Farm Animal Newsletter

November 2011

Welcome to Fiona

Following Ben's departure, we welcome Fiona Boothby to the farm animal team.

Fiona is a new graduate from Liverpool University. She comes highly recommended having won the farm animal clinical prize in her final year.

She has a particular Interest in cattle fertility and has also seen how things are done across the Atlantic, studying cattle medicine at Cornell University.

We hope you will make her feel welcome.

She has big shoes to fill. Ben joined us straight from Edinburgh University and quickly established himself as an important part of the practice, particularly developing a successful sheep AI and ET programme.

We wish Ben and Nicole every success with their move to South Africa.

Inside this issue:

Focus on Heat Detection during housing periods

Cows generally show better signs of oestrus when they are out at grazing. Studies have shown that during winter housing the time a cow spends in oestrus is typically 30% lower. And considering our modern Holstein cross cows are already showing oestrus for a shorter period this is obviously not helpful! There are a few housing issues which if addressed can help to maximize both the time cows spend in oestrus and the likelihood of you detecting it:

- The floor surface is vitally important. Cows will not stand to be mounted or mount other cows if they are on slippery concrete.

Activity	Field	Concrete
Duration of oestrus (hrs)	13.8	9.4
Mounts per hour	7.0	3.2
Stands per hours	6.3	2.9

- Ensure all concrete surface have sufficient grip, and if necessary re-groove areas.
- Providing large open areas for loafing will increase bulling activity. Often just opening the outside area of the shed with a few gates can help. Cows do not like to bull in narrow, crowded passageways.
- Ensuring adequate lighting levels and increasing the hours of day light (with artificial light to 16-18 hours) can increase both yields and bulling activity.
- Increasing the time spent detecting cows bulling can dramatically increase the % of heats detected. Cows should be observed at quiet periods of the day, e.g. before morning milking, late evening, and a couple more times during the day. Increasing heat detection rates can help to improve overall reproductive performance greatly. A 10% increase in heats detected is worth £49/cow or 0.81p/l (6000l average)
- Using heat detection aids such as activity monitors (collars, pedometers), tail paint, kamars, and scratch cards can often significantly help with improving heat detection rates.
- A recent study showed that a combination of neck collars and visual observation gave the best results.

Severe, non-healing lameness in Cattle - Toe Necrosis, Infected Ulcers and Severe White Line Disease

We have recently been seeing a significant number of lame cows with severely infected lesions which are very hard to treat. These include severe white line disease, toe necrosis, and infected sole ulcers.

We have for a while now assumed that these lesions are normal white line, toe ulcer or sole ulcer lesions which have become infected with Digital Dermatitis (DD) bacteria, and a recent study has indeed confirmed that this is the case.

These lesions are of great worry for a number of reasons, not least the welfare of the cow, but also the significant financial impact of these lesions as they often result in repeated treatment by a vet, digital amputation or culling of the cow (and not always through walking on a lorry!).

There are a few points to make in relation to prevention and treatment of these lesions. They usually start as a simple white line lesion or sole ulcer which then becomes infected with DD. So prevention is 3 fold:

- Reduce the risk factors associated with white line disease and sole ulcers
  - Handling of cattle
  - Lying times
  - Underfoot surfaces
- Ensure that DD is well controlled in the herd
  - Foot bathing (a strict foot bathing regime if essential to control DD)
  - Slurry management
- Ensure prompt and effective treatment of all lame cows
  - Any cow showing signs of infection at the first treatment should receive a topical antibiotic (lincocin) bandage and injectable antibiotic - if necessary by a Vet
  - Any cow not responding to treatment quickly should be referred to a vet for more aggressive treatment

Foot Bathing

Beginning foot bathing with 2 sessions of lincocin (3 consecutive milkings 1 week apart) can help to significantly reduce infection levels, but must then be followed up by regular foot bathing at least 3-5 milkings a week, with either formalin (5% - (10l per 200l)) or copper sulphate (5% (10kg per 200l)).
Lower concentrations can be used if done daily.
Foot baths should be changed every 1 litre per cow, i.e. a 200l foot bath will do 200 cows through it.
As important as what goes in the foot bath is its construction and where it is sited - if it is easy to use (i.e. set up, fill, empty and run cows through) you are more likely to do it regularly!

Both DairyCo Lameness and Mastitis plans are available through the practice, and with 70% discount through Healthy Livestock!

DairyCo Mastitis Control Plan

Castration of Bull Calves

There has recently been an article in the Veterinary Press discussing the castration of bull calves - specifically the use of rubber rings in animals over 7 days of age. It is ***ILLEGAL TO USE A RUBBER RING TO CASTRATE AN ANIMAL OVER 7 DAYS OF AGE.***

Animal Health had recently been made aware that it was becoming common practice on some farms, particularly calf rearing units buying in calves, to apply rubber rings to animals when they arrive on farm, usually at a few weeks of age.

It is legal for anyone over 18 yrs of age to castrate an animal less than 2 months old and no anaesthetic is required. This can be done either by surgical castration or bloodless castration - Burdizzo. Animals over 2 months of age must receive anaesthetic and be done by a vet.

Animals over 7 days of age which have a rubber ring applied will be in pain, this will affect their feed intakes and their growth rates, so it is economically sensible to not do it, as well as for legal reasons!

Anyone found to be illegally castrating calves faces prosecution and also penalty reduction through cross-compliance under the Single Farm Payment scheme.

Must be less than 7 days

Can be up used up to 2 months of age

Pneumonia Vaccines

The are a large number of vaccines available to help control pneumonia in cattle now. Some are against single diseases and some include more than one disease. Some provide quick acting protection which is usually of short duration (the intranasal vaccines) and some take longer to act but provide longer term cover (the injectable vaccines).

For best results discuss with a vet which are most suitable for your situation, if you are a beef farmer and would like a complete Bovine Respiratory Disease Plan then get involved in the Healthy Livestock Respiratory Disease Strand.

Rispoval 4

Contains the main respiratory viruses - PI3, RSV and IBR and also BVD. Requires 2 doses, ideally over 3 months of age, can be used from 3 weeks but requires re-vaccination at 12 weeks. Covered from 2 weeks after 2nd dose (so need to start 6 weeks before risk period). Provides 6 months cover.

Rispoval 3

Contains PI3, RSV and BVD (no IBR). 2 doses 3-4 weeks apart from 12 weeks of age, covered from 3 weeks after 2nd dose. Protection lasts 6 months.

Rispoval Intranasal

Contains PI3 and RSV. Can be used from **9 days of age.** Covered within 10 days. Protection lasts 12 weeks. Ideal for young calves, especially protecting dairy calves around weaning.

Rispoval Pasteurella

Covers against Pasteurella only. 1 dose from 12 weeks of age. Protected in 7 days, Cover lasts 4 months. Useful for suckler calves and stores before housing, often in combination with Rispoval Intranasal (both single dose).

Bovilis Bovipast RSP

Covers against Pasteurella, RSV and PI3. Can be used from 2 weeks of age, covered 2 weeks after second dose. Protection only guaranteed for 6 weeks. Again useful for suckled calves before housing, but needs 2 doses.

Bovilis IBR Marker Live

Covers against IBR, marker vaccine, a live vaccine which can be used intranasally or intramuscularly. Can be used from 2 weeks of age onwards intranasally (if less than 12 weeks old must be revaccinated at 12 weeks of age). Can be used intramuscularly from 12 weeks of age. Single dose. Protection lasts 6 months.

Rispoval IBR Marker Inactivated

An inactivated IBR vaccine. Provides better cover in endemically infected herds with latent carriers (most infected dairy herds). Requires initial course of 2 s/c doses 3-5 weeks apart followed by 6 monthly boosters, from 12 weeks of age onwards.

Bovilis Huskvac

Protects against lungworm. Can be used from 8 weeks of age, requires 2 doses 4 weeks apart. Covered from 2 weeks after second dose, so should receive 2nd dose 2 weeks before turnout. Must not be wormed during course. Natural challenge provides boosters, so need to be grazing to receive this. Generally used in dairy replacements before being turned out for first grazing season.

For best results always speak to a vet about which vaccines suit your particular situation. The age of the animals and the timing of vaccination are critical.

Healthy livestock.org

For Beef Herds with Pneumonia Issues there is the Respiratory Strand of the Healthy Livestock Project (see previous newsletter or contact the practice)

myhealthyherd.com

Get an individually tailored plan for Bovine Respiratory Disease by us through MyHealthyherd.com

Dry Matter Intakes

Dry Matter Intakes (DMI) are critical when it comes to formulating winter rations for cows. Many nutritional issues can be sorted by increasing intakes rather than altering the constituents of the diet.

A 1kg increase in DMI (20 - 21kg) for a 35l cow can mean you can increase forage:concentrate ratios from 40:60 to 60:40, as the overall energy density of the ration needs to be lower (as they are eating more), and with forage costs being on average at least half that of concentrates this can lead to significant savings, around 30p/cow/day or nearly 1p/litre.

There are many things that can impact on DMIs, including:

- Ration formulation and presentation - a total TMR will give the highest DMI
- Fresh food available 24/7, 2 -3 feeds a day, pushed up regularly (5x a day)
- Fresh palatable food - no mouldy silage, no heated left overs in bottom of trough, cleaned out regularly
- Plenty of feed barrier space - at least 2ft per cow (double for fresh cows?)
- Easy access to feed area - no narrow passages, blind alleys
- Good feed barrier design -
  - barrier off set by 1ft
  - no electric fence
  - ideally not face to face
  - Flexible lorry strap
- Shiny surface to bottom of feed trough
- Good ration structure
  - Affected by constituents of diet and way it is processed
  - Straw chopped to correct length
  - Ration not over mixed - may need to pre-chop some parts
- Mixed in the same way every day, consistency is important
- Ideal total Dry Matter 45%
- Sometimes adding water to the diet ~5l/cow can help to improve structure and DMI

Water supply is very important to ensure maximum DMI

- At least 10cm trough space per cow

If you would like help in assessing what your DMI's are currently and some advice on trying to increase them if needed then contact us.

Carole is on the run… again!

Carole is running the London marathon next spring!
She is running in aid of Exeter Hospiscare. If you would like to donate any money to her you can either visit http://www.justgiving.com/carole-newbould-London-Marathon-2012 or contact her at the practice.

Cullompton Branch

College Road
Cullompton
Devon
EX15 1TG

Phone:01884 32228
Fax: 01884 831941
E-mail: valefarmvets@btconnect.com

Tiverton Branch

The Laurels
Tiverton
Devon
EX16 4LF

Phone:01884 253355
Fax: 01884 257050
E-mail: valelab@btconnect.com

Honiton Branch

2 Duchy Road
Heathpark Industrial Estate
Honiton
EX14 1YD

Phone:01404 44095
Fax: 01404 46243
E-mail: valehoniton@btconnect.com

the VALE veterinary centre