

Making the transition to dairy calf-to-beef

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Teagasc DairyBeef500 Programme



Farming on the banks of the river Shannon near Killaloe in east Clare, Michael Culhane is Clare's participant in the new Teagasc Dairy Beef 500 campaign. His farm consists of two separate blocks totalling 68ha.

The main block of approximately 52ha, which can be described as good-quality, dry, clay type soil, is around the farmyard. The remainder of the land is an out-farm with heavier, more challenging soil.

In the past, Michael operated a suckler-to-store/finishing operation. He made the full transition to dairy calf-to-beef in 2020.

"My reason for making the switch was the high cost of keeping the suckler cows compared to the price received for the progeny," says Michael.

"I also felt that a dairy calf-to-beef system would offer a more structured workload than calving sucklers."

Michael first tried out dairy calves in 2017, with the purchase of Aberdeen Angus calves from a number of different sources. These were later sold as stores.

Not quite happy with that system, Michael turned his attention to sourcing Hereford calves for a store system, but again, he was not quite happy with the outcome.

"In 2020, I got in touch with a dairy farmer in west Clare, who was breeding Belgian Blue calves from his dairy herd," says Michael. "I felt these were the type of stock that would suit the system. Working with the Teagasc Green Acres team, I



Michael Culhane says achieving high-quality silage is key.

decided that the best option would be to take all stock to finish."

This year, approximately 100 predominately Belgian Blue and Angus cross calves were reared on the farm, 30 in the autumn and 70 in the spring. The plan going forward is to remain with these breeds and increase numbers to over 120 by increasing autumn numbers to 50.

"Converting to slaughtering everything off-farm takes careful planning and thought, with factors like cash flow and housing needing careful

consideration," says Michael.

"The two main systems in future will be a 21 month heifer system and a 24 month steer system. There will also be a cohort of Belgian Blues kept for a 28 month finishing system."

Increasing the number of times a year stock are killed on the farm will greatly increase cash flow, while the 28 month finishing system has the potential to take advantage of traditional, seasonal, higher prices. Table 1 shows animal performance targets for the systems.

Table 1: Animal performance targets for each finishing system.

Age of slaughter	Heifer 21 months	Angus steer 22-24 months	Autumn-born	Continental steer 24 months	Continental steer 28 months
Reared calf (kg)		90	90	90	90
After first season at grass (kg)		240	340	250	250
Turnout March (kg)		330	430	345	345
Liveweight autumn (kg)		490-510	580	525	525
Turn-out third season					595
Liveweight at slaughter		550-620	590	660	700
Carcass weight		280-310	305	355	385



Setting up the farm for calf rearing

Grassland management

High-quality grass is a key aspect of any successful livestock production system and this is particularly relevant in dairy beef.

Maximising the amount of quality grazed grass in the animal's diet over its lifetime will have a major impact on the productivity and profitability of the farm.

"Originally, the farm was laid out in large paddocks with only one water trough per paddock," says Michael. "In recent years, we have installed more water troughs and started to sub-divide paddocks."

Stock residency in paddocks has been greatly reduced. Stock reside in paddocks no longer than three days and then the paddock recovers for 21 days before being grazed again.

There are a minimum of seven paddocks for each grazing group and this allows for better control of grass, increased grass growth and improved animal performance.

Housing facilities

"In order to set up a suitable calf rearing area, we needed to renovate some existing buildings," says Michael. With the assistance of his local Teagasc advisor Conor Reilly, modifications to the original suckler cow buildings were identified, cubicles were removed and suitable calf penning erected.

"Important aspects of the design such as ventilation, air flow and floor slopes were given careful consideration to ensure a suitable environment for calf rearing," says Conor.

Automatic feeders were installed in the calf rearing area. "At the time, they were a significant investment," says Michael, "but I feel the investment is justified and will greatly assist with calf rearing in the future."

Animal health

As mentioned before, providing the correct environment in the form of housing and implementing strict biosecurity measures are important aspect of keep-



Michael Culhane says the new system will give him better cash flow and a more manageable workload.

ing animals healthy. Another key factor is disease prevention and there is a strict vaccination policy on the farm.

"Calves are vaccinated against pneumonia and clostridial diseases, as well as getting an oral drench to prevent coccidiosis," says Michael. "Generally, calves arrive on the farm at three weeks of age.

"On most farms, calves would be vaccinated when they arrive on-farm, however we wait for a few days to allow them to settle in after their journey to Killaloe."

Parasite burdens are regularly monitored on the farm, with pooled faecal samples tested for infestations at regular intervals throughout the year.

Table 2: Costs of setting up calf rearing facilities.

Shed renovations (removal of cubicles concrete floor).	€3,500
Penning and stock board.	€1,500
Automatic feeders (net cost).	€8,000
Total	€12,000