

Earlier finishing the goal

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Programme



Agriculture is obliged to reduce greenhouse gas (GHG) emissions by 25% by 2030 under the targets set out in the Government's Climate Action Plan. Reducing the age at slaughter by three months – moving from an average of 27 to 24 months – will help achieve this target.

From an environmental and economic sustainability perspective, it is crucial that the reduction in slaughter age is achieved without compromising carcass weight and quality.

Approximately 2,000 cattle are slaughtered across the DairyBeef 500 Programme farms annually. Performance is monitored to identify progress and trends. Friesian bull calves seem to be the preference among the majority of the DairyBeef 500 farms. These are seen as less risky due to the lower purchase price and their carcass weight potential.

The average carcass weight in this category declined by 9.6kg between 2022 and 2023. The poor weather experienced last year was a factor.

On a positive note, the slaughter age was reduced by 15 days to 24 months in 2023. The reduction in weight didn't result in lower income for farmers. Beef prices in 2023 averaged 21c/kg higher than the previous year, and the average price of dairy-bred steers increased by €16 (see Table 1).

Beef-sired steers

Fewer beef-sired steers were slaughtered across the DairyBeef 500 Programme in recent years. If improved beef genetics are used on dairy farms alongside the new Commercial Beef Value (CBV) to identify higher merit beef calves, DairyBeef 500 would be open to increasing the numbers of these animals if prices are appropriate.

A similar trend to dairy cross steers was seen for beef-sired steers over the past two years. Average carcass weights decreased by 12.1kg with the slaughter age reduced by just shy of two weeks.

As with the dairy steers, carcass conformation remained the same for beef-sired steers across 2022 and 2023 with an O= grade carcass being obtained on average both years. Again, prices for both years remained the same with the higher beef price in 2023 making up for the reduced average carcass weight (see Table 2).



There are fewer heifer systems on the Programme's farms. The lower carcass potential of these animals has been the main reason for farmers deciding against them.

However, with the advances being made in genetics some farms are now looking at these systems. The heifers' early slaughter age potential is a huge advantage in terms of reduced winter housing requirement. These animals also produce less nitrogen.

Summary

- There were slight reductions in carcass weight across all categories of animals in 2023.
- Steer carcass weights fell on average close to 10kg but at a younger slaughter age.
- The drop in carcass weight and increase in age of slaughter reported in bulls and heifers was most likely due to the poor weather in 2023.

As with the steers, carcass weights for heifers slaughtered across the DairyBeef 500 farms were back slightly and were 5.3kg lighter on average in 2023 than in 2022.

Unlike the trend seen with steers, this reduction in weight did not come at a younger age. Heifers were slaughtered, on average, one month older in 2023 and the average carcass value increased by €65.

Bull carcass performance saw the biggest drop in weights, which were 24.5kg lighter on average in 2023 than the previous year. This resulted in the average carcass value dropping by €84.

As with the heifers, this reduction in weight did not come at a younger age. The average slaughter age increased by 20 days with the weather a significant factor as turnout was delayed substantially on most farms in the spring of 2023.

Carcass conformation remained the same with an average grade of O= both years (see Table 4).

on DairyBeef 500 farms



One of the DairyBeef 500 Programme's objectives is to reduce slaughter age without compromising on carcase weight and quality.

Table 1: Dairy x dairy steer performance

Year	Carcase weight	Number	Conformation	Age of finish (months)	€/kg	€ value
2023	298	863	O-	24	4.84	1441
2022	307.6	764	O-	24.5	4.63	1425
Difference	-9.6	+99	N/A	-0.5	+0.21	+16

Table 2: Beef x dairy steer performance

Year	Carcase weight	Number	Conformation	Age of finish (months)	€/kg	€ value
2023	299.3	243	O=	22.71	5.05	1510.7
2022	311.4	248	O=	23.1	4.84	1507
Difference	-12.1	-5	N/A	-0.4	+0.21	+3.7

Table 3: Heifer performance

Heifers	Carcase weight	Number	Conformation	Age of finish (months)	€/kg	€ value
2023	252.4	107.0	O=	21.5	5.2	1312
2022	257.7	205.00	O+	20.5	4.84	1247
Difference	-5.3	-98	-1	+1	+0.36	+65

Table 4: Bull performance

Bulls	Carcase weight	Number	Conformation	Age of finish (months)	€/kg	€ value
2023	289.4	308.0	O=	21.5	4.70	1359.45
2022	313.9	267	O=	20.8	4.60	1443
Difference	-24.5	+41	N/A	+0.7	+0.1	-84

Table 5: Martin Connolly four-year carcase performance

Year	Carcase weight	Conformation	Age of finish (months)
2023	328	O-	22.3
2022	335	O=	21.4
2021	321	O-	22.2
2020	317	O-	23

How one Roscommon farmer has achieved consistent gains in carcase performance

Martin Connolly farms part-time just outside the village of Castleplunket in Co Roscommon. He operates a calf-to-bull beef system. The farm consists of 60ha of grassland, which is divided into four main blocks within a three-mile radius of the farmyard.

The land is a heavy-type soil, typical of the area. Approximately 140 Holstein-Friesian male calves, purchased at three weeks of age, are reared annually on the farm and they are slaughtered as bulls at under 24 months of age.

The feeding programme during the finishing phase is grass silage ad lib supplemented with 6kg concentrates per head daily for a maximum of 100 days.

"In recent years my main aim has been to improve animal performance without increasing the level of concentrate input," says Martin.

Improvements in grassland management and grass silage quality has paid dividends through increased animal growth rates. Significant improvement have been made on the farm in recent years with carcase weights consistently increasing at reduced age of slaughter (see Table 5).

