Age at First Lambing

Options for breeding ewe lambs

Most flocks lamb once per year (sheep in temperate zones are seasonal breeders). Natural selection pressure has favoured this seasonal production cycle as this couples lambing time to the most appropriate phase of the annual cycles of climate and food availability, i.e. in early spring when temperatures warm up and the grass starts to grow.

The age of puberty in sheep will vary depending on breed, size (weight), nutrition, and season of birth. Most ewe lambs reach puberty between 5 and 12 months of age. It is therefore possible for a ewe lamb born at one lambing to be bred at the age of 7 months so that she lambs 5 months later, when she is one year old, at the same time that the rest of the flock lamb again.

The alternative system is to keep ewe lambs separately from the breeding flock post-weaning, mating them when they are around 18 to 19 months of age so that they lamb when they are two years old. Anecdotally, breeding to lamb at one year of age is more common in flocks that focus on meat production rather than merino flocks, but it is possible in all flocks.

Why is lambing too early an issue?

If ewe lambs are bred too early there may be a higher risk of mortality for them and their lambs. This is due to multiple factors. One issue is that one year old ewe lambs tend to produce lower birth weight lambs than older ewes. Lower birth weights are correlated with higher lamb mortality. Even though birth weight is generally lower, year old ewe lambs may struggle to give birth naturally, and complications at lambing can lead to the death of the ewe and/or her lamb(s). Young ewe lambs often have poorer maternal instincts than older ewes and this can also lead to death of their lambs through hypothermia.

Is age the key factor?

Although the negative factors listed above are linked with whether the ewe lambs in her first or second year, research has shown that the weight of the ewe lamb is far more important than age when it comes to avoiding negative outcomes at first lambing.

A ewe lamb that is at least 60 to 65% of her adult weight when she is first bred, and who is well managed through pregnancy such that nutrition is sufficient to ensure her continued growth as well as the development of her lambs, is unlikely to experience the negative effects listed above. Ewe lambs at this weight are also far more likely to get in lamb – conception rates of around 80% are reported. Very light ewes have much lower conception rates – down as low as 40%, and if they do get in lamb are more likely to suffer problems at lambing time.

In other words, management is a greater factor than age of ewe lamb when it comes to positive outcomes at first lambing.
Other factors

A ewe lamb that is not bred until she is 18/19 months of age will produce a greater weight of wool in her first year as all her energy is focused on her growth and the growth of wool. Pregnancy diverts resources to the growth of the lamb(s). This is a possible reason for the anecdotal information that merino farms tend not to breed ewe lambs early.

Proposal for RWS standards

New proposed wording for AW4.23 is as follows:

The lambing period shall be planned to coincide with local climatic conditions favourable to good welfare and survival.

This broadens this standard to cover both timing of lambing and age at first lambing and to ensure that farmers are judged on the outcome of lambing – that there is good welfare and survival of both ewes and lambs – rather than simply the age at which they breed their young ewes.