

Getting calves off to a good start

The third meeting of the Climate Change Focus Farm discussion group at Woodhead focused on importance of getting calves off to the best start

Key points:

- Dry cow management is key to colostrum quality
- Test your colostrum to ensure you only keep and feed the best
- Aim for 3 litres high quality colostrum within first 2 hours post calving to ensure best start for calves
- Offer fresh clean water from birth; preheated water may increase overall intakes to improve growth rates
- Calves don't tolerate heat loss from draughts or damp bedding. Heat loss = energy loss, compromising health growth rates

As calving was underway at Woodhead, the group travelled to Crichton Royal Farm by kind permission of Hugh McClymont to look at the systems they have in place with a focus on calf rearing.

Speakers at the event were Huch McClymont, Vet Helen Carty and Dairy Specialist David Keiley. The group were shown around the unit and had plenty of time for discussion and questions. The visit was a good opportunity to see what could be achieved and take ideas back to their farms at home and to develop at future meetings at Woodhead.



Colostrum - the 3 Q's

Colostrum is vital for newborn calves - it contains antibodies to boost their immune system and rich in nutrients to get them through the first days of life. AHDB have launched their 3 Q's of colostrum campaign to help reinforce it's importance. Helen Carty, SAC Veterinary Services explained more to the group. The 3 Q's are summarised below:

1. **Quantity** - calves should receive a minimum of 3 litres/10% bodyweight of colostrum at body temperature (38°C)
2. **Quality** - high quality colostrum will contain high concentrations of antibodies. In order to ensure that you have quality colostrum, collect it as soon as possible after calving.
3. **Quickly** – calves should receive colostrum within 2 hours of birth and it is a legal requirement that the calf receives colostrum within 6 hours.

Quality of colostrum can be affected by whether or not the cow has been leaking milk prior to calving and the length of the dry period e.g. cows dry for less than four weeks can have lower levels of antibodies.

A colostrometer is an easy and inexpensive tool to make sure you keep and use good quality colostrum. There is no way to tell by just looking at colostrum whether or not it is of high quality.



Calf jackets

Recent research has shown the benefits of using calf jackets on all winter born calves. It is common for jackets to be used with ill or premature calves, but the latest studies have shown significant growth rates *and* feed savings when jackets are used routinely.

Key findings from the trial found:

- Calves with jackets ate less concentrate saving 13p/kg of gain whilst gaining on average an additional 5.3kg in a 12 week period.
- Last rib girth measurements indicate rumen development. During this study the results showed calves with jackets had an increased measurement when compared with calves in the control group.



Transitioning to solid feed

The calf's rumen is small and not fully developed at birth, so can't function to digest a forage diet. Although it can be stimulated from as early as 5 days to start development. Key to this is access to both water and concentrates.

Calf concentrate should be available to the calf from birth and can be in either course mix or pellet form (no bigger than 1.19mm diameter) but should be dust free and of a suitable size for small animals. Nutritionally a CP of 18% should be sufficient to promote rumen microbial development. Good quality forage e.g. hay can encourage rumen muscle growth and function; offer little and often to ensure palatability and encourage intake.

Importance of water

Providing a milk feed, calf concentrate and quality forage will all help to transition the calves to solid feed, but the importance and volume of water required can often be underrated.



Providing fresh water from birth is a legal requirement, but can improve concentrate intake by up to 31% and increasing growth rates by up to 38%. Water requirements will increase from 1 litre/day to over 3 litres by 3-4 weeks.

Fresh water should be readily accessible but out of the way for soiling contamination. Check buckets or troughs are clean and water is refreshed throughout the day. Offering warmed (16-18°C) water in cold weather may increase overall solid feed consumption.

Bedding - "the knee test"

Calves spend up to 80% of their time lying down, so they need a dry, draught free bed. Draughts and wet bedding will cause heat and energy loss and have further health implications.

A deep straw bed ($\geq 15\text{cm}$) is ideal. Test how dry your calf bed is by doing 'the knee test' – drop to your knees with your full weight.



If your knees are wet the bedding is not deep or dry enough.

To help budget your bedding requirements, each calf (on solid floor) will require an average of 20kg straw per week. This can be reduced by up to 50% if kept over slats.

There are nine climate change focus farms in Scotland. Keep up to date with their activities at



@SACFarm4Climate

www.farmingforabetterclimate.org

Meetings are free to attend and all farmers are welcome.

For Woodhead, contact farm facilitator Robert Ramsay on 01292 525252 or via email at Robert.ramsay@sac.co.uk for more information.

Funded by the Scottish Government as part of its Climate Change Advisory Activity

Farming

