



# WELCOME TO farm news



APRIL 2015



## Twin Trouble

Carolyn Baguley MA VetMB Cert AVP (Cattle) MRCVS

Twins, especially in dairy cows, can result in significant losses to a herd, as they significantly increase the risk of dystocia, retained foetal membranes, metritis, metabolic disease (e.g. ketosis or LDA) and culling. The calving to conception period often increases as a result.

The potential problems with twins begin very early on with the fusing of the placental blood vessels, often resulting in freemartin heifers if they are twin to a bull calf. As the pregnancy develops, total foetal mass becomes the critical issue, since a cow with twins is attempting to support 60% more foetal mass than in a singleton pregnancy (as well as the extra fluids and placenta). Cows carrying twins can 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 than their singleton-carrying cohorts. This can pose problems in dry cow selection therapy with regard to withdrawal periods. Roughly 18% of twins require assistance at calving and, following assistance, survival rates in twins are only 73% (compared to 95% in assisted single deliveries).

As a result of their poorer dry matter intakes through pregnancy, cows carrying twins have significantly lower insulin concentrations through the dry period. This results in fat mobilisation and higher NEFA (nonesterified fatty acids) 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 and 1% in heifers, but 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) ranging 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. As part of the normal oestrus cycle, the cow's ovaries go through waves of follicular development (typically three in maiden heifers and two in adult cows). One of the follicles is selected to become the 'dominant' follicle, which then goes on to ovulate. The dominant follicle secretes oestrogen and suppresses the development of other follicles - it is this increasing oestrogen level which is in part responsible for the expression of oestrus. However, during periods of heat stress follicular quality is reduced, compromising oestrogen production (which helps explain the reduction in oestrus expression in hot weather) and as the heat wanes, multiple, poorer 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 best detected by ultrasound at around 40 days, although they can be picked up less reliably from 30 days. Diagnosing twins early can allow you to consider the following management strategies:

- Monitor body condition scoring more closely.
- Dry off 10-14 days earlier than usual.
- The use of Kexxtone boluses (although Monensin has been demonstrated to increase the likelihood of twins).
- Monitor cows with twins more closely around calving.



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Please note that telephone calls are recorded for quality and monitoring purposes.

## TB Announcement

Rose Jackson BVSc DBR MRCVS



You may have seen in the farming press that XLVets Farmcare Midlands has won the TB tender for the Midlands. Scarsdale Vets is one of the founding members of XLVets Farmcare Midlands. From our clients' point of view, this means that absolutely nothing will change and that we will continue to carry out your TB testing as usual.



## Correction...

In the February newsletter, we talked about vaccination of ewes for clostridial diseases and pasteurellosis pre-lambing. Ewes that receive their annual booster 4-6 weeks before lambing will pass the immunity to their lambs through colostrum.

We said that lambs can then be vaccinated when they are 4-5 months old, when maternal immunity wanes. We should have said 4-5 weeks old, rather than months! Apologies for the error, and well done to all those who spotted it!

## Meet the Team: Mandy Thompson



Mandy has worked on reception at Scarsdale for nearly 8 years now, and for the last 2 and a half years has been enjoying her role as a vet tech which involves going out on farm for mobility scoring and

vaccinations. In her spare time Mandy loves travelling, horse riding and walking her dog, Basil the Rottweiler, to a nearby pub!

## Liz Cresswell BVM BVS MRCVS

# Biosecurity

## Prevention is better than cure!



Biosecurity is a topic which conjures up images of endless welly washing and changing of boilersuits. It sounds like a lot of hassle, but in reality there are many simple and easy ways in which to implement biosecurity, and prevent potentially catastrophic diseases spreading between farms.

It is estimated that each outbreak of digital dermatitis costs around £45 per cow per year, whilst a severe outbreak of BVD could cost a farm upwards of £50,000. It is therefore worthwhile considering what biosecurity measures you are using, both for your sake and for the sake of other farms.

### Key areas to address include:

- **Buying in animals** - this is one of the biggest disease risks. Consider where you are sourcing replacements from, and don't be afraid to ask for proof of their disease-free status. Buying from accredited herds/flocks can help to give buyers reassurance.
- **Quarantine incoming animals** - 3 weeks is usually the minimum recommended time.
- **Vaccination** - it's by no means bullet-proof, but can be used as part of a whole herd/flock strategy to help reduce the impact of some diseases.
- **Control wildlife/domestic pet populations** - diseases such as TB, neospora and toxoplasmosis are spread by wild and domestic animals as well as between cattle.
- **Culling protocol** - getting chronically infected animals (e.g. cows with persistent *Staph. aureus* mastitis, or Johne's-positive animals) out of the herd will prevent them spreading disease further among your own animals (a particular branch of biosecurity known as biocontainment).

Anybody who spends time travelling between farms poses a risk to biosecurity, and unfortunately this includes us vets! Diseases such as BVD, Johne's, salmonella and digital dermatitis can be carried in muck, blood and other fluids which can contaminate our clothes, vehicles and equipment. Whilst we all carry disinfectants, brushes and clean protective gear, we still need your help to help prevent us transmitting diseases from one farm to the next:

- **Wash on, wash off** - washing on arrival to the farm as well as when leaving will help to prevent us bringing diseases onto your farm if we've just been somewhere that isn't as biosecurity conscious as you are! A simple boot dip will help - but make sure it is changed regularly and doesn't become a biosecurity hazard in itself!
- **Consider where vehicles park** -
  - \* **Away from animals** - muck can easily be carried from one farm to the next on tyres, so help us to keep our vehicles away from your animals.
  - \* **Near washing facilities** - so we don't have to walk back through muck in our clean gear.
- **Have your own equipment** - whilst we carry equipment such as calving aids and halters, using your own will help us reduce the risk of transferring diseases from the last sick animal we've used that piece of kit on.

Biosecurity is an issue which needs a concerted effort from everybody, not just to protect your own farm but for the sake of other farms too. If you have any questions about biosecurity or would like to put a biosecurity plan in place for your own farm then please do speak to us.

