

Are you in a suckler to beef system?

Come and see what's new at Newford suckler farm

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The Newford suckler farm is a suckler calf-to-beef demonstration unit located in Athenry, Co Galway. The farm was established by Teagasc and Dawn Meats, with the support of the *Irish Farmers Journal* and McDonald's in 2015.

The project was set up for a seven-year term during which the 100-cow suckler calf-to-beef demonstration was run on 68ha across four blocks. The project has recently been renewed for a further five years.

The herd will now consist of 85 suckler cows on 58 ha across three land blocks. Over the next five years, the farm will become even more sustainable and profitable by reducing greenhouse gas (GHG) and ammonia emissions, improving water quality and enhancing biodiversity.

The herd will continue to consist of first-cross Aberdeen Angus and Hereford cows, bred from dairy cows. Evidence shows that this breeding policy, along with careful ICBF terminal sire selection for high carcass weights, is performing well. This is due to a combination of excellent milk production by the cows and inexpensive grass-based liveweight gain by their offspring.

In 2022, Newford farm joined the Future Beef Programme and the

Signpost Programme. Over the coming years Newford will demonstrate best practice by adopting a number of technologies to enhance sustainability.

2023 calving summary

This spring, there were 68 cows and 21 in-calf heifers to calve down. The first cow calved on 27 January and the last cow calved 5 April 2023. Compact calving resulted in a six-week calving rate of 90%. Of the 89 cows that calved, there are 85 live calves on the ground resulting in 0.96 calves per cow per year as outlined in Table 1.

2023 breeding – pre-breeding heat detection

Pre-breeding heat detection began on 3 April with artificial insemination commencing on 24 April until 3 July (10 weeks).

Recording pre-breeding heats helps identify issues with cows who are not cycling regularly and allows for early intervention. This process helps maintain compact calving for the following spring.

We purchased three vasectomised teaser bulls on 4 April, weighing 409kg and costing €1,016 per head. These animals are currently undergoing a quarantine period for biosecurity reasons before joining the cows and yearling heifers.

These will be fitted with a MooCall HEAT collar, which sends a text message to the operator's phone once the vasectomised bull has been paying attention to a cow showing signs of heat.



For ease of management and additional heat detection method, a chin ball is fitted to each vasectomised bull which marks the cows back and tail head during the mounting process.

We will use the once-a-day AI rule on the farm again this year. Cows are inseminated each day at midday. If a cow is inseminated at 12 noon and she is still showing signs of standing heat again that evening, she will be served again the next day (at 12 noon).

Initially, yellow tail paint is applied to the cows and is topped up every week. Once a cow is served, the tail paint is changed to red and then to blue. Table 2 outlines the section criteria used to identify suitable sires for the 2023 breeding season.

Update on Newford performance

All the 2022-born weanlings were weaned from their dams during September. The male weanlings had an average daily gain of 1.37kg from birth to weaning with an average weight of 327kg. Males were castrated on 30 July.

Heifer weanlings had an average daily gain of 1.32kg from birth to

Table 1: 2023 calving summary

2022 KPIs	Newford	National average
Calves per cow per year	0.96	0.87
Calving interval (days)	359	393
Six-week calving rate (%)	90%	55%
Heifers calving at 22-26 months (%)	100%	24%



Newford heifers are achieving 296kg R-3= carcass at 17.9 months. Similarly, steers are slaughtered at 20.5 months of age delivering 355kg R-3= carcass.

What's the plan for replacement heifers this year?

Twenty replacement heifer calves which were sourced from two dairy herds are being reared on Newford farm. These heifers are the 2025 replacement in-calf heifers and will calve down at 24 months. These have an average replacement index of €154 and arrived at 27 days old.

Calves were initially receiving 3l milk replacer/head twice daily. This has been reduced to 2l milk replacer/head twice daily and animals have access to ad-lib concentrate and straw for roughage.

Implementing this rearing process encourages greater concentrate intake, which in turn promotes rumen development. Table 3 outlines the liveweight targets required to ensure these heifers are suitable for breeding in April 2024 and will calve down in February 2025.

Grassland and incorporating clover

We walk the farm weekly and all covers are uploaded to PastureBase Ireland. Based on the results, decisions are made to match growth rate with demand on the farm.

The aim is to reduce chemical nitrogen input on the farm. Hence we decided to incorporate clover into existing swards on the grazing ground.

At the end of May 2021, 20 acres of grazing ground on the home block was over-sown with white clover. This was at a rate of 2.5kg per acre consisting of the varieties Buddy and Aberherald.

A 6m Einbock Tine Harrow air seeder was used. In follow-up, 45 acres was over-sown in May 2022 at a rate of 3kg/ac and we decided to reseed six acres on the home block with a multispecies mix.

The mix included Ballintoy (5kg), Drumbo (5kg), Aberherald (1kg) clover, Aberswan (1kg) clover, Puna II Cichorium (1kg), Tonic Plantain (1kg) which was a total of 14kg of seed per acre.

During 2023, a further 30 acres of grassland will be over-sown with white clover and these paddocks were sprayed for docks in 2022, which eliminates dock burden for the year ahead and aids successful establishment.

Table 2: Sire selection criteria

Criteria for selecting AI sires

Five-star terminal index (within and across)
<8 % calving difficulty for mature cows
<5.8 % calving difficulty for younger cows
>70% reliability calving difficult
>35kg predicted carcass weight mature cows
>25kg predicted carcass weight young cows
>1.86 on conformation
<6% for first calvers (beef heifers) : 80% reliability
>25kg predicted carcass weight
Cost of AI straw less than €20
>-3 days predicted transmitting ability age of slaughter

weaning at an average weight of 328kg. Prior to weaning, all the weanlings were creep grazing ahead of the cows and were receiving 1kg of meal each day.

After weaning, this was increased to 2kg when the weanlings returned to grass.

Steer weanlings were housed on 26 November followed by the heifer

weanlings on 10 December. Steer and heifer weanlings achieved 0.56kg/day and 0.68kg/day, respectively, over the winter.

Newford suckler progeny are consistently achieving significant progress in reducing age of slaughter. On average, all 2021-born progeny were slaughtered eight months earlier than comparable national animals.



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How will biodiversity be enhanced?

The management team at Newford Farm is determined to enhance the level of biodiversity on the unit.

The farm has been selected as a demonstration farm as part of the Teagasc Signpost Programme and Future Beef programme. This will see a suite of measures introduced over the lifetime of the programme.

For example, we set aside a small portion of old grazing ground beside the main yard. This ground will not be grazed and will act as a food source for bees during the summer. We will also establish a selection of native trees in this area.

There were 220 metres of whitethorn hedge planted on the farm this spring and we plan to establish another 200 metres over the coming years.



Donall Fahy and Stephen Frend with French visitors Chloé Poitral and colleagues from CFA - AgriCampus Laval.

Table 3

Arrival weight	Rearing ADG	Weaning (nine to 10 weeks old)	ADG first grazing season	Housing	ADG first winter	Bulling (April 2024)
60kg	0.7kg	95kg	0.7kg	220kg	>0.6kg/day	330kg

Newford Suckler Open Day

Tues, 23 May | 2pm - 6pm

Athenry, Co. Galway








