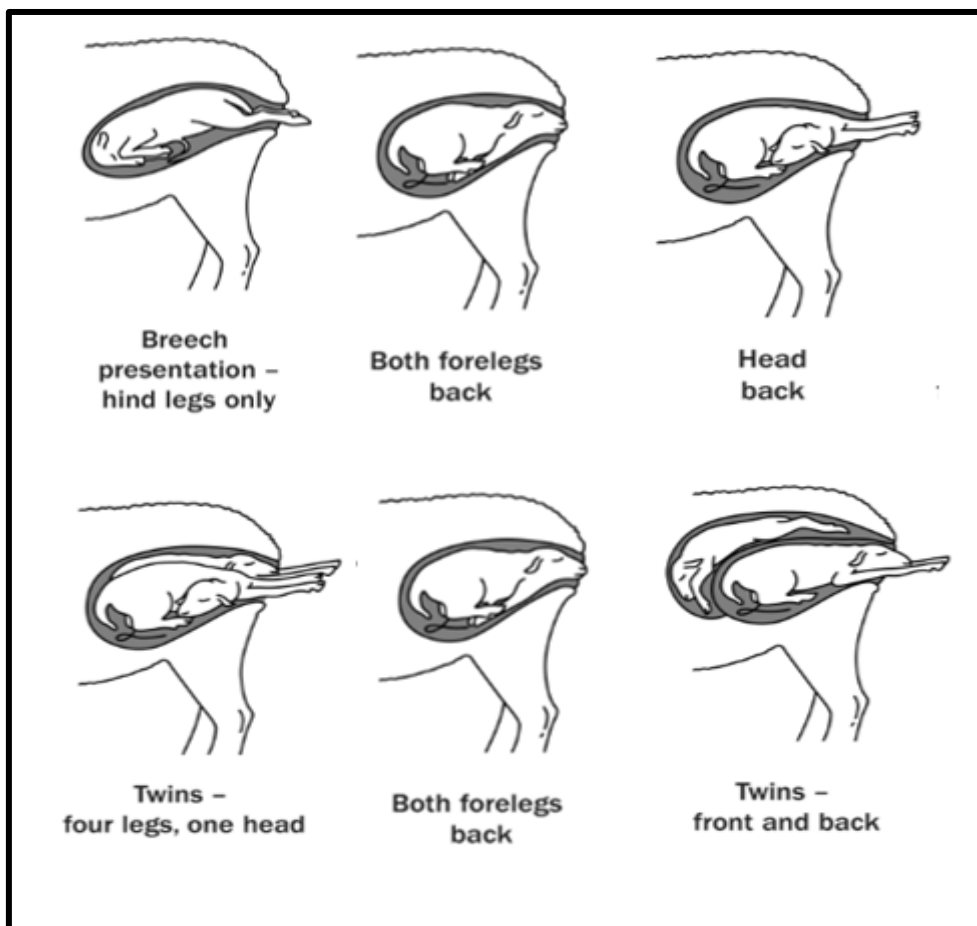


Image sourced from Ontario: <https://www.ontario.ca/page/assisting-ewe-lambing>

Position	How to score
Normal presentation	Score 1 when no operator intervention is required. If operator intervention is required, score 2 or 3 accordingly.
Elbow lock	Score 2 or 3 according to the amount of assistance required.
One leg back	If the hoof is facing forwards, score 2 or 3 according to the amount of assistance required.
	If the leg facing backwards is completely extended back (i.e., the hoof is facing backwards) then this should be scored as malpresentation (score 4)
Head back	Score 4 - malpresentation
Twins – four legs, one head	Score 4 - malpresentation
Both forelegs back	Score 4 - malpresentation
Breech presentation – hind legs only	Score 4 - malpresentation
Twins – front and back	Score 4 - malpresentation

Scoring twins/triplets/multiple births

Lambing ease is recorded against individual lambs in the litter. All lambs born within a litter should receive a LE score.

If the birth of the first lamb is easy and does not require intervention, but the remaining lambs have difficulty, the first lamb should be scored as a 1, and the remaining lambs should be scored accordingly.

If the first lamb has a difficult lambing and requires intervention, then the first lamb should be scored accordingly. Any following lambs (e.g., the second or third lamb in the litter) which are pulled because an operator is present, should be scored as having been assisted (i.e., a score 2 or 3).

For multiples, it is possible that one lamb will exhibit malpresentation and the other lamb(s) will have normal presentation but may require assistance (refer to the above image). In the instance where one lamb is exhibiting malpresentation, score this lamb accordingly (i.e., score 4). For the other lamb(s), in a normal presentation, score each based on the assistance provided (i.e., either score 1, 2, or 3).

THINGS TO CONSIDER WHEN RECORDING LAMBING EASE SCORE(S)

- It is important to be consistent when scoring, particularly if there are multiple operators present during lambing.
- Record a lambing ease score for all lambs (live or dead at birth) born in a lambing event.
- If you regularly check your ewes (e.g., on a daily basis), it is reasonable to assume that ewes who lamb without observation or assistance are scored as unassisted (score 1), provided their lamb(s) do not meet the criteria outlined for score 2.
- The birth group of the lamb should always be recorded.
- When estimating ASBVs for lambing ease (LE_DIR and LE_DTR), lambing ease scores of 4 and 5 are excluded from the analysis. Serious malpresentations are considered as non-genetic.
- Record dead at births (DABs) accordingly.
- In combination with the lambing ease score, the lambing ease analysis also includes correlated data on gestation length, birth weight, the presence of DABs, and genomic information to generate lambing ease ASBVs.
- As a general rule of thumb, if a lamb has its nose and at least one front foot out, it can be scored 1 – 3 for lambing ease (depending on whether it requires assistance, and the amount of assistance required). If the leg is completely extended backwards and the hoof is facing backwards, this should be scored 4 for malpresentation. Otherwise, all other malpresentations should be scored as a 4.

If you are not receiving ASBVs for lambing ease, check that you are recording and submitting the trait correctly to Sheep Genetics. If you are recording this trait, and not receiving ASBVs, please contact Sheep Genetics.

For more information regarding lambing ease ASBVs, please contact the staff at Sheep Genetics