

Reward for producing higher beef merit calves

Alan Twomey¹ and Siobhan Ring²

¹Teagasc, Animal & Grassland Research and Innovation Centre, Moorepark, Fermoy, Co. Cork;

²Irish Cattle Breeding Federation, Link Road, Ballincollig, Co. Cork

Summary

- The Commercial Beef Value (CBV) is a tool to facilitate the buying and selling of cattle destined for slaughter.
- Dairy farmers can generate higher value and more saleable calves by using Beef bulls with a high Dairy-Beef beef sub-index value (>€80).
- Calves with higher CBV subsequently have greater carcass value.

What is the commercial beef value?

The Commercial Beef Value (CBV) is a decision-support tool to aid in the buying and selling of cattle that are destined for slaughter. The tool allows farmers to easily identify highly profitable animals, irrespective of colour or breed, at the time of sale. This information allows the buyer and seller to have a better understanding of the lifetime value of the animals on sale. Without this tool, dairy farmers have no opportunity to reap the benefits of using more favourable beef merit sires since it is impossible to visually see the carcass potential differences between animals as calves. Historically, the market value of calves was determined by a combination of breed, weight and age. Within a breed, however, variability for carcass weight and quality traits is large, and just because an animal is sired by a continental breed (e.g. BB, CH) it does not mean that calf will outperform the traditional breeds (e.g. AA, HE) at slaughter and vice versa. The large variation in CBV within breeds is illustrated in Figure 1, and therefore it is important to choose an elite beef bull with desirable beef genetic merit. The CBV is displayed as an economic value, similar to the EBI whereby higher euro values are more desirable. The CBV is also presented with stars to represent its rank within the genotype group (i.e. Dairy×dairy, Beef×dairy and Beef×beef), whereby 1-star is considered very poor within the genotype, whereas 5-stars is considered excellent within the genotype.

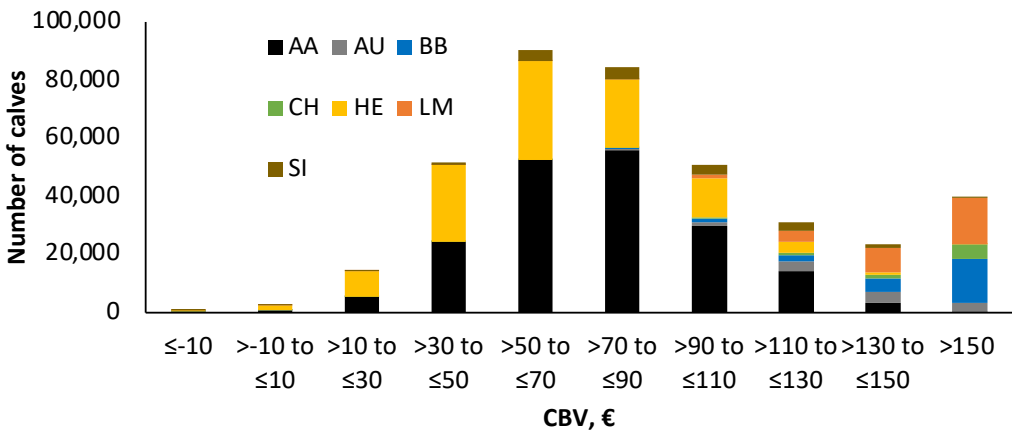


Figure 1. Commercial Beef Value (CBV) of calves born to a dairy cow and sired by a beef bull. Higher CBV values are more desirable

How can I breed a high CBV calf?

Breeding decisions in dairy herds determine the quality of beef calves available to beef farmers. Beef farmers can now identify and seek out only high genetic merit calves for slaughter characteristics by using the CBV. Hence, it will be important that dairy farmers generate beef calves with high CBV, which will be in demand in the market. The beef merit (and the CBV) of calves is determined by the genetic merit of both the dam and the sire. It is important to note that poor beef merit cows can still produce high value CBV calves if a very high beef merit bull is used. The average herd needs to use a beef bull with a Beef SI of at least €75 to obtain a 4-star CBV calf (i.e., a calf in the top 40% for the CBV); to achieve a 5-star calf, a Beef SI of at least €118 is required. Dairy herds with poorer beef genetic merit need to use bulls with a higher Beef SI (Table 1). The advice for all herds is to maximise Beef SI of the bulls used, while also ensuring that calving difficulty thresholds are appropriate for your herd.

Table 1. Minimum DBI Beef SI required for beef bulls to achieve a 4* or 5* CBV dairy-beef calf categorized by dairy herd ranking on EBI Beef SI

Dairy herd Beef SI ranking ¹	Dairy herd Beef SI	Beef Bull Beef SI (DBI) to achieve	
		€80 [4*CBV]	€123 [5*CBV]
1* herds	-€13	€86	€129
2* herds	-€5	€78	€121
3* herds	-€2	€75	€118
4* herds	€0	€73	€116
5* herds	+€4	€72	€112

¹available on EBI report scorecard

Do higher CBV calves perform for beef farmers?

A validation study of CBV was conducted using slaughter data collected in 2022. This indicated that animals with higher CBV outperformed lower CBV animals at slaughter. Beef×dairy cross calves that had a four star CBV were 11 kg heavier, were three days younger and had a higher conformation score at slaughter compared with the three star calves (i.e. average beef×dairy calf; Table 2). The calves with a five star CBV produced superior carcasses, although they were slightly older at slaughter (Table 2).

Table 2. Slaughter performance of beef X dairy steers ranked stars for CBV

Star rating	CBV (€)	Carcass weight (kg)	Conformation score, 1-15 (EUROP)	Age at slaughter (d)	Percentage ≥O= for conformation
1	35	315	4.6 (O=)	824	56%
2	55	326	4.8 (O=)	818	64%
3	72	334	5.1 (O=)	814	73%
4	98	345	5.4 (O=)	811	81%
5	152	361	6.4 (O+)	820	91%

Conclusion

Breeding higher beef merit calves will become more important in future years. The introduction of the CBV will enable beef farmers to purchase calves based on beef potential and not just breed. This in turn will reward dairy farmers in the marketplace that use high beef merit sires and consequently produce high CBV calves.