



# Farm Vet News

Endell Farm Vets Blog

Endell Vets Beef Team

January 2021

## Beef Benchmarking in Practice

### OVERVIEW

The aim of beef benchmarking is to improve our methods of measuring, monitoring and improving performance in beef suckler herds. Whilst a great many parameters including body condition score, infectious disease status, EBVs of sires (see our previous blog article on the use of AI in the beef herd) and trace element status can all be measured it is advisable to keep things “simple” to begin with. Initially it is sensible to focus on fertility:

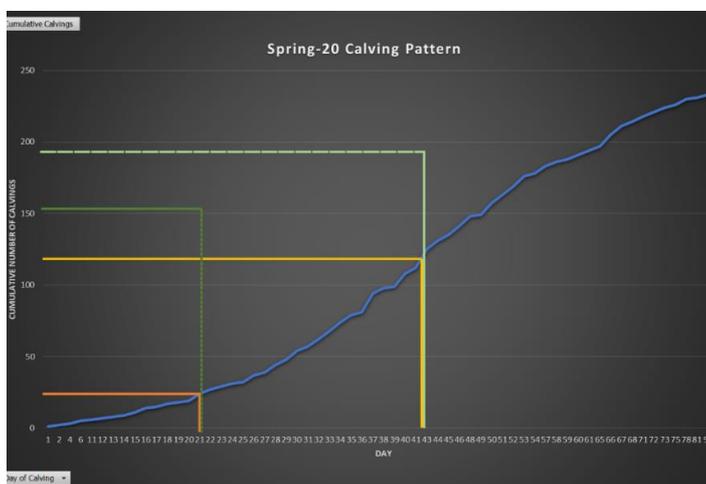
- Number of eligible cows: number of bulls in group
- Date bulls in and out
- Number of cows PD+ve
- Individual calf dates of birth
- The number of calves weaned
- Average weaning age and weaning weight
- Total creep fed to calves before weaning
- Number of cow deaths and culls
- Number of replacement heifers bought or transferred in
- Number of cows/heifers carried over to the next season

### RECORDING PERFORMANCE

Recording herd and individual cow performance is essential for managing fertility and can help to inform decision made regarding which animals should be kept and which should be culled. This alone makes it a worthwhile investment and reiterates the importance of keeping good records.

*Increasing weaning weights by 10kg per calf can increase output by up to £2,000*

It is easier for your veterinary team to help identify problems and investigate the cause if the historic herd performance is known. Good records allow a proactive, rather than reactive approach to herd health. Calculating the number of calves born in the first and second three-week oestrus cycles can determine the success of the rest of the system. The graph shows one farm’s spring prolonged calving pattern. The table below shows this same farm’s performance for the calving period and highlights that large improvements can be made to tighten the start of the calving block.



*Example of cumulative calving dates throughout a spring calving period (green lines=targets, orange/yellow lines=farm performance)*

Calving Pattern Analysis		Target
Total number of calvings	234	N/A
% of herd calved in first 3 weeks	10%	65%
% of herd calved in first 6 weeks	48%	80%
Total length of calving period (weeks)	13.9	12

*Example of calving pattern analysis summary showing a herd that can make significant improvements*

### IMPACT OF IMPROVED FERTILITY

Increasing the fertility of your suckler herd will result in:

- Reduced length of calving period
- Simpler cow and calf management
- Increased period for cows to return to cyclicity before mating
- Reduced calving interval
- More calves produced per year
- Early born calves are less likely to become sick
- Increased numbers of calves weaned
- Older and therefore heavier, more uniform calves weaned
- Heavier, more fertile heifers at mating with the potential to reduce mating age.

### MARGINAL GAINS

Even relatively small improvements can make a significant difference to the bottom line especially in an era where marginal gains are so important to farm survival. Increasing the number of calves reared in a 100-cow herd by just 2% can increase calf sales by over £1,000 a year. Tightening the calving block can increase weaning weights, just a 10kg increase per calf could increase output by <£2,000.

## EXAMPLE

1 <sup>st</sup> serve Preg Rate	% calved in 12 wks	% Barren	Weaning Age (Av)	Weaning Weight (Av)
75%	99	1	205 days	250kg
40%	87	13	182 days	227kg

- Improving pregnancy rate from 40% to 75% in a 100 cow herd with a 12 week calving period means that 12 more calves will be weaned. If calves are weaned at 250kg this is equivalent to 3,000kg more beef weaned
  - o 12 x 250 kg = 3,000 kg more beef weaned
  - o 3,000 kg @ ~£2.05/kg LW<sup>1</sup> = £6,150
- This improved pregnancy rate makes the average calf 23 days older at weaning (around 23kg heavier)
  - o 99 calves x 23kg = 2,280kg
  - o 2,280kg @ ~£2.05/kg LW = £4,650
- Calves weaned 23kg lighter will need to be kept for extra time to achieve the aim of 250kg meaning these need to be kept for ~23 days longer
  - o Feed costs per calf estimated at 75p/day
  - o 99 calves @ £0.75/day for 23 days = £1,700
- No account of other costs including housing, bedding, water, labour, increased replacements, extra bull power
- A conservative estimate of additional income if fertility in a 100 cow suckler herd is improved so that conception rate rises from 40% to 75% is:
  - o £6,150 (more calves) + £4,650 (heavier calves at weaning) + £1,700 (reduced feed costs) = £12,500
  - o An extra £125 per cow

## KEY PERFORMANCE INDICATORS

Parameter	Target
Cows PDED in calf	>96%
Calves born	>95%
Mature cows with assisted calvings	<3%
Calves born dead	<2%
Calves born in first 3 weeks of calving period	>65%
Calves born in first 6 weeks of calving period	>80%
Calves born in first 9 weeks of calving period	>90%
Calving period	12 weeks
Calves weaned	>98%
Average daily liveweight gain to weaning (kg per day)	>1.1kg
Average 200 day calf weight	>250kg
Empty cows and heifers	<5%

Please let us know if you are interested by calling the office and asking to speak to Lucy (Beef Working Group). As more farms sign up, we will not only be able to compare your figures to national targets but also determine where you sit within the practice group of farms.