beef

Better beef breeding pays dividends in the west

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Niall O'Meara farms full-time on his 24ha (60 acre) farm just outside the village of Killimor in east Galway. Male progeny from Niall's 30-cow suckler herd are sold at 12 months, with a high percentage of the heifers retained in the herd and bred at fourteen-and-a-half months.

Last December, Niall was named as the national commercial herd winner of the FBD €200 replacement index herd competition 2018. Niall took the overall award along with the Connacht/Ulster title. The award rewards the excellence in beef breeding performance of his suckler herd.

"We've made a lot of changes in recent years," says Niall. "These were all simple steps but together they have proved very beneficial. Our focus is on breeding, herd health and grass; three very important areas for a profitable beef enterprise.

"It was clear we had huge scope for improvement. We changed to a compact calving period: mid-August to the end of October." For the past five years, the herd has been consistently achieving a calving interval of less than 370 days and delivering one calf per cow per year.

"The main aim has been to increase output on the farm while controlling costs by focusing on a grass-based system," says Niall. "Since we began regularly weighing the stock, we have really focused our attention on achieving high daily liveweight gains from grass."

The changes on the farm have not required significant capital outlay. Niall continues to target a gross margin of €1,000/ha annually. While big advances have been made in this area of the business, there is still room for improvement.

Breeds

Niall's herd consists primarily of Limousin and Simmental cross cows with a selection of Charolais, Angus and Salers cows. He has been using maternal AI sires in a bid to generate sufficient replacements for the herd.

"I use maternal AI sires as it gives me options," says Niall. "There is only one route for terminal-sired animals. I admit I may be taking 10-20c/kg less but, given their genetic potential, the weight for age compensates for this. I always look at the average in my herd and not just the top cows."

Careful selection for traits such as calving difficulty, docility, carcase weight and daughter milk have led to the herd achieving an average replacement index of €108. Niall operates at two LU/ha and in 2018 achieved at output per LU of 380kg, which was above the national average of 298kg/ha. Similarly, output per hectare at 759kg is higher than the national average of 450kg/ha. The output being achieved on the farm makes it one of the top herds in the country.

Calving at two years old

All of Niall's heifers calve at 22 to 26 months of age. Nationally, only 24% of heifers are calving within this range. "Maximising performance of the heifers from birth to breeding is critical to ensuring they routinely reach the target bulling weight of 475kg at 14.5 months by 1 November," says Niall.

"By calving at 24 months, I get more calves from each heifer over her lifetime. It also offers the possibility to reduce the number of stock groups, which makes grassland management easier."

Niall says he places huge emphasis on the sire selection for maiden heifers. The main focus is on ease of calving and high reliability. "This year I used a Salers AI sire called SA2189 on my replacement heifers. The sire's calving difficulty is only 1% and he has a reliability of 98% which is very important. He has five stars on the replacement index, with a replacement value of €212."

Heifers that are not kept as replacements are sold as beef. As all the heifers are of high genetic merit, there is also the option to sell these at breeding sales.

Selecting sires

Niall has been using 100% AI on the farm for the past decade. He concentrates on the replacement index when selecting sires. "In the past I always relied on the €uro-Star replacement index values and rarely looked at what the sire looked like. More recently, I have moved away from looking at the actual replacement index value and I am more focused on the sub-indexes," says Niall.

"Calving difficulty, docility and carcase weight are my main focus. I target a carcase weight of >25kg as I cannot afford to compromise on the quality of my bull weanlings. The target for daughter milk on the farm is +10kg with as high reliability as possible alongside a negative calving interval figure of -2 days. I am not partial to any breed, I rely on the €uro-Star figures. Sires used include OCD, ISL, Biouvac and SI2469."

BGDP & BEEP

Niall participates in the Beef Data and Genomics Programme (BGDP) and Beef Environmental Efficiency Pilot (BEEP) Scheme. "BDGP has got a lot of bad press which I don't think it deserves. I can see myself making progress on this farm. What other country would pay you for making progress? I have a weanling efficiency performance target of 42%."

Through genetic selection and improved grassland management, the weight of the weanling bulls at sale has increased as outlined in Table 1 below. Niall has a target weight of 500kg for male progeny at 12 months and has been consistently above this in recent years. This has been achieved through minimum use of concentrates. Weights declined slightly due to the extreme weather conditions experienced last year.

"While concentrating on heavier bull weanlings, the main emphasis is on further increasing grass in the diet and decreasing concentrates."

Grazing performance

High-quality grass swards play a

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Catherine Egan, John Galvin (Teagasc), Niall O'Meara, Chris Daly (ICBF).

Today's farm

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Table 1: Bull liveweight and concentrate input

Year	Bull live-weight at sale (kg)	Total concentrate input from birth to sale /head (kg)
2015	499	150
2016	513	125
2017	525	100
2018	497	125

huge role in achieving consistent target weight gains of the yearling bulls and getting heifers to target breeding weights at 14.5 months. According to Niall: "Achieving high output cheaply is very important and I pay a lot of attention to grassland management during the year to ensure a long grazing season and high-quality swards for grazing."

Niall has made huge progress in recent years in grazing management and has recently put in new roadways and increased the number of paddocks on the farm. He also uses pigtails and reels to further divide paddocks during peak grazing periods.

"I have 24ha of land, but 45 paddocks," says Niall. I'm completely convinced of the value of grazed grass. I operate a rotational paddock system, but it doesn't matter what kind of system you have so long as you are getting fresh grass into them every few days. To do that, you need really good infrastructure.

"The aim is to graze each paddock for three days and allow 18 to 21 days recovery and re-growth."

Winter management

All animals are housed on 1 November. The calved cows and all the breeding heifers are fed ad-lib high-quality silage and 2kg of concentrates for six weeks from mid-October to the end of November. Calves have creep access to as many as 12 paddocks in rotation from November onwards.

Niall has been measuring grass growth on the farm using a plate-meter for the past number of years to aid management decisions. This information is entered into the Teagasc grass measurement programme Pasture-Base Ireland.

"It can establish my number of grazing days ahead and I can decide if I need to take out surplus grass as baled silage or spread extra fertiliser," says Niall. Grass budgeting is key to maintaining a high-quality grass sward at all stages during the grazing season. In addition, Niall says he has found that the quality of silage produced on his farm has improved and the quantity coming from surplus grass has increased.

In 2017 grass production was almost 11t DM/ha which decreased, due to drought conditions, in 2018 to 8.5t DM/ha as in Table 2. The annual tonnage report helps Niall to identify poor-performing paddocks that may need reseeding or have soil fertility issues which are limiting grass growth. Niall's view is that: "I used to be a beef farmer but now I am a grass farmer who feeds beef."

Not to be missed

Niall will host an open day on his farm on **Tuesday 16 July at 2pm**. Visitors will be able to view demonstrations, discussions and stock. The emphasis is on highlighting the technologies and management tools Niall uses to achieve the excellent beef breeding performance of his commercial suckler cow herd.

Technologies related to beef genetics, reproductive management, grassland management and animal health will be on display. The day will also provide an opportunity to meet with industry stakeholders with a selection presenting display stands on the day.

John Galvin concludes: "The open day will provide an excellent opportunity to see and discuss the key elements involved in operating a high-performing family-run suckler herd that has consistently achieved top results over the last number of years."

> "I used to be a beef farmer but now I am a grass farmer who feeds beef

Table 2: Grazing performance

	2018	2017
Grass production (t DM/ha)	8.5	10.9
No. grass measures completed/yr	36	34

Knowledge Transfer group

Niall is an active member of his local knowledge transfer (KT) discussion group facilitated by Teagasc advisor John Galvin. Prior to this he was involved in the BTAP discussion group. "Participating in my local discussion group has been invaluable, for the amount I have learned from local farmers as well as Teagasc. Members of my group have had a huge influence in the development of my farm," says Niall.

Teagasc advisor John Galvin said: "Niall is a very active member of the Portumna/Killimor Beef Discussion group. It is a pleasure to work both with him and the other members of the group. The primary focus of the group is to generate ideas and implement technologies to make improvements in each members system of producing beef as efficiently as possible. Niall's positive attitude and business-like approach is invaluable within the group."