September 2019

All the latest news and advice from our expert team

Farm news

KETOSIS: STATE OF THE NATION #ketosisSOTN

Rob Howard
BVMS MRCVS

Ketosis: State of the Nation

Cows suffering from subclinical ketosis will take longer to return to oestrus, are more likely to become cystic and will be 50% less likely to get pregnant to their first insemination. This means that ketosis if often one of the unseen factors driving down fertility on many farms.

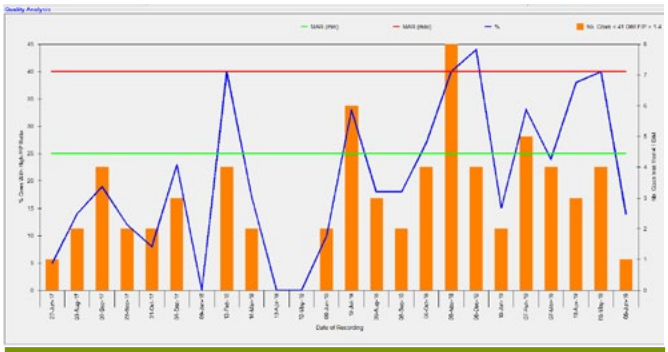
If you have issues with fertility, you need to check if cows are suffering with ketosis, as it could be contributing to the problem. Ketosis is caused when cows go into extreme negative energy balance around calving and are forced to mobilise excess body tissue. This leads to higher than acceptable ketone levels in the blood (BHBs). Energy balance is key to return to cyclicity, so on average cows with ketosis take 22 days longer to return to service. Energy balance also has a significant impact on the viability of the egg: follicles that produce the eggs we serve at first service start to be produced in the transition period, so energy balance in transition and early lactation is important. Ketones and fatty acids produced from the breakdown of body fat reserves are toxic to the eggs. Cows at risk of ketosis also face more health challenges – see graph below.

Cows at risk of ketosis face more health challenges

How can we monitor ketone levels?

1. Milk quality analysis: fat/protein ratios

Monitoring the fat/protein ratios for cows on their first milk recording (<41 days in milk) can give an indication of the level of ketosis risk. The target is to have less than 25% of cows with a high fat/protein ratio at any time (green line). More than 40% of cows affected gives an indication that there are likely to be problems associated with ketosis that month; this is likely to show up in the fertility in around six weeks' time.



Milk quality

2. Milk (dipsticks) or blood BHBs (ketone meters) on fresh cows 2–21 days after calving

To be truly accurate, cows should be tested twice in the first three weeks. To get a representative sample, you need to check 12 cows every 2-3 weeks (or all fresh cows if you don't have this many calving) so this could be done as standard at a routine visit. Occasional testing may underestimate the problem, so it is better to carry out regular sampling.

Mastering Medicines Courses

We are running a series of courses covering all things veterinary medicines related. Attendance will comply with the new Red Tractor recommendations for farm staff involved with the administration of veterinary medicines to have attended a course on the appropriate use of these products.

There are separate sessions for dairy farmers and for beef/sheep farmers and will take place at our Markeaton Lane practice on the following dates:

Thursday 5th September 2019
Thursday 3rd October 2019
Thursday 7th November 2019
Thursday 5th December 2019
Thursday 9th January 2020
Thursday 6th February 2020

For more information or to book, call our team on **01332 294929**.

For more information call our practice on **01332 294929**
or email **farmandequine@scarsdalevets.com**

ScarsdaleVets Farm
scarsdalevets.com

Cross-sucking behaviour in dairy calves

Rose Jackson BVSc DBR CertVBM MRCVS

One of the concerns dairy farmers have over paired or group housing of calves is the increased risk of cross-sucking and any associated navel problems.

There is a strong and consistent link between milk intake and a calf's motivation to suck. A behavioural study found that non-feeding sucking behaviour is largely related to the taste of milk rather than hunger, because most of this behaviour occurs immediately after a milk feed. One study showed that bucket-fed calves spent 44 seconds drinking milk and then 10 minutes sucking on an empty bucket! However, food intake is still important as it was reported that calves on a lower milk ration had a slightly higher frequency of cross-sucking so it is important to feed more milk, especially in the first 4 weeks of life.

Non-feeding sucking is normal behaviour and contributes to the feeling of being full (satiety), therefore it is important to allow calves to perform non-feeding sucking. Satisfaction of this behaviour will then reduce the occurrence of cross-sucking.

Here are some practical suggestions to try:

- Use teat feeders rather than bucket feeding
- Provide more teats than the number of calves in a group
- Provide a dedicated sucking station for 10–15 minutes immediately after a milk feed e.g. a dry teat at a normal height for sucking or a small amount of water provided in a clean teat feeder
- Use teats with a very small hole to reduce milk flow and increase drinking time
- Provide hay at the end of a meal.

Manipulating the breeding season in sheep flocks

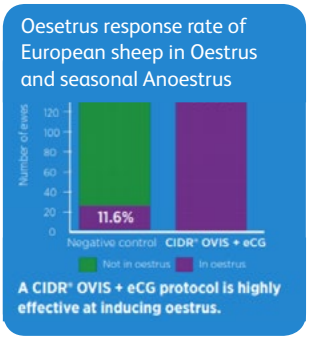
Pablo Sancho Ros MRCVS

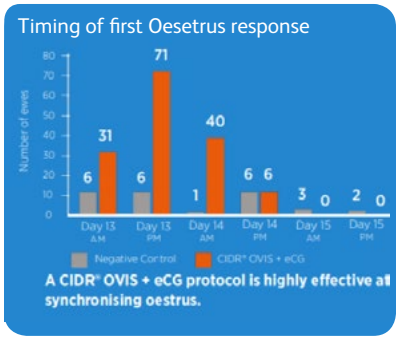
There are several options available to alter the reproductive cycle of sheep; I am going to discuss the use of vasectomised rams (teasers) and the CIDR ovis synchronisation programme.

Teaser rams

Using raddles, teaser rams can identify the ewes that are in heat so that they can be inseminated with high genetic merit semen. The animals that we select to vasectomise should be animals rejected as a reproductive ram but that are in good body condition and without lameness or any problem that makes it impossible for them to mount the ewes. Following this we should be able to retain teaser rams in our flock for up to three years.

We can also use vasectomised rams with young ewes that are going to have their first heat. It's known that first contact with a mature tup can provide undue stress for ewe lambs, resulting in poor fertility due to rejecting the ram or not having a regular cycle. Mixing teaser rams with young ewes two months before breeding season means that the ewe gets used to the ram. They also get used to being mounted, which means the fertility in your flock improves so there are more lambs born and the final income would be much bigger. In addition, leaving ewes away from the rams for at least 30 days and then mixing them with the teasers can have a small synchronisation effect in the flock but not as well as other methods like CIDR.





CIDR Ovis Synch

CIDRs are a device that use progesterone to synchronise oestrus in ewes. The benefits include a shorter lambing period, which reduces labour costs and also an advanced breeding season that provides an opportunity to utilise spring grass more efficiently for lamb production. Lambs sold in April and May generate on average a 21% greater return over those sold in the summer months.

CIDRs are very easy to put in and remove using the applicator. Like the cow CIDR, the device has a "T" shape which means that it has good retention rates. The CIDR has to be removed 12 days after insertion followed by a PMSG injection; 1–2 days after that, the ewe should be in oestrus. CIDRs have fewer problems such as vaginal discharge on removal compared to other methods like vaginal sponges.

Moreover, the system has shown to be effective for induction and synchronisation at all stages of the oestrus cycle (see graph) which makes it very easy to set up AI protocols. This gives us the chance to improve our genetics with the possibility of using semen with high genetics.

In summary, using teaser rams can synchronise our ewes and shorten the lambing season but not as effectively as CIDRs. Using CIDRs, we can synchronise and move our lambing season to the most suitable month for your farm.

If you are interested in either of these techniques to improving the fertility efficiency of your flock, please call the practice on **01332 294929** and we will be very happy to help you.

Farm and Equine Centre
Markeaton Lane, Markeaton, Derby DE22 4NH
01332 294929

Alfreton 01773 304900
Allestree 01332 554422
Hilton 01283 732999
Langley Mill 01773 304914
Mickleover 01332 518585
Oakwood 01332 666500
Pride Veterinary Centre 01332 678333
Shelton Lock 01332 700321
Stapenhill 01283 568162
Stretton 01283 565333
Wollaton 0115 697 6586