

beef

Maintaining performance this winter in Mayo

With daylight hours declining, housing is imminent on the Claremorris farm of Jarlath and Austin Ruane.

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Holstein Friesian, Angus, Hereford and Limousin calves are bought in and finished at various different ages on the Ruane farm. The heaviest animals go on to be killed at 20-21 months of age and the rest are killed at 28-30 months of age at grass, with the remainder slaughtered out of the shed at around 24 months of age.

“The range in age at slaughter is good for our cash flow and it also allows for optimum use of our limited winter housing facilities on the farm,” says Jarlath Ruane.

Summer performance

Adult animal performance has been excellent this summer, with eight 2021-born steers slaughtered at an average carcass weight of 331kg at just 20.8 months. Comrade animals are also close to slaughter.

Table 1 shows that calf performance has also been good this summer. “All calves were weighed mid-summer and averaged 130kg on 16 July,” adds Jarlath.

Subsequently, calves were split in two groups based on weight and the heavier group were weighed again on the 8 October and weighed 221kg on average. They have made excellent daily gain of 1.04kg since July’s weighing.

Maintaining winter performance

Rising input costs over the past 12 months mean farmers will feel the pinch this winter.

“But we can’t afford to cut corners over the winter,” says Jarlath. “Good weight gain over winter months is



Jarlath Ruane.

crucial or the good performance achieved over the summer months will be undone.”

The target over winter months is at least 0.6kg/day for steer and heifer weanlings, 0.9kg/day for finishing heifers and over a kilo a day for steers.

These weight gains are being achieved consistently on the Ruane farm. Let’s look at how they are achieving them.

Silage analysis

Nationally, silage quality of around 65% dry matter digestibility (DMD) has been the norm on many farms. This level of quality silage is only capable of supporting a daily liveweight of 0.3-0.4kg/day for stock, without the inclusion of meal.

Silage analysis is critical to ensuring that the nutritional requirements of stock are met and that the desired level of performance is achieved over the winter. Visual assessment alone is not adequate to determine silage quality.

A laboratory test will provide accurate information on silage nutritive value and preservation, which will allow informed concentrate feeding decisions to be made. Table 1 gives the

Table 1: Weighing performance of spring 2022-born calves.

Group	Weighing date	Average weight (kg)	ADG from birth (kg)	ADG from previous weighing (kg/day)	Target ADG (KG/DAY)
All calves	16/07/22	130	0.64	n/a	0.7
Heavy group	08/10/22	221	0.83	1.02	0.7



calves. Stock on the farm are grouped with others of a similar weight and size to prevent bullying.

Table 4 and 5 look at the ideal lying and feed space required for the different groups of stock housed in slatted accommodation over the winter.

Water

“We believe that access to clean, fresh, drinking water is every bit as important as good-quality silage or any dosing programme,” adds Jarlath. Research shows that cattle have a huge need for water while housed.

Water troughs on the farm are checked daily and if there is any sign of soiling with either animal waste or feed, they are cleaned immediately. All finishing sheds on the farm have large water troughs as opposed to bowl drinkers, as animals on high meal diets have a higher demand for water.

Parasite control

It is important that stock are free from parasites to prevent any impact in performance. “About two weeks pre-housing, all animals are treated for lungworm,” says Jarlath.

Post-housing treatments for fluke and stomach worms are administered to all stock about a month after housing. About six weeks after treatment, faecal samples are taken to check the efficacy of the products used. For external parasites, animals’ backs are clipped and pour-on treatment is applied as required.

“There are a lot of things to get right,” concludes Jarlath. “But it’s the only way to get top winter performance.”

key parameters tested and the target in each area.

Silage sampling

Silage samples must be taken carefully to ensure correct results. A period of five to six weeks should elapse between ensiling and sampling. A long core sampler should be used, with three to five cores taken from well-spaced points on or between diagonals on the pit surface. Alternatively, sample an open pit by taking nine grab samples in a ‘W’ pattern across the pit face.

When testing bales, a number of samples from each batch are needed to get a representative sample.

Quality silage

“We put strong emphasis on both silage quality and forage analysis,” says Jarlath. “Last year, our first cut was harvested on 14 May and resulted in a crop with a DMD of 76.7. We had a week’s delay in harvesting this year’s first cut, which impacted quality, and we ended up with a reduced, but still respectable, DMD of close to 72.”

The feeding strategy for this winter is to provide calves and finishing animals with this high-quality, first-cut baled silage. Alongside this quality silage, weanlings will receive concentrates at a rate of 1kg/head/day of a 16% protein ration.

This will ensure that the target ADG of 0.6kg is reached over the housing

period, while finishing stock will receive 5-6kg/head/day of a 14% maize-based ration and store cattle receive 1kg/head/day until Christmas.

Lying and feeding space

Adequate lying and feeding space is important to ensure animal performance over the winter months.

“Housing on the farm is tight,” says Jarlath. “To help offset this, 17 of the heaviest Friesans and 10 early maturing steers were selected and introduced to meal in August. Some of these animals have already been slaughtered and the remainder will be slaughtered before the middle of November.”

Once these animals leave the farm, space becomes available, which facilitates housing of the remaining

Table 4: Lying space allowances (m²/animal).

Animal type	Space allowance
Suckler cows	2.5-3.0
Animals greater than 275kg	2.0-2.5
Animal less than 275kg	1.2-1.5

Table 5: Recommended feed space allowances (mm/head).

Feedstuff	Finishing cattle	Light store cattle	Weanlings
Ad-lib roughage	400-500	250-300	225-300
Restricted roughage	600-650	500-600	400-500
Concentrates	600-650	500-600	400-500

Table 2: Key information provided from silage analysis.

Unit of measure	Meaning	Low	High	Target	Ruanes
Dry Matter (%)	Feedstuff less water content	13-17	40-55	28-32	29
pH	Measure of acidity	3.4-3.7	4.5-5.5	3.8-4.5	4.2
Ammonia – N (%N)	Indicator of grass N content at cutting	4-7	15-25	<10	5.2
NDF (% DM)	Measure of forage fibre and intake potential	42-47	55-65	<44	42
DMD (%)	Measure of quality	55-65	76-80	>72	71.9
ME (MJ/kg DM)	Energy content (linked to DMD value)	8-9	11-12	>11	10.9
UFV/UFL (unit/kg DM)	Energy content (linked to DMD value)	0.6-0.7	0.89-0.96	>0.89	0.87
Crude Protein (% DM)	Measures N as indicator of true protein content	7-9	15+	>13.5	13.4
Ash (% DM)	Indicator of soil contamination	5-6	12-15	<8.6	7.4

Table 3: Guideline daily feeding rates based on silage quality (DMD).

Animal type	Target ADG	66 DMD	68 DMD	70 DMD	72 DMD	74 DMD	76 DMD
Weanling	0.6kg/day	1.8kg	1.5kg	1.2kg	0.9kg	0.6kg	0.4kg
Finishing steers	1kg/day	7.0kg	6.0kg	5.5kg	5.0kg	4.0kg	4.0kg
Finishing heifers	0.9kg/day	7.0kg	6.0kg	5.5kg	5.0kg	4.0kg	4.0kg