

Black Sheep Farm Health

April 2018 Newsletter



Anti-inflammatories at lambing and calving

Inflammation is one of the body's key responses to infection and damage. However it is also responsible for pain. In the long term it causes scarring of tissue with a subsequent loss of function. One example would be untreated metritis (or 'whites') in cows which ends up scarring the uterus leading to a significant reduction in fertility.

Anti-inflammatory drugs are therefore a vital part of our arsenal when dealing with sick animals. Generally we use a particular group called non-steroidal anti-inflammatories, or 'NSAIDs'. NSAIDs include flunixin and meloxicam ('Metacam' and 'Recocam'), as well as human counterparts like ibuprofen.

NSAIDs reduce long term scarring - increasing the likelihood of retaining a functional organ whether that is an udder in mastitis or a lung in pneumonia. They also reduce fever, improve appetite and (critically) reduce pain. Eating and feeling bright can make a great difference to recovery. The exception is for animals that have become dehydrated e.g severely scouring calves - NSAIDs should only be used very carefully in these situations.

Uptake of NSAIDs is improving, and we would encourage you to consider using them in several instances, including:

- **Twin lamb disease**
- **A difficult or rotten lambing or calving**
- **Mastitis or metritis**
- **Joint ill**
- **Lameness**
- **At disbudding and castration***



* Although these animals aren't sick, there is plenty of evidence that the pain and stress of these procedures significantly slows growth, and also that NSAIDs reverse this effect.

The Field Report

Having thought we turned a corner on the weather, as we write the 'Beast from the East' is back for a highly unnecessary third sequel. While we wouldn't expect anything less, the commitment of farmers to their livestock in Northumberland and beyond has not failed to impress.

When you get a chance, make a cup of tea and read on for a guide to maximising the returns from your bull, and also on the importance of anti-inflammatories.

The Bull: is he primed for purpose?

Key Points

- **Sperm take about 6 weeks to produce, therefore fertility should be checked and treatments given in good time.**
- **Do not forget routine treatments for your bull, including trace elements, and vaccines including BVD and leptospirosis.**
- **All breeding bulls should undergo a pre-breeding soundness examination.**

Bull Biology

The cost of a bull is estimated to be about £45/calf by NADIS. One way to minimise this cost is to maximise the numbers of calves sired. A bull's ability to serve cows is directly related to his scrotal circumference, and both increase with age. As a rule of thumb young bulls should be given no more cows to serve than their age in months (e.g. no more than 24 cows for a two year old bull). Excessive work can stunt bulls to some extent.

Sperm are produced continuously, but take 6 weeks to mature from start to finish. This is very important - if a bull suffers a problem that reduces his fertility then it will remain reduced for 6 weeks after his recovery.

Body condition

Bulls should be 'fit not fat', or condition score 3.0 - 3.5. They should also be settled into a ration and a routine. Bulls straight out of the sale will have been pampered so do not expect them to perform to their full potential if they are immediately sent out to the hill with no supplementary feeding.



If he is in negative energy balance he will be fatigued and his sperm count will fall, as will the conception rate of the cows.

Infectious disease and parasites

A bull may introduce disease into a herd including BVD, IBR or Johnes. Non-virgin bulls are an especially high risk for diseases like *Campylobacter*. Wherever possible, buy from accredited free or low-risk herds, and only buy virgin bulls.

Likewise, it is important to know your own status. If a bull has not been exposed to disease until he arrives on farm, he may then become infected and his fertility will suffer.

Anecdotally, bulls are more susceptible to parasites. Make sure he is up to date with fluke and worm treatments in good time. Chronic fluke or worm issues can reduce energy available for mating and sperm production.

Lice and other skin parasites can also be a problem, potentially due to their thicker coats. Itchy bulls may have lower libido - make sure they are treated with an appropriate pour-on if needed. Any vaccinations should be also be given. These should be given at least two months before service as they potentially cause a short fever, which will affect fertility.

Feet and Locomotion

It is vital that a bull moves well, so bulls should have their feet routinely checked once a year, at least two months pre-mating.

Getting a foot trim too close to bulling can result in 'new shoe' syndrome, whereby bulls can have sore feet and so are reluctant to serve cows.

If he is being used to breed replacements, consider his foot quality. Foot problems are reasonably heritable and so bulls with poor feet should be avoided for this purpose.

Bull Breeding Soundness Exam

All bulls used for breeding should be have their semen tested. Few bulls are fully infertile. However, 25% are 'subfertile' and using a subfertile bull leads to more empty cows, and more late calving cows. This is because the bull cannot keep up with the demands placed on him. As with treatments, it should be done at least two months beforehand. If it is done closer to bulling, it does not leave enough time to improve the

situation.

In addition we check scrotal circumference. Scrotal circumference is not only related to serving capacity, but also fertility of his daughters - a consideration if bull is intended for breeding replacements.



Electroejaculation typically takes about five minutes from start to finish. The probe is no thicker than an arm that would be used to rectal a cow, and the manufacturer are always working to improve their kits. We have just taken on a new probe - the Lanes Pulsator 5 - which has reduced the number of electrodes needed and even has breed-specific programmes.

It is also a great opportunity to give him any routine treatments, check his body condition score, and feel for epididymitis (a swollen epididymis) or scrotal hernias.

Last but not least: Libido

A bull's willingness to serve cattle is clearly important. No matter how good his semen quality is, he needs to transfer it into the cow for any success. For that reason, watch bulls regularly during the bulling period.

If you have any doubts about his libido, get an early pregnancy diagnosis done at around 40 days. This allows something to be done about a poor bull before a mishap becomes a disaster.