

Everycalf – profitable dairy calf to beef systems on commercial rearing farms

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Summary

- The Everycalf project has demonstrated that high-quality pasture management on commercial farms can deliver good animal performance in dairy calf-to-beef systems.
- The slaughter data collected to-date indicate that calf Commercial Beef Value has a significant impact on carcass value within pasture-based dairy-beef production systems.

Introduction

Consumer concerns about where their food comes from is growing, and the welfare of farmed animals is a particular focus. In dairy farming, one such concern has focused on the management of surplus calves. Increased cow numbers on Irish dairy farms, and compact calving patterns have resulted in large numbers of surplus male dairy calves born on dairy farms each spring. During the peak calving period, dairy farmers face many challenges: provision of adequate feed for the herd; sourcing skilled help to assist with additional workloads; and having access to adequate calf rearing facilities. As a result, more dairy farmers are looking to contract rearing of both replacement female calves and non-replacement calves to reduce both workload and requirements for facilities on farm. Teagasc has recently undertaken a project looking at the performance of male dairy and dairy-beef cross calves in contract rearing partnerships on commercial farms.

Everycalf Project – Dairy Calf-to-Beef with commercial rearers

The objective of the Everycalf Project is to evaluate the potential for profitable dairy calf-to-beef systems in collaboration with commercial farmers operating a contract rearing service. In the programme, Teagasc and 10 dry stock farmers entered a collaborative arrangement where the dry stock farmers contract rear the entire population of approximately 300 male progeny from Teagasc dairy farms each year from three weeks of age to slaughter at 22-23 months. The breed composition of the calves born was 60% dairy (with equal parts Holstein-Friesian, Holstein-Friesian crossbred and Jersey Holstein-Friesian cross) and 40% beef cross (primarily Aberdeen Angus but also Limousin, Hereford, Charolais, Belgian Blue and Aubrac). The proportion of beef crossbred calves increased from 34% in 2020 to 46% and 41% during 2021 and 2022, respectively, due to increased use of sexed semen to generate replacement heifers on all farms.

Results to-date

The average birth weight of the calves during the first two years was 37 kg and these were moved on average at 35 days of age [56 kg live weight (LW)] to the rearing farms. All calves were weaned at 63 days of age when eating in excess of 1 kg of concentrate per day. On average, all calves achieved 0.6 kg LW/head/d average daily gain (ADG) from birth to weaning and 0.7 kg/d during the first grazing season and during the first winter period, and 0.9 kg for second grazing season. Following a short (80 day) intensive indoor finishing period on a high concentrate and silage diet, average live weight at slaughter was 585 kg, resulting in an average carcass weight of 281 kg and an average carcass value of €1,291 (€4.60/kg) at 23 months of age. The overall ADG from birth to slaughter was 0.78 kg. Both sire and

dam genetic merit had a significant impact on carcass weight and conformation with each additional €10 increase in the Commercial Beef Value (CBV, €) of the calf corresponding to a 2.8 kg increase in carcass weight at slaughter while also improving confirmation (Figure 1).

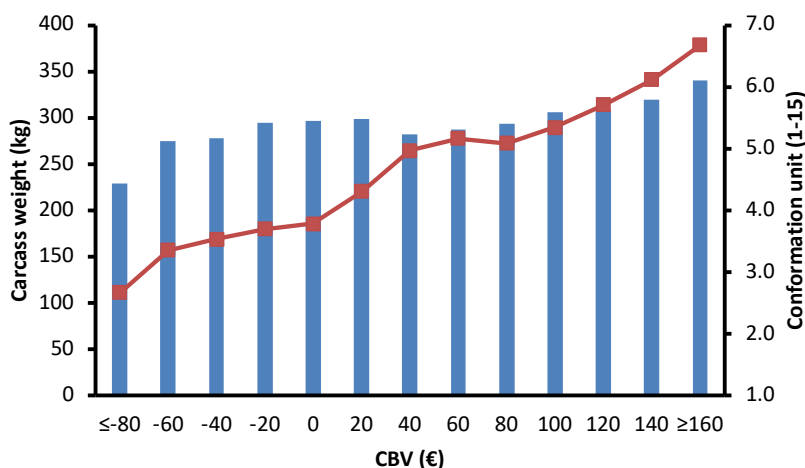


Figure 1. Association between carcass traits (weight (kg) = blue bars; conformation units (1-15) = red line) and animal Commercial Beef Value (CBV)

The average cost of contract rearing the cattle to slaughter was €1,225 over the two years leaving a residual value of €66 to cover the cost of the calf incurred before movement and initial vaccination costs (€10/calf). On that basis, the preliminary results are indicative of the potential of high quality pasture management on commercial farms to deliver excellent animal performance in dairy calf to beef systems. The data presented corresponds to a census population of calves that were predominantly dairy breed (66%) rather than dairy-beef crosses, and with poor genetic merit for beef traits. These results also indicate that substantial increases in profitability can be achieved by increasing the proportion of beef-cross calves and associated CBV of surplus calves in the future.

Conclusion

The preliminary results from the project highlight the potential of high-quality pasture management on commercial farms to deliver excellent animal performance in dairy calf-to-beef systems and provide a strong basis for the development of such operations into the future.

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