

# Lamb Crop 2022

## Maximise lamb survival outdoors

Research Focus: Cathy Dwyer, SRUC Animal Behaviour & Welfare Researcher

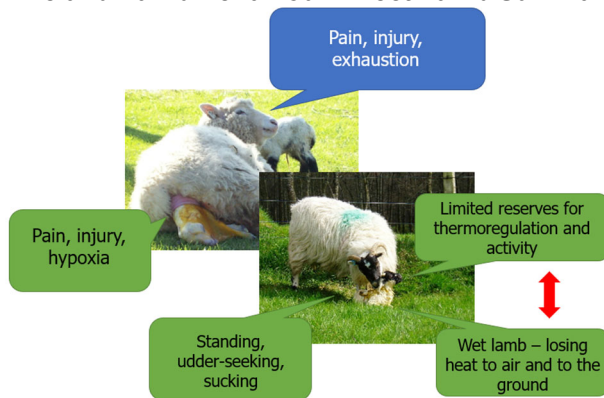


The Lamb Crop webinar series focussed on highlighting methods to maximise lamb survival for indoor, outdoor and hill systems. The last in the series focussed on outdoor lambing where we heard from Poppy Frater, SAC Consulting Sheep and Grassland Specialist, Neil McGowan, Incheoch Farm, Alyth and Cathy Dwyer, SRUC Animal Behaviour and Welfare Researcher.

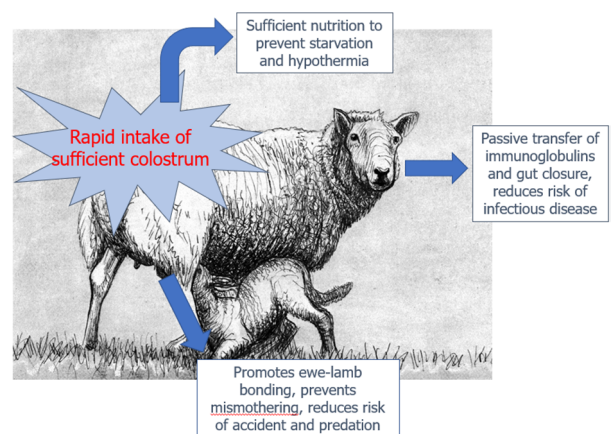
**Ewe and Lamb Bond:** In outdoor lambing situations there is more opportunity for the ewe to find a good birth site, more space and less disturbance, which helps optimise her bond with her lamb and promotes successful lamb rearing by the ewe. There are however additional challenges to lamb survival outdoors with weather, use of shelter and risks of predators. 50% of lamb deaths occur on their day of birth and 75% before they reach 3 days old, it is vitally important the ewe and lamb have a good bond. In the ewe maternal behaviour is triggered by changes in oestrogen and progesterone in the last 2 days before birth, and a peak of oxytocin as the ewe gives birth. The oxytocin peak makes the ewe attracted to the smell and taste of birth fluids on the ground, and on the coat of the

lamb. For a short period of 30-60 minutes after birth the ewe is then able to make a specific 'smell memory' for each of her lambs, which allows her to identify them as her own, so this period of licking and smelling the lamb is vital for the ewe to mother her own lambs. The licking and mothering process also helps to dry the lamb and for it to find the udder to suckle. Suckling creates a bond from the lamb to the ewe and maintains maternal feelings in the ewe.

### Ewe and Lamb Behaviour Affect Lamb Survival



### Colostrum is a vital part of the survival



### Why it sometimes goes wrong:

- **Ewe inexperience** - Inexperienced are less efficient and need the experience of giving birth for systems to mature and need everything to work in sequence.
- **Ewe undernutrition in late pregnancy** - seems to disrupt the hormonal profile of ewes.
- **Difficult birth** - pain and stress may disturb normal signalling and ewes may fail to interact with their lambs during the 'window' for bonding.
- **Stress at lambing** - ewes can delay birth if conditions are not good which can lead to prolonged labour and birth. Ewes interact less with their lambs which reduces bonding, drying of the lamb and suckling.
- **Disturbance at the birth site** - can prevent the ewe effectively transferring attachment to amniotic fluids to attachment to the lamb. Ewe may become bonded to other lambs and mismothering.
- **Breed/genetics of the ewe** - breed differences in maternal behaviours which are related to ewe-lamb bonding success.

### Key Message

Ewe and lamb behaviour contribute to lamb survival, working with the biology of the ewe will help give her the best opportunity to bond to the lamb and raise it herself. Lamb behaviour is independent of maternal behaviour immediately after birth and lamb behaviour or vigour at birth is associated with improved survivability. Give the ewe time/space to do what she is biologically primed to do.