DAIRY HERD HEALTH & PRODUCTIVITY SERVICE

Newsletter 2015, Q4 November 2015

Getting ready for winter

The belated summer finally arrived for most in September and October, and a number of farms have had their cows out at grass for longer than usual. The sun was out, the grass was green, the cows continued to milk well….

However was this potentially storing up problems for later on this winter? Although the grass was still growing, its quality was deteriorating, and so a lot of cows have ended up losing body condition whilst out at grass. This is possibly not so much of an issue for stale late lactation cows, and would help stop them gaining excessive amounts of body condition prior to drying off.

However for fresh calvers it could potentially result in problems with poor milk production (even after cows have been housed on full winter rations), with reductions in milk protein content due to long-term energy problems.

However fertility is the main concern with such an extended grazing season, and such thin cows at housing will struggle to get back in calf again. Extended post-partum nutritional anoestrus means that they will take longer to start cycling after calving, with weak/poor signs of bulling and disappointing conception rates.

Actions to take before full winter housing (if you have not already done so!):

- Get your silage analysed. If you don't know what you are working with, then you cannot plan ahead for winter rations. Due to the poor summer, 2nd and 3rd cut grass silages on most Scottish farms have been analysing particularly poorly according to reports.
- Work out your forage stocks for the coming winter. Most farms look to have a good supplies of forages, but can the best quality forages be reserved for the "close up" dry cows and early lactation milking cows?
- Check that your cows have not picked up anything that they should not have at grass. Liver fluke would be one concern, and testing on 200 dairy farms in Shropshire last year (considered to be a "good" year for fluke) revealed that 42.5% of units were fluke positive. Discuss testing options with your veterinary surgeon.
- Given the current pressure on milk prices (especially those with low "B price" contracts), carrying passengers is not an option this winter. Cull any cows that are costing – high cell counts, chronic mastitis cases etc.
- If you are not sure what your cows think of their diet, then a metabolic profile blood test will enable you to "ask the cows" before any issues potentially result in long-term effects on cow health and productivity. Don't delay – blood test today!

As usual, the DHHPS will be part of the Royal (Dick) School of Veterinary Studies stand at Agriscot 2015 on Wednesday 18th November at Ingliston. Please pop into the stand and say hello if you are coming along to the show.

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Heat detection in dairy herds

At the recent 2015 BCVA conference, Jon Remnant from the University of Nottingham presented the results of a study looking at the oestrus cycles of 42,252 dairy cows in 159 herds in England and Wales. The oestrous cycle of a cow has been widely accepted as being 21 days, with a normal range of 18-24 days.

In their study, Jon Remnant found that the most common interval between services (and thus heat interval) was actually 22 days, and that 90% of these fell within the range of 18-28 days. There was also a lot more variation of this interval in an individual cow than previously thought. The implication is that we need to be heat detecting on a daily basis to prevent missing cows showing signs of heat outside of the expected 21 day cycle.

Why improve heat detection?

Current research suggests 50% of heats are being missed… that's 50% of cows that could have been served that were not, resulting in longer calving to conception periods than necessary.

Why is heat detection so poor?

- Modern dairy cows have shorter periods on heat (7-10 hours), and in fact 20% of cows are on heat for less than 6 hours.
- Time pressures on farmers and staff.
- Reduced expression of heat due to: all year round calving herds (less cows on heat at any one time), other disease problems such as lameness, large herds resulting in cows spending more time standing in collecting yards waiting to being milked etc…
- Standing to be mounted is the only definitive (or primary) sign of bulling activity in a cow. **HOWEVER….** recent research suggests less than 50% of cows display this behaviour during heat.
- Secondary signs of heat (such as head mounting, chin resting etc.) can be used as part of a scoring system to improve heat detection.

Maximising expression of heat

Reducing overcrowding, promptly treating lame and sick cows, providing adequate space and a non-slip floor, minimising body condition loss in early lactation. All of these will increase the chances of cows showing good signs of heat.

Improving heat detection

Observation of cows and recording

- Have a detailed plan of who, when and where any heat detection is occurring.
- The ideal is for 3 periods of observation each day lasting for 20 – 30 mins.
- Evenly spaced throughout day: 6am, 2pm and especially in evening (as the majority of heats will occur in the evening/night).
- Ensure cows are undisturbed: 2 hours after milking, feeding etc.
- Good cow ID essential: visible freeze brands, good lighting.
- Good record keeping, especially for picking up returns to service.

Other methods can be used as an adjunct to good observation and recording such as:

- Tail paint or Heat Mount detectors
- Activity Meters and pedometers
- Milk Progesterone Testing
- Bulls – either using Natural Service or Vasectomised Bulls/Teaser Bulls

Further details on these techniques and heat detection can be found in our heat detection factsheet on the DHHPS website.

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