DAIRY

Ben Barber, veterinary surgeon at Synergy Farm Health, discusses some of the causes of abortion and ways to help prevent losses.

Help reduce future losses by looking into abortions

It is often worth investigating abortions when the number reaches above 3 per cent, says Ben Barber

The cost of an abortion can be significant. It has been estimated that loss of a calf, unplanned culling, loss of milk and genetic wastage, cost about £630 for a dairy cow in the UK. Abortions to a certain degree are unavoidable, however, when either the number of abortions reaches a threshold of above 3 per cent or you have a quick flurry in a short space of time, then it is often worth investigating, says Mr Barber.

Ben Barber

All cattle owners must notify the Animal and Plant Health Agency (APHA) of abortions which occur on their farm with the definition of an abortion being a calf which is produced less than 271 days after service regardless of whether it is born dead or alive. This reporting is to maintain and provide evidence for the country's brucellosis-free status, a system which has proved successful but which can only continue if the reporting of abortions continues.

Mr Barber says if the decision is made to investigate, it is vital to provide a complete history including whether any illness was present in the aborting dam, as well as any other problems surfacing in the rest of the herd.

While some sick animals abort just as a consequence of a high temperature, some animals may have a particular abortive disease and show specific concurrent symptoms to go along with it – one example being IBR, a virus with the ability to cause both abortions and respiratory signs.

He says: "With some infections causing abortions during certain stages of pregnancy, it is useful to know the stage at which cows are aborting. While abnormal inter-service intervals are commonly due to incorrect identification of oestrus, it can also be an indicator of early loss of the embryo and should be considered as part of the investigation."

Unfortunately a diagnosis is not reached for thousands of abortions every year. While this is likely due to many cases not having an infectious cause, there is also the certainty there are infections about which we still have no knowledge.

Identifying potential causes and taking action

- Consider whether new stock has been recently introduced and, if so, if their infection status was known. New infections arriving on-farm can be devastating, especially if the herd is naive and unvaccinated. Enquiring into an animal's status and then quarantining for three weeks is always advisable
- Poorly kept silage or other feedstuffs can also harbour harmful fungi and bacteria capable of causing abortions. Sporadic abortions caused by such feedstuffs will often produce a placenta with a thick, leathery appearance; this is especially true for fungal abortions which will more commonly occur during the spring
- Neospora still remains the most commonly diagnosed cause of abortion, with those infected up to seven times more likely to abort. While the main route of transmission is from the dam to their unborn calf, the parasite can also be spread by dogs via their faeces. As there is no treatment, prevention is paramount and involves stopping dog faeces contaminating the cow's surroundings, as well as the quick disposal of foetus and placenta.

Due to the parasite's persistency within the dam and its ability to spread to all of its offspring, the management of those found positive on bloods or foetal sampling may involve selective breeding or even culling

- Some nutritional deficiencies can cause abortions, the most frequently diagnosed being iodine deficiency. This is normally due to a lack of iodine within the diet, although it can be caused by the feeding of brassica species, a high calcium intake, or fields polluted with human sewage. Stillbirths and weakly calves might also be seen with this deficiency; some calves may even present with a swelling below the jaw called goitre, a sign highly suggestive of iodine deficiency
- When submitting samples to your vet it is vital to include both the foetus and placenta for testing. Last year submitting the foetus gave a 42 per cent success rate for reaching a diagnosis. Submitting only the placenta gave a success rate of 20 per cent and submitting neither (which in most cases was purely bloods) just 7 per cent (APHA 2014, personal comm. G. Hateley). If you are undecided, there is the option of freezing samples to be defrosted for testing at a later date