Better beef breeding pays dividends in the west

Catherine Egan, Teagasc Animal and Grassland Research and Innovation Program,
John Galvin, Teagasc Athenry.

Niall O’Meara farms full-time on his 24ha (60 acre) farm just outside the village of Kilimor 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 FHO 6200 replacement index herd competition 2018. Niall took the overall award along with the Connaught-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. In 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 €1,200/ha annually. While advances have been made in this area of the business, there is still room for improvement.

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 470kg at 14.5 months by 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.”

The changes have not required significant capital outlay. Niall continues to target a gross margin of €1,200/ha annually. While advances have been made in this area of the business, there is still room for improvement.

Breed
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 10-20kg/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, carcass weight and daughter milk have led to the herd achieving an average replacement index of 417. Niall operates at two LU/ha and in 2018 achieved output per LU of 388kg, which was above the national average of 386kg/ha. Similarly, output per hectare at 785kg is higher than the national average of 649kg/ha. The output being achieved on the farm makes it one of the top herds in the country.

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 Euro-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 carcass weight are my main focus. I target a carcass weight of 258kg 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 Euro-Star figures. Sires used include OCD, ISL, Biovac and SZ268.”

BGDP & Beef
Niall participates in the Beef Data and Genomics Programme (BGDP) and Beef Environmental Efficiency Pilot (BEFP) Scheme. “BGDP 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 weaning efficiency performance target of 42%.”

“Through genetic selection and improved grassland management, the weight of the weaning bulls at sale has increased as outlined in Table 1 below. Niall has a target weight of 560kg 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.

The BEEP scheme on this farm has been very useful for managing beef weanlings. The main emphasis is on increasing the quality of the weaning bull stock, with a focus on improving calving and post-calving performance.”

Grazing performance
High-quality grass swards play a critical role in this herd. Niall relies on high-quality grass swards in the pasture to improve the quality of the suckler herd.

Niall O’Meara’s Open Day
Kilimor, Ballinasloe, Co Galway
16/08/19 on Tuesday 16 July @ 2pm

Niall O’Meara, Chris Galvin (Teagasc), Catherine Egan, John Galvin (Teagasc).
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 pig-tails 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.”

**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.”

<table>
<thead>
<tr>
<th>Year</th>
<th>Bull liveweight at sale (kg)</th>
<th>Total concentrate input from birth to sale/head (kg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015</td>
<td>499</td>
<td>150</td>
</tr>
<tr>
<td>2016</td>
<td>513</td>
<td>125</td>
</tr>
<tr>
<td>2017</td>
<td>525</td>
<td>100</td>
</tr>
<tr>
<td>2018</td>
<td>497</td>
<td>125</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Grass production (t DM/ha)</th>
<th>2018</th>
<th>2017</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>8.5</td>
<td>10.9</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>No. grass measures completed/yr</th>
<th>2018</th>
<th>2017</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>36</td>
<td>34</td>
</tr>
</tbody>
</table>