Improving efficiency; cow diets and performance

This was the fifth meeting of the Hillend climate change focus farm discussion group, looking at practical ideas to improve farm efficiency and profitability.

Carneil Farm

The meeting on the 10th December saw the group visit John and Brian Craig at Carneil Farm Carnock, Dunfermline who are regular attendees to the Hillend meetings. Donald Brown from SRUC Barony Campus and Helen Carty from the SAC consulting vet lab in Ayr were the invited speakers.

John and Brian run 160 milking cows, calving all year round on an aligned contract with Sainsbury’s. The business has increased cow numbers and invested in new buildings, slurry storage and land to accommodate these increases in recent years. The business has also been able to successfully accommodate succession during this expansion with the majority of the decisions now being taken by the younger generation whilst still maintaining the counsel and labour force of the older generation.

Donald Brown a lecturer at the SRUC Barony campus with a lifetime of experience in dairy farming from a nutritional background, led the discussion in the morning session. Donald was tasked with using the host farm facilities to talk about a number of different factors which can influence the efficiencies of the attending farmers dairy businesses. Overleaf we summarise some of the key topics discussed.

There are nine climate change focus farms in Scotland. Keep up to date with their activities at www.farmingforabetterclimate.org, Facebook or follow us on Twitter.
Quality forage
Starting with forage analysis and the diet being fed. Donald highlighted the benefits of good silage analysis and forage intakes. The business at Carneil was feeding slightly less than average amount of concentrates at 0.3kg/litre, whilst still giving a herd average of 29 litres of milk per cow per day. Around 60% of the DMI (Dry Matter Intake) was coming from forage and the herd had a feed conversion efficiency of 1.35 which is above average.

Feed space
Trough space, barrier height and barrier options were discussed. The system at Carneil was based on a trough which avoided the requirement to push up the TMR (Total Mixed Ration) on a daily basis; however the problem of removing any refusals (feed not eaten) was not so easy to overcome. Minimising the amount of refusals was seen as the best way to reduce the amount of shovelling that was required at Carneil. Well presented, well mixed but not over mixed TMR was also essential to maximise the intakes of forage being fed to milking cows.

Shed design
The milking cows, dry cows, bulling heifers and calving cows were all under the one roof span at Carneil. There were number of different diets being fed which highlighted John and Brian’s attention to detail. Having all the different important groups in the same building made the management of these groups much easier and reduced the risk of anything being missed in terms of cows or heifers coming to the bull or any cow requiring assistance at calving. The time spent with the graph paper designing the building expansion was time well spent, as cow flow and condition of the cows in their cubicles showed the building was working well for the animals.

Dry cows
The management of dry cows seems to be different on every farm. The message was that if your system was working for you at this stage or as the cows enter the milking herd, then don’t change your system. The different systems discussed and operated by the farmers attending the meeting allowed plenty of opportunity to change the management of your dry cows should you not be happy with cow performance at this time in the cows production cycle. The cows at Carneil were fed a dry cow concentrate plus haylage pre-calving and not introduced to the milking cow diet until they had calved.

‘Cow Signals’
Donald Brown is a qualified cow signals trainer and discussed the merits of this management tool when assessing a dairy farms performance. Cow Signals are a recognised trademark and are based on the principal of having a number of headings (Light, Air, Rest, Space, Feed and Water) in order to allow you to produce and manage a healthy productive dairy herd. Farmers at the meeting were given sheets to score the set up Carneil and to take home and assess their own herd to establish where they may have room to improve their own herds performance.

BVD Eradication Scheme
Vet Helen Carty (SAC Ayr) was tasked with bringing those in attendance up to speed with the BVD eradication scheme that has been introduced by the Scottish Government. The Scheme is progressing and the country is slowly getting the number of herds with BVD reduced. The scheme restrictions have been increased and those in attendance with herds which do have a “not negative” status were given the available options on how to establish a negative herd and outlined alternatives when selling livestock which were not destined for slaughter.