

Tightening the calving interval within commercial beef herds can reduce costs and improve margins. **Chloe Palmer** reports on how this can be achieved.

Tighter calving period greatly improves beef herd profitability

An extended calving interval is one of the main factors leading to reduced weaning weights and higher feed costs, according to industry experts.

Keith Cutler, partner with the Endell Veterinary Group, Salisbury, and past president of the British Cattle Veterinary Association, suggests calving intervals can provide a good indication of the standard of herd management and overall herd health status.

He says: "Calves born early in the calving period tend to be

healthier so will grow better and be heavier at weaning.

"Consequently, they will be more valuable."

Mr Cutler refers to a self-perpetuating cycle where cows which calve early have a longer time period for uterine evolution and for a return to ovarian cyclicity resulting in higher fertility. Similarly, for cows calving later in the period, the problem is exacerbated year-on-year.

"Cows which calve later in the period will slip each year and eventually fail to get in calf.

"They will then either have to be culled or they must be carried

round for a year, but either way they are a significant cost to the herd."

Mr Cutler refers to management of cow nutrition, bull fertility and infectious disease control as the three key management factors affecting the length of the calving period.

"Cows should be on a rising plane of nutrition prior to bulling to promote cycling the ovaries and to improve the quality of eggs. For spring-calving herds, this critical time usually coincides with a flush of spring-grass which is ideal.

"On average, one in 10 bulls



Simon Marsh, principal lecturer at Harper Adams University, believes compact calving can pay off.

on-farm is sterile and an additional two in 10 are sub-fertile, so a pre-breeding examination is highly recommended to rule out the risk of infertility."

Action

Identifying whether infectious disease is present within a herd is also essential so appropriate action can be taken.

Mr Cutler says synchronisation and artificial insemination

(AI) are 'under-used tools', but farmers should be wary of viewing them as a quick-fix solution because management of a herd must be 'spot-on' for this strategy to be effective.

He says: "Synchronisation and AI can be particularly useful for tightening up the tail-end of the calving pattern.

"Synchronisation secures the best possible time for service and AI eliminates the risk of an

infertile bull as it enables the best genetics to be sourced."

Simon Marsh, a principal lecturer at Harper Adams University, shares Mr Cutler's concerns about the impact of an extended calving period for beef producers and says the cost to the industry is considerable.

Benefits

He says tackling issues to achieve compact calving period will have wider benefits for animal welfare and business profitability: "Herds recording a calving period of less than nine weeks are weaning calves at an average weight of 47kg greater than herds where the calving period is 18 weeks or more. Calving periods extending beyond 12 weeks equate to an additional cost of £3.55 per cow per day."

Mr Marsh says cow management prior to bulling is critical "Poor condition at bulling where body condition score falls to less than 2.5 is one of the most common reasons for poor fertility."

Mr Marsh advocates calving at two years old where it can be achieved because it can result in significant financial gain.

He says: "Aim for heifers to calve two to four weeks before the main herd so they can adjust before other cows calve.

Calving interval - facts and targets

- Number of calves born per 100 cows/bull is 88 per year
 - Number of calves weaned per 100 cows/bull is 85 per year
 - Calving period from first to last calf is 18.9 weeks
 - Calving interval is 440 days
- Recognised targets are:**
- A nine-week calving period
 - 95 per cent of calves weaned
 - A calving interval of 365 days

Source: Eblex stocktake 2014 report for suckler herds; results from top third of producers



Cost reductions and therefore boosted margins are two of the benefits of working on tightening calving intervals in beef herds.

Would urge farmers not to consider bulls with very high mature cow weights or 400- and 600-day growth

SIMON MARSH

"This will mean heifers are actually younger than two years old when they calve, but they are likely to have been bred from the most fertile cows in the herd which calved in the first few weeks of the calving period."

Mr Marsh points to bulls which have been over-fed prior to sales then come back to the farm to a grass-based diet as another potential problem.

He says: "We see bulls which are over-fleshed in the sale ring because they have been fed a high proportion of concentrate

and this has been shown to reduce fertility and longevity.

"Once the same bull is working in a commercial herd, it is usually fed a very basic diet prior to being turned out with the cows and this can reduce their performance."

Mr Marsh says improved genetics may offer part of the solution and estimated breed values can be used to select for improved maternal traits when choosing bulls.

He says: "The aim should be more fertile female replacements and to achieve this, farmers should be looking for traits such as 200-day milk, age at first calving, maternal calving ease, calving interval and longevity.

Considerations

"I would urge farmers not to consider bulls with very high mature cow weights or 400- and 600-day growth, since this will subsequently increase cow size.

"The objective must be to breed small- to medium-sized cows which are milky and prolific and can produce calves weighing 50 per cent of the cow weight at 200 days."

Case study: Heathcote Grange Farm

NEIL Flower of Heathcote Grange Farm, near Buxton, Derbyshire, became aware of the calving period in his spring-calving herd was steadily increasing year-on-year.

He observed cows were becoming too fat and suspected low fertility in one of his bulls.

He says: "We were finding we were still calving the tail-end of the herd in August, which meant it was October before cattle were ready to go for slaughter. This delay was having an impact on our cash flow."

Volunteer

Around the same time, Eblex was looking for focus farms for its Better Returns Programme and Mr Flower was happy to volunteer.

Herd data was analysed and revealed a long, drawn-out calving period of 18 weeks.

He says: "Aberdeen-Angus utilise grass very well and rarely lose any flesh over winter. When we condition scored our cows, we found a proportion had a body condition score of five and many of the remaining were scoring four."

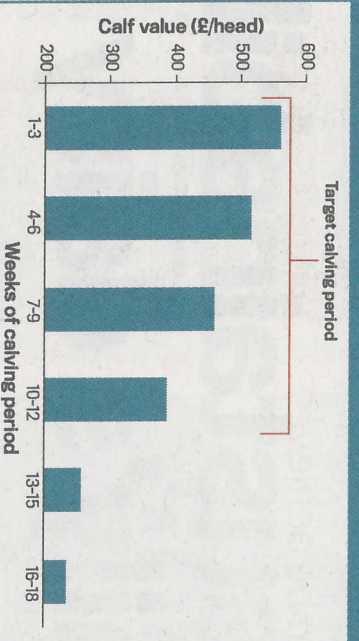
The decision was made to cull heifers at two years old rather than two-and-a-half so they were less likely to become over-fat.

Mr Flower says: "We had to feed some concentrate to heifers so we could achieve the target culling weight of 65 per cent of their expected mature weight.

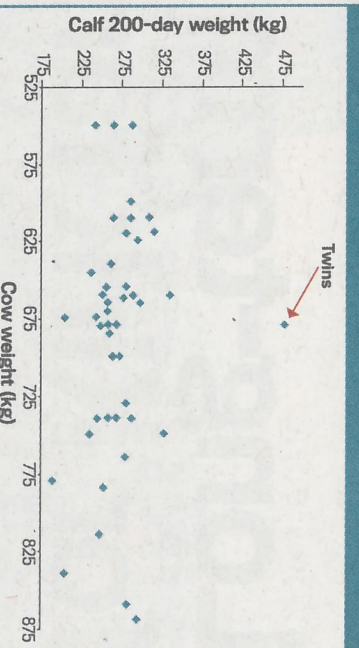
"We fed 2kg of a 16 per cent blended protein over winter and a 14 per cent protein in spring. All six of these heifers attained the desired weight of 100kg at 15 months old when they were served."

A forage analysis was undertaken which showed a deficiency

Graph 1: Average calf value at housing vs calving period (based on £2/kg) Source: Eblex focus farm data



Graph 2: Relationship between cow size and calf size Source: Eblex focus farm data



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