



Twins in Dairy Cows

Twins in dairy cows can result in significant losses to a dairy herd, as they significantly increase the risk of difficult calvings, retained foetal membranes, metritis, metabolic disease (e.g. LDA), culling and also extend the calving to conception period.

The potential problems with twins begin very early on with fusing of the placental blood vessels resulting in freemartins. As the pregnancy develops, total foetal mass becomes the critical issue as a cow with twins is attempting to support 60% more foetal mass. When foetuses, placenta, and fluids are considered, cows carrying twins lose more condition before and after calving compared to single-pregnancy cows.

The problems continue around calving with cows carrying twins typically calving 10-14 days earlier, which can pose problems with dry cow selection therapy. Roughly 18% of twins require assistance at calving and following assistance, survival rates in twins were only 73% compared to the 95% in assisted single deliveries.

As a result of their poor dry matter intakes through pregnancy, cows carrying twins have significantly lower insulin concentrations through the dry period resulting in fat mobilization and higher NEFA and ketone concentrations during the last month of pregnancy - both of which significantly increase the risk of type II ketosis and subsequent metabolic disease. When all of the above is taken into account the net cost of a typical set of twins is believed to be approximately £130.

The typical UK incidence of twins is believed to be roughly 2-5% in cows, compared to 1% in heifers, however there is a large inter-herd variation with incidences of 14-15% in some herds. The average heritability of twinning among Holstein sires has increased over time. Individual bulls have a Predicted Transmitting Ability (PTA) which can range from 1.6% to 8% with a higher incidence of twinning being reported for certain cow families.

A large number of twins are expected early this year as a result of the period of heat stress through the summer of 2014. During periods of heat stress follicular quality is reduced, compromising oestrogen production and as the heat wanes, multiple (poor quality) follicles are allowed to develop and ovulate – increasing the incidence of twins. This is further exacerbated by the increase in dry matter intakes which occurs as the heat recedes, resulting in an ovarian 'flush'.

Twins are detectable at PD using ultrasound best around 40 days (however they can be picked up less reliably from 30 days) which can allow you to consider the following management strategies:

- Monitor body condition scoring more closely.
- Dry off 10-14 days early.
- The use of Kexxtone boluses (although monensin has been demonstrated to increase the likelihood of twins).
- Monitor cows calving twins more closely around calving if those carrying twins are well identified.

Bull MOTs

The stock bull may not be at the forefront of most farmers' minds as they battle with rain, wind, mud and lambing, but for herds which want to produce a good calf crop next spring, now is the time to start preparing the bull for his work in the next few months. A fit bull can cut your calving interval, reduce input costs and provide greater financial returns. Research has shown that 20% of bulls are subfertile, which will result in disappointing conception rates in the cows.

MOT your bull well in advance, ideally 10 weeks before the start of the breeding season, as semen production takes over 8 weeks. The things to check can be remembered as the five "T"s. **TOES:** Assess the bull's gait when standing and walking. Lameness can impair movement, increase body temperature and reduce semen production Investigate any lameness promptly, so that remedial foot trimming can be carried out at least 8 weeks before the breeding season. **TESTICLES:** Scrotal circumference is positively related to sperm output. The testicles should have a minimum circumference of 34 cm in bulls over 2 years of age for most breeds. The testicles should be even in shape, and have the firmness of a tennis ball. **TONE:** Bulls should be fit not fat. Too little or too much body condition can lead to reduced libido and semen quality. Investigate any causes of loss of condition e.g. teeth, lameness, parasites, disease. To achieve a body condition score of 3, good nutrition is essential. Bulls should be on a rising plane of nutrition at the start of

the breeding season. Feed good quality forage along with 2-3 kg of a high fibre, 14%CP good quality concentrate, depending on body condition. Include a general purpose mineral supplement, ideally one formulated for the specific farm conditions. Avoid feeding high levels of concentrates over a long period of time as this can adversely affect sperm production. **TREATMENT:** In the weeks preceding the breeding season ensure that routine vaccinations for BVD, Lepto, IBR are up to date and give any necessary fluke or lungworm treatments. **TEST:** Observe the bull serving cows and look for issues such as lack of libido or physical problems. One month before the breeding season a breeding soundness examination should be carried out by a vet. This will entail a thorough physical examination of the bull and collection of a semen sample for evaluation. This is often the only way of detecting a subfertile bull, other than waiting for the cows to be PD'd, by which time a lot of months will have passed.

If hiring a bull or purchasing one that has worked in other herds, be aware that he could bring disease into your herd, as these bulls have an increased risk of disease. Ask for them to be blood tested for BVD, Johnes and possibly other diseases. Discuss with your vet treatments that can be given to eliminate any leptospire that may be living in the kidneys, and have a sheath wash carried out to prevent introduction of Campylobacter.

HuskVacTime

Bovilis Huskvac is the only vaccine for the prevention of lungworm infection in cattle and now is the time to think about using it. There are several reasons to consider this method of lungworm control in both dairy and beef herds.

1. Coughing cows – an increase in the incidence of lungworm in heifers in their 2nd grazing season and adult cows in the last 10 years may be associated with inadequate opportunities of developing immunity due to over worming in the first grazing season.

2. Reduce unnecessary use of anthelmintics – Bovilis Huskvac can be used in combination with other strategies to reduce anthelmintic use.

3. Organic herds – Bovilis Huskvac is the recommended option for the prevention of lungworm as anthelmintics are restricted in organic herds.

Huskvac can be used in healthy cattle of 8 weeks of age and older. Following vaccination, vaccinated stock should not be mixed with unvaccinated stock or allowed to graze on pastures recently used by unvaccinated stock until 2 weeks after the second dose of Bovilis Huskvac. Calves need to complete a full course 2 weeks before they can be let out to grass.

Farming Connect Initiatives

A range of funded spring vet clinics and workshops are available to farmers through Farming Connect. If you are interested in taking part in a Beef BVD Screening workshop, or participating in a one to one FEC Clinic or a Post Mortem Clinic to investigate lambing losses - please contact Catherine Smith to register your interest as soon as possible. Mobile: 07974655774, email: catherine.smith@menterabusnes.co.uk. Alternatively you can contact us at the office to discuss the options with one of the vets.

Staff Changes

We are sorry to inform you that Brigitte has decided to move on from her job as one of our receptionists. She has been with us for two years, and during that time many of you will have met her and will want to join us in wishing her all the best for the future. We would like to thank her for her hard work during her time with us.

Joke of the Month

Have you heard about the five young bulls who were standing in the pasture discussing what they wanted to be when they grew up?

The first said he wanted to go to Rome and become a papal bull.

The second said he wanted to go to New York and become a bull on Wall Street.

The third wanted to go to the windy city to become a Chicago Bull.

The fourth said he wanted to go to Beijing and be a bull in a China shop.

The fifth said he was just going to stay in the pasture for heifer and heifer and heifer.