

# Innovation driving profitability

Steady focus on animal performance and new technologies are the keys to profitability on this west Cork beef farm.

**Alan Dillon**  
DairyBeef 500 Programme.

**J**ames O'Sullivan farms 31ha near the villages of Leap and Union Hall in scenic west Cork. Some of his land drops steeply to the sea and faces directly due south. The next landfall is over a thousand miles away at Santiago de Compostela in northern Spain.

"My wife Rachel and I run a dairy-beef enterprise with the emphasis on early maturing heifers," says James. They have four children, Kayla (12), Daire (10), Jenna (8) and Eoin (6).

James has been in the DairyBeef 500 programme since early 2022 and has been steadily implementing changes that will increase the profitability on the farm, according to his local Teagasc advisor Anna Sexton.

Exposed to the warm(ish) sea wind, the coastal land can certainly grow very early grass. James says this comes at a cost, with early nitrogen a 'must' to drive growth on early turnout. He reseeds a portion of his land each year. The home farm has much heavier soil, with some needing reclaiming.

### Calves are key

"In the recent past, I have been sourcing calves from local dealers and marts," says James. "This worked well from a time efficiency point of view, but it did lead to variability in quality of calves. It also brought with it disease risks, particularly respiratory illnesses."

James works part time as an AI technician and aims to use this knowledge to source better quality calves in the future. "My aim is to buy calves with a higher Commercial Beef Value (CBV) next year," he says.

"They will finish early, before the main group of yearlings are housed



Local advisor Anna Sexton with James O'Sullivan.

prior to the second winter, and will deliver an increased carcass weight. To ensure as many cattle as possible are finished before the second winter, it is important to get hold of early calves."

James' strategy is to identify farmers that will have early maturing calves born from early to mid January onwards.

"I hope to be finished buying calves by mid-March. I want to keep the

group as tight as possible in terms of weight uniformity. This will help also with housing, dosing and drafting for sale."

### Weight targets

"Low carcass weights have been an issue with the finishing stock," says James. "Early maturing heifers were the main class of stock on the farm this year. These animals would naturally have lower carcass weight than

**Table 1:** James's cattle performance.

Year	Category	No.	Age (mths)	Carcass kg	Grade	€
2020	Steer	21	23	291	0=	1,046
2020	Heifer	60	20	244	0=	938
2021	Steer	24	21	262	0=	1,143
2021	Heifer	34	21	240	0=	1,044
2022*	Steer	4	21	257	0=	1,229
2022*	Heifer	54	20	250	0=	1,234



Alan Dillon and James O'Sullivan.

their male counterparts or Friesian steers, but would finish at an earlier age with lower inputs.

“I have been carrying more steers in recent years, but heifers give me the chance to kill more before the second winter. This is important as our housing is limited.”

As can be seen from Table 1, James is achieving a low age of slaughter compared to national performance with the majority of his stock killed by 21 months of age.

“Carcass weight does need some improvement, with roughly 20-30kg of extra carcass gain needing to be achieved at the same age to inject a higher level of profitability into the system,” says Anna Sexton.

“This must be achieved in the earlier stages of life, with the majority of the weight gain coming from grazed grass.”

### Commercial Beef Value

James says he aims to target calves with a higher CBV, which will have a higher value for carcass weight. This

will help deliver the targeted carcass of over 300kg at 21 months for steers and 275-280kg for heifers at 20-21 months.

“I examined some of the sires of the cattle I had slaughtered over the past number of years and found significant variability in the quality of bull used,” says James. “Some bulls, particularly some of the early maturing stock bulls, were extremely poor in terms of carcass characteristics.”

As can be seen from Table 2, only two bulls are even positive for carcass weight.

These bulls produced finished carcasses which are below target weight and are largely unprofitable.

“For this year, I will be targeting calves from some of the sires in Table 3 if they are available,” says James.

“The main focus will be on carcass weight, with a target of at least 12kg for this index. These bulls should have the ability to deliver on carcass traits while maintaining an early slaughter age.”

### Sticking with the system

While James will be incorporating various technologies on-farm, including CBV to purchase better calves of a higher beef merit and reseeded with MSS to reduce reliance on chemical nitrogen and help with drought periods, the overall plan of the farm remains the same.

Calves will be purchased slightly earlier and from known sources, but they will still be slaughtered at 20-21 months of age from a largely grass-based system. Profitability will improve on the farm over time.

The message is that no radical change is needed on most farms, simply focusing on what delivers profit, incorporating new technologies that increase profit, reduce costs and promote environmental sustainability and sticking with the targets set out will lead to a more profitable and labour efficient system.

Achieving these goals should result in calves being finished profitably here, rather than heading due south to Spain.

**Table 2:** Examples of the bulls commercial beef values.

Breed	Stock Bull/AI	Carcass weight (Beef Sub index) (kg)	Beef sub index value
(€)	280	300	320
Hereford	Stock Bull	-2.1	26
Hereford	Stock Bull	6.7	41
Angus	Stock Bull	-5.2	17

**Table 3:** Examples of sires with good beef carcass characteristics.

Breed-Code	Stock Bull/AI	Carcass weight (Beef Sub index) (kg)	Beef sub index value (€)
Angus - AA4087	AI	20	99
Hereford HE4344	AI	13	51
Angus - AA6331	AI	15	65

This year, James decided to apply for the Multi Species Sward Scheme and sowed 8ac of multi species sward (MSS) between his home farm and his out-block. The farm is very fertile, with excellent P, K and lime status, which has been worked on for a number of years.

The land was ploughed by James himself in early summer and run with a disc harrow shortly after to break up

the sod. The land was levelled and run with a harrow to create a nice fine seed bed and then seeded and rolled. The only spray the land received was glyphosate prior to ploughing and it received two bags of 10-10-20 at sowing.

“Growth was excellent once the sward became established this year,” says James. “Particularly in the dry period in late summer and early autumn, when the sward outperformed grass

swards on the farm without the need for any chemical fertiliser applications.”

James says he definitely saw a good level of performance, enough to encourage him to try another few paddocks in future.

“What I want to establish is how the swards will persist next year, particularly if there is any level of poaching on the sward, which can be quite open early in the year.”