

Maximising efficiency in suckled calf production

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The latest costings from AHDB Farmbench for suckled calf production make for depressing reading. Average gross margins for 'All Suckler Herds' are £290 per cow however when fixed and non-cash costs are deducted a loss of £179 was recorded per cow. However top 25% recorded producers recorded a gross margin of £470 per cow and with significantly lower fixed costs made a profit of £84 per cow. Producers must therefore focus on improving technical efficiency. The key areas identified in maximising efficiency and hence profit in suckled calf production are as follows:

1. Maximise economies of scale and focus on output. Your fixed costs will generally not increase if you keep more cows.
2. Adopt 'Easicare' systems i.e. easy calving with low labour requirements.
3. Maximise hybrid vigour, especially in the cow. Cross breeding improves traits with low heritability such as fertility and health. Cows should be small-medium sized, prolific and milky.
4. Focus on breed improvement. For terminal bulls use Top 1-20% index sires that have very high growth and eye muscle areas and most importantly are easy calving i.e. 'curve benders'. We have too many hard calving bulls being used today. At Harper Adams we have carried out 8 studies with progeny from Limousin, Hereford, Simmental and Angus bulls and compared the performance of calves from bulls with different Terminal Indexes. All eight studies have shown that with high Index bulls, with reasonably high levels of EBV accuracy, that they produce calves with superior economic and physical performance compared to those from low Index bulls. The increase in profit has typically ranged from £42-£68 per calf. Our highest ever increase was £136 per calf when we compared progeny from top 1% and bottom 1% Index Limousin bulls. All of the trial reports on these studies are available on the NBA website (go to Resources>Technical Information>Beef Breeding).
5. When selecting bulls to breed replacements really focus on the choice of breed to suit your system and the individual maternal traits of the bull such as 200 day Milk, Scrotal Size and Calving Ease Daughters EBVs. Not enough attention has been focused on maternal traits by many suckler producers and as a consequence we have too many big heavy cows with very little milk. They might have a good cull value but they take a lot to maintain and calf growth rates and fertility can be poor.
6. Many producers have moved away from beef x dairy bred cows due to the Holstein influence together with many dairy farmers using scrub 1/3rd rate beef bulls bought at kill price plus £50. Thankfully many dairy

producers are now moving away from extreme Holstein genetics. Try and develop a link to a dairy farmer who has cows that don't have extreme breeding and uses a decent beef bull. Very often the dairy farmer can simply run the heifers alongside his own dairy replacements and are available to buy as bulling heifers. Always remember that a beef x dairy bred cow has plenty of milk and hybrid vigour.

7. Don't be afraid to buy 'ugly bulls' if their EBV figures are good. Too many buyers of bulls are obsessed with buying masculine pretty faced bulls with big back sides! We need breeding bulls with easy calving, growth, width and depth of body and 'an extra rib'. The highest priced part of the carcass is the loin so why are too many pedigree breeders obsessed with bulls with masculine heads and big back ends! What happens to a head at an abattoir? It gets binned! When I raised this issue at a recent meeting I was asked "would I marry an ugly woman?" My answer was "it would depend on her other traits, but I certainly wouldn't shoot her!" I would also like to quote from A L Hagedoorn, 1932, "When a breed is controlled by 'show men' the breed is doomed".
8. Improve herd fertility and block calve. Data from recent herd surveys show the average calving interval is 399 days and calves weaned per 100 cows put to the bull is 84 for 'Average' producers. This is dreadful performance! The target is a minimum of 95 calves weaned per 100 cows per 365 days.
9. Home-bred replacements must calve at 2 years old, unless you have a lot of very cheap forage or have split calving herds and can calve at 2½ years old. Purchased dairy bred beef heifers can calve down at 2½ years old.
10. Manage cow condition scores especially at calving and bulling. The target is a minimum of 2.5. Having easy calving bulls enables you to have your cows in better condition at calving with subsequent benefits for fertility.
11. Target a calving period of 9 weeks. However leading suckler producer and Harper Adams Beef Focus Farmer Simon Frost from Bakewell in Derbyshire would argue that this isn't critical and is happy with a 14-16 week calving period. This is a bit of a 'curve ball'! Simon comments that a very compact calving period with 65% of cows calving in the first three weeks would put significant pressure on the availability of calving boxes and subsequently on the bulls during the bulling period. An extended calving period works for Simon since he meticulously pressure washes the calving boxes to reduce the disease pressure on late born calves and has the late calvers in separate management groups during bulling and can wean them later than the main herd thus not reducing his mean weaning weight. Simon herd is based on Lim x Friesian cows put to top 1% index curve bender Charolais bulls. His

bull and heifer calves typically weigh 390kg and 330kg at weaning at 7.1 months old having recorded DLWGs of 1.63 and 1.31kg with a cow efficiency of 56.5%.

12. Just to offer another 'curve ball' and returning to cow size. What is the optimum cow size? 500, 550, 600, 650, 700kg? This does depend on your farm and availability and quality of forage but I've recently done an evaluation on cow size with Simon Frost and also Ian Willison at Warcup Vale in Nottinghamshire who is also a Harper Adams Beef Focus Farm. Ian runs an autumn calving herd of Sim x Blue cows put to high index Simmental bulls. Bull calves are finished intensively on a maize silage:blend TMR at 390kg carcass weights at 12.4 months old. Heifers are kept for replacements with surplus sold at a premium to a pedigree breeder for ET work due to the high health status of the herd. I have analysed calf data born from either big (600+kg) or small (under 600kg) cows from both Ian's and Simon's herds. The calves from the bigger cows were finished earlier at heavier weights. The financial benefits this brought however would be negated by higher feed requirement and lower stocking rate for the bigger cows. So not much difference between big or small cows so let's not get 'too worried' about having small cows. I must stress that this was an analysis of **cows of the same breed** within each herd. No doubt some beef specialists will wish to debate this further with me!
13. Improve calf DLWG's and reduce slaughter age. Creep feeding is recommended in most systems to improve DLWG and minimise the growth check at weaning. The target is to wean a calf at 50% of the cow weight and look at suckler cow efficiency i.e. target 50+kg calf weaned [200 day wt] per 100kg cow weight.
14. Intensive and semi intensive (18-22 months) finishing of the calves will improve meat quality and earlier slaughter reduces the carbon footprint of beef production. A leading major abattoir recently quoted that their average age at slaughter is 28.7 months. There is massive potential to improve the efficiency of beef production.
15. Focus on feed costs and quality and maximise utilisation of home grown forage. Consider out-wintering dry spring calving cows if you have suitable land.
16. High levels of health care are essential to maximise cow fertility and minimize calf losses. Calves with a disease challenge will not thrive. Membership of a health scheme will bring significant rewards with eradication of BVD, IBR Lepto and Johnes.
17. Focus on marketing. Target either the commodity or niche beef market and produce beef as efficiently as possible. There are critics of bull beef production and continental breeds so if native breeds are reared on semi intensive and extensive systems they must obtain significant

premiums in the market place. Producers must still focus on rearing beef cattle as efficiently as possible using ‘the science of beef production’.

With all of the above topics, think of them as the ‘golden triangle’ with focus on genetics, health and nutrition. Get one area wrong and you will fail! Finally we need to work towards a level of productivity with our cattle that we ‘feed less to produce more in a shorter time scale’. More on this topic in a subsequent edition of Beef Magazine.



Picture left of Simon Frost’s Lim x Fr cows with Charolais calves taken in September.
Picture right Simon Marsh with Simon Frost



Picture left of Ian Willison’s Sim x Blue cows with Simmental calves. Picture right Ian Willison with Simon Marsh