

Fact sheet

Fit to join — Improving ewe and lamb survival through pre-joining assessment

The issue:	Reproductive success in a sheep operation is a combination of conception rates and lamb survival. Sheep producers can be frustrated if they're implementing industry best practice in the lead up and during lambing but aren't achieving their marking percentage goals.
The impact:	Producers may be joining ewes that are at a high risk of failing to get in lamb or at a high risk of failing to raise a lamb.
The opportunity:	Improve lamb and ewe survival outcomes through a simple yet effective ewe assessment and selection process pre-joining.

Assessing ewes as 'fit to join' offers sheep producers an opportunity to increase ewe and lamb survival rates, productivity and profitability while improving animal welfare outcomes.

MLA-funded research found:

- unfit ewes were four times more likely to scan empty and three times more likely to die between joining and scanning
- lambs from unfit ewes had a 21% higher risk of dying
- culling ewes as unfit to join could increase on-farm profit by \$4–\$8 per ewe.

A simple ewe assessment tool has been developed to identify sheep that are at a high risk of failing to get in lamb or at a high risk of failing to raise a lamb.



To gain a deeper understanding of the ewe assessment process and its benefits, watch the [Ewe assessment overview video](#).

What impacts ewe and lamb survival?

The pre-joining risk factors that impact ewe and lamb survival include udder health and structure, body condition, lameness, teeth and age.



While many producers routinely assess body condition as a key management tool, fewer producers routinely assess and address issues such as udder health and structure, lameness and age-related risks.

Research indicates that ewe body condition leading up to and during pregnancy is a key driver of conception rate. Following a successful birth, the ability of the lamb to feed from the ewe is a crucial factor affecting lamb survival. It is worth keeping these two factors in mind when assessing ewes as fit to join.

Ewe assessment process

Identify udder issues

Udder health and structure are key indicators of a ewe's ability to successfully rear a healthy lamb. Ewes with unsound udders are not fit to join as they are unlikely to raise a healthy lamb, which has significant animal welfare and productivity implications.

Producers can assess udders quickly in the race through physical palpation and visual assessment.



Watch a short video to learn how to assess ewe udder health and structure at mla.com.au/fittojoin

Body condition score (BCS)

Ewes in optimal condition are more likely:

- to conceive
- carry a pregnancy to full term
- experience a successful labour
- provide adequate nutrition to newborn lambs.



To assess the body condition score, place your thumb on the backbone just behind the last long rib and your fingers against the stubby ends of the short ribs.

Foot health

Foot health plays an important role in the fitness of ewes to join, with significant production losses attributed to lameness, including:

- loss of body condition
- predisposition to metabolic disease during late pregnancy.

Identifying and addressing foot-related conditions in ewes prior to joining will increase animal welfare outcomes and improve productivity and profitability of the sheep enterprise.



Watch a short video to learn how to assess foot health at mla.com.au/fittojoin

Mouth and teeth

There is insufficient evidence to support culling ewes based solely on broken or gummy mouths however, loose and/ or uneven incisors are likely to impact body condition and reproductive performance.

Following an initial assessment of body condition, investigating the mouths and teeth of ewes with a BCS 0.5 less than the mob average could identify issues that exclude them as fit to join (such as damaged or worn teeth).

Focus on the mouths and teeth of older ewes (>five years) as younger ewes in good condition (BCS ≥ 3.0) are unlikely to have loose, broken or uneven teeth, unless they have been subject to prolonged drought conditions.



When checking ewes' mouths, focus on the integrity, soundness and wear of the teeth. Signs for concern include loose teeth or teeth showing signs of uneven wear.

Age

When assessed on their merits, with age as one, but not the overriding factor in the mix, healthy and sound older ewes offer a valuable breeding proposition to any sheep enterprise, particularly for producers trying to build their breeding flock.

Older sheep with no other underlying issues (body condition score, feet or teeth) can have the same reproductive performance as sound, younger ewes, providing risk factors are well managed.

While older ewes can be at an increased risk of mortality (e.g. hypocalcaemia), this can be largely addressed by improving nutrition and monitoring for symptoms of declining health (e.g. condition score).



Watch a short video to learn how to assess older ewes at mla.com.au/fittojoin

When do I complete the ewe assessment?

The timing of the ewe assessment is critical and needs to be done four to six weeks after weaning because some ewes will develop mastitis from being weaned.

Doing the ewe assessment at lamb marking or weaning means producers can't identify all the sheep with bad udders.

How long does the ewe assessment take?

With two people and two dogs, up to 2,300 ewes can be assessed per day.



More information

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Resources

- Read the *Fit to Join* ute guide at mla.com.au/fittojoin which includes a handy one-page printable flow chart to guide you through this decision-making process in the yards.
- Watch four instructional videos to learn how to complete the ewe, udder and lameness assessments at mla.com.au/fittojoin.

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