Beef Farmer Spring Turnout

Watch out at turnout!

We should be able to look forwards to turn out – no more feeding out, bedding up, mucking out, spreading muck, but like most things in life there can be unpleasant surprises if you aren't fully prepared. Here, **Westpoint Veterinary Group's Rachel Risdon** looks at some of the potential pitfalls associated with turning stock out.

There's nothing more upsetting than finding one of your best calves dead with no forewarning – and it nearly always your better stock. Clostridial disease may well be the likely culprit and there are a number of different clostridial 'bugs'. Blackleg (*Clostridium chauvoei*) typically causes one massively swollen up hind leg and rapid bloating of the body. However, the symptoms aren't always as obvious and around 40% of 'Blacklegs' actually involve one or more of the other clostridial bugs, so that's why it's wise to use a multi-valent clostridial vaccine.

Disease

Often a few deaths occur at once and then there won't be any for a while. Clostridial bacteria form spores that can survive in the soil and in the animal's body, only emerging when conditions are right, and often when you least expect. Vaccination should be considered as an insurance policy and an investment. Do it in advance and remember that the more different clostridia components in the vaccine the more protection for your stock - with only pennies difference in cost.

Many farmers only vaccinate against clostridial disease before first turnout, and generally don't give annual boosters. In many cases this can seem to be sufficient, but I saw several adult cows die last spring from Blackleg. If only one cow had died I doubt I would have had the chance to carry out a post -mortem and the death would have been just 'one of those things'. Think about it, vaccinating could be cheap insurance!

Minerals

Another nasty is 'staggers' (hypomagnesaemia) which often has a similar outcome - death. Cattle do not have available reserves of magnesium in the body so have to eat what they need each day – this is why lactating cows are at higher risk as they are putting magnesium into their milk.

Often the cow is seen down and thrashing and needs emergency treatment with magnesium, which is luckily quite easily absorbed from under the skin if warmed up and rubbed in well. If one animal is affected, the rest of the herd will be in need of supplementary magnesium too. In the spring, part of the problem is that the grass is lush and passes quickly through the animal. Using N and K fertilisers also prevents magnesium from being well absorbed.

Think about which pastures stock are turned out onto. Consider feeding hay to slow things up. Check the weather, since wet and cold conditions exacerbate the problem. Lick buckets can be effective but not all cows always take to them, magnesium in the water can fail in wet weather when cows don't drink enough. Cake, magnesium boluses and dusting grazing are all more reliable.

Older cows are at higher risk of fitting but calves can be affected (not commonly) too – if the milk they consume is low in magnesium and they aren't getting any creep – the symptoms are just the same.

Other minerals in excess or deficiency rarely have such a dramatic effect as magnesium. Unfortunately, this often means that they don't really get considered, although deficiencies can result in more subtle effects such as reduced fertility and growth rates, which can be pretty costly.

Mineral imbalances will vary considerably from area to area so using the same mineral bolus as a friend a few counties away could be a waste of time. For example, many areas of Britain are slightly copper deficient but in Devon/Cornwall we have actually found that many (to be fair mainly dairy!) herds are over supplementing with copper which can also cause problems - including death! Unfortunately, blood sampling can be very misleading as the body tries hard to keep blood levels consistent and uses the liver a bit like a balance tank – putting excess in when it can and drawing from it when times are hard. A more reliable, yet slightly more costly method of determining copper status is through analysis of stored liver levels. This can be done with samples taken at the abattoir from finished beef animals or cull cattle, though this can be misleading as often these animals are managed differently to current breeding stock. The only way to get a true assay is by liver biopsy – easily done on live animals under local anaesthetic. This is a popular service with Westpoint Vet Group clients and is the only reliable way to know the true situation with copper.

It pays to find out the mineral status of *your* stock. Never assume that if a little bit of minerals will be a good thing, and bit more will be even better. You need to feed the right minerals for your particular situation. Deficiencies or imbalances could mean you're missing out on a tighter calving pattern or faster growing, healthier calves.

Parasites

Younger stock are more susceptible than adult animals to gutworms, particularly when grazed in groups without any adult animals. Cattle develop immunity with exposure to gutworms.

This immunity in adult animals reduces the worms' capacity to produce eggs which helps keep pasture worm populations down. This is in contrast to a youngster grazing, where each worm egg that they eat goes on to produce thousands of eggs, so building up the risk on the pasture. The suckler cow and calf is as nature intended – the mother eats a lot more grass than her calf and in effect 'hoovers' up worms. The calf gets a low level of exposure to worms and becomes immune without the gut being damaged.

Where youngstock are grazed in groups (with no adults) we need to try to expose them to as low a level of worms as possible – preferably using 'clean' grazing such as silage aftermaths or 'poor man's clean grazing' where stock are wormed early in the season to try to prevent the build up of worm eggs. The best way to monitor how things are going without waiting to see cattle scour, by which time the gut lining has been damaged and growth compromised, is to take faecal samples. This system is really simple, you just hold the cattle up in a corner of the field for five minutes, let them move away and pick up 10 fresh dung samples which you can post directly to the lab or have analysed by your own vet.

Lungworm should be considered separately from gutworms, although wormers which kill one will kill the other. The main difference in control is that it takes relatively few lungworm to cause infection compared to gutworms (less than 1,000 lungworm larvae versus over 10, 000 for gutworm infection). This means that pastures can very quickly change from low risk to high risk. Sadly, faecal egg counting is no use for predicting a brewing problem, as the worms start irritating the lungs before they start producing eggs. Coughing is the first symptom you'll see, but it indicates lung damage already occurring. There is a vaccine for lungworm (Huskvac), one of the oldest vaccines we have, yet it is still very effective.
Fluke are the other major parasite to consider – traditionally mainly a problem of wetter parts of the country but been seen in most places in recent years. It has a long lifecycle (compared to worms) as it burrows through the gut, makes its way across to the liver, eats through the liver tissue and then starts multiplying in the bile ducts – all this takes at least 10 weeks. Fluke don't produce many eggs and do so quite intermittently so dung samples aren't that useful. However, we can also use bloods to look for liver damage or for antibodies to show stock have been exposed to fluke. There are various different drugs to remove fluke which have different capabilities for removing the younger flukes. This needs to be taken into account when working out a control plan, in discussion with your vet.

Prevention can be tricky. Unfortunately, cattle don't get much immunity over time to fluke and the same fluke also affect sheep so cross grazing won't help. The other part of the fluke lifecycle involves small mud snails so improving drainage can be an effective control method. In theory, ducks should be useful in eating these snails – if only you could make them stay put in the fields where you need them! If improving the drainage is not an option try to avoid grazing, or even fence off, known wet areas.

A little thought and forward planning before turnout will prevent some of the possible pit-falls highlighted here, resulting in fewer losses and a more viable enterprise.