THE WOOD VETERINARY GROUP

Hopefully everyone's lambing is going well! We know it can be a difficult topic but recording losses and reasons for losses is good practice, not only for your records, but to help us plan and mitigate any losses next year. In last month's newsletter, we discussed colostrum intakes which are vital for reducing lamb losses within the first 48 hours after birth. In this month's newsletter, we will be discussing losses due to abortions and foetal resorptions, which accounts for approximately 30% of lamb losses.

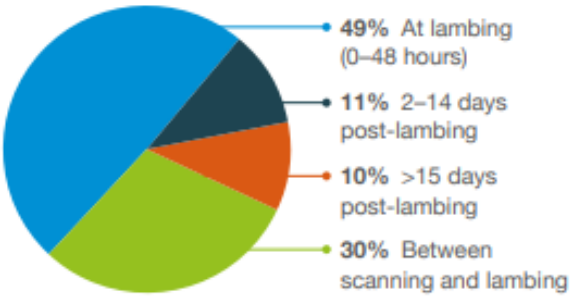

Figure 1. When lamb losses occur (% of total losses)

Source: HCC Lambing project 2010/11

<u>Abortions and losses – diagnosing a problem</u>

An abortion rate which **exceeds 2%, OR 2 or more abortions over 2-3 days** irrelevant of the size of the flock, suggests that an infectious cause is likely present, and samples should be submitted for investigation. Any sheep that abort must be isolated away from all other sheep as they will still be shedding, and aborted material must be discarded of. The area where the ewe aborted must also be cleaned and disinfected.
For a diagnosis to be made of the cause of abortion, ideally abortion material needs to be submitted to us, this includes recent aborted lambs and placenta. If no abortion material is found, we can test vaginal discharges or do blood testing on the ewe, but the best results usually come from testing abortion material.

Enzootic abortion

Enzootic abortion, often termed enzootic abortion in ewes (EAE), is one of the leading causes of sheep abortions in the UK and is becoming more and more prevalent. It is caused by Chlamydophila bacteria. Sources of infection include aborting ewes, where abortive material is infectious for several days, bought-in infected ewes or carrier ewes which shed during oestrus. The outcome of infection depends on when the ewe is infected:

- If the ewe is pregnant and >90 days gestation then she may abort
- If <90 days pregnant, she may abort after 90 days gestation OR may become latently infected by harbouring bacteria in her reproductive tract, keeping that pregnancy and abort next pregnancy
- If not pregnant (after lambing or tupping) and the ewe is infected, the bacteria remain dormant in the reproductive tract and will then cause an abortion in the next pregnancy. If a ewe lamb is exposed as a lamb, she won't show any symptoms but will likely abort at her first pregnancy

EAE typically causes abortions in the last month of pregnancy but you may also see the birth of weak, premature lambs or the birth of one live lamb and one dead lamb. One of the main times we see abortion introduced is when carrier ewes are purchased as replacement ewes, and the following year after this, major abortion storms can be seen in a flock. Getting a diagnosis by submitting abortion samples now will help us create a plan to reduce losses in following years. Enzovax is the vaccine used to help reduce losses to EAE and must be given before ewes go to the tup. Vaccines are never a 100% fix, but they significantly lower abortion rates in a flock with a diagnosed infectious cause, and also reduce the amount of shedding in a flock. In flocks where EAE is continually circulating without vaccination, abortion rates 5-10% are usually seen.

Toxoplasma abortion

Toxoplasma abortion is caused by a very small parasite for which cats are the main host, with its reservoir being in wildlife. Cat faeces contaminate the environment/feed/straw/water, which is then picked up by the ewe. The toxoplasma oocysts are very resistant and can survive for more than 500 days in the environment. Similar to EAE, Toxoplasma infection can have many different outcomes depending on the time of infection:

- If sheep are not pregnant when exposed, they develop immunity, and you may see no signs of infection at all
- If sheep are in early pregnancy, then foetal resorption can occur and ewes will present as barren ewes, this therefore is an **important cause of low scanning percentage**
- If sheep are in mid pregnancy, you may see foetal death or the mummification of lambs if they do reach full term
- If sheep are in late pregnancy, you may see abortion of fresh dead lambs, the birth of weak lambs with a high death rate or the birth of immune lambs

Control is achieved by managing the rodent population and securing feed stores to prevent access by cats/rodents. Vaccination with Toxovax is advised if a diagnosis of Toxoplasmosis is reached, and like the EAE vaccine, needs to be given before the ewes are tupped.

Both Toxoplasma and EAE can be passed to humans, therefore immuno-suppressed and pregnant women are at particular risk and should avoid contact with sheep at this time.

Other main abortion causes include Salmonella species and Campylobacter. These are far less common than EAE and Toxoplasmosis and will often result in a very sick ewe which will need veterinary attention.

Ring womb or very late term abortion?

- Ring womb is defined as the incomplete dilation of the cervix, that is present **more than 6 hours after a water bag/membranes have appeared and in the ewe is in active labour**. Typically, the **cervix is only partly dilated (2-3 fingers)**
- Do bear in mind that very late term abortion where fresh dead lambs or premature early lambs are delivered this can sometimes be misdiagnosed as a ring womb
- If it is a true ring womb, we advise trying manual manipulation of the cervix for 10-20 minutes, with calcium administered under the skin, and if no progression is experienced, then do get in contact with us at the practice as we may be able to administer different medicines or alternatively, perform a caesarean. As always, if you are concerned at any point, always get in touch with us at the practice.

<u>Caring for pet lambs</u>

One of the key differences about pet lambs is that they require more colostrum at birth than lambs with a mother. Below are some numbers and ideas regarding what to feed pet lambs to give them the best start in life:

- 50ml/kg colostrum in the first 6 hours
- A total of 250ml/kg of colostrum in the first 24 hours of life
- Week 1 onwards – 300ml of warm milk, 3-4 times a day, ad lib if possible
- Week 2 onwards – 1-1.25 litres twice daily, ad lib if possible
- Straw and creep feed from 1 week old
- Abrupt weaning at 4-6 weeks around 15kg
- 0.4m^2 space per lamb

Evidence suggests that good quality straw is very good for rumen development in lambs and is the preferred roughage over hay/haylage. Make sure pet lambs are vaccinated against clostridial disease as they are more susceptible to disease as they're not receiving milk from their vaccinated mother.