



As we approach the 2024 breeding season, the aim should be to breed enough high EBI replacement heifer calves from the first 4 weeks of the breeding season. These replacements should come from the highest EBI and top performing cows in the herd and from the high EBI maiden heifers.

Before making any decisions around sire selection or female selection, farmers should know the strengths and weaknesses of your herd. This can be done by looking at the ICBF Dairy EBI Scorecard. It is also advisable to look at your Coop Performance Report to identify the areas that may need more immediate attention as areas to improve.

Cow Selection

There is increased interest among herdowners on selecting the best cows to breed replacements from. A more practical simpler method is to select which cows not to breed replacements from.

There are several reasons why cow selection for replacements is becoming more topical and more possible.

- **Improved overall herd fertility – less matings required to generate replacements.**
- **Breeding replacements from maidens – less heifers required from the cow herd.**
- **Fewer replacements required – improved cow longevity, better health, stable herd.**
- **Sexed semen – less dairy straws required compared to conventional (2.5 vs 4.5 straws per dairy heifer – depending on herd fertility).**

Factors to consider when selecting cows to breed replacements from

- **Avoid cows calved after Patrick's day** - Ideally all conventional dairy straws should be used in the first 4 weeks of the breeding season and sexed straws should be used in the first 2 weeks. This will mean you will have a compactly born, easily managed group of replacement heifer calves. For sexed semen cows need to be min 50 days calved.
- **Avoid cows with problems that may not be milking in 2025** – cows with poor feet, SCC issues, old cows or other issues should not be selected. Firstly, their problem may be hereditary and secondly they may not be milking in 2025.
- **Avoid breeding replacements from the poorest performers.** The lifetime milk recording report identifies the poorest performing (bottom 20%) of cows both for the current lactation (red card in YTD milk value column) and for their lifetime production (red card for lifetime margin per day – far right).



| 3rd+ Lactation Cow Performance | | | | | | | | | | | | | | | | | | | | |
|--------------------------------|--------------|------|--------------|-------------|-------------|------------------------|----------------------|--------------------------|---------------------------------|--------------------------|-----------------------|--------------------|---------------|------------------------|--------------------|-----------------------------|-----------------------|------------|--------------------|-----------|
| Jumbo | Calving Date | Lact | Days in Milk | Prod SI (€) | Fert SI (€) | Test Day | | | | | | Year to Date (YTD) | | | | Milk Recorded Lifetime | | | | |
| | | | | | | Current Test Milk (Kg) | Current Test Fat (%) | Current Test Protein (%) | Current Test Fat + Protein (Kg) | Current Test Lactose (%) | Current Test SCC '000 | SCC Lact Status | YTD Milk (Kg) | YTD Fat + Protein (Kg) | YTD Milk Value (€) | Lifetime Fat + Protein (Kg) | Avg Days Dry Per Lact | Total Days | Margin Per Day (€) | Herd Rank |
| 2633 | 15/03/2021 | 6 | 129 | 30 | 82 | 16.9 | 4.12 | 3.31 | 1.26 | 4.56 | 31 | | 2791 | 205 | 820 | 1869 | 76 | 1976 | 1.24 | 224 |
| 2635 | 14/02/2021 | 6 | 158 | 67 | 80 | 21.3 | 3.60 | 3.30 | 1.47 | 4.54 | 178 | | 4577 | 327 | 1481 | 2815 | 65 | 1994 | 3.41 | 5 |
| 2637 | 17/04/2021 | 6 | 96 | -19 | 54 | 18.7 | 3.54 | 3.14 | 1.25 | 4.55 | 66 | | 2172 | 144 | 649 | 1791 | 98 | 2011 | 1.02 | 230 |
| 2650 | 30/04/2021 | 6 | 83 | 28 | 62 | 18.9 | 3.88 | 3.04 | 1.31 | 4.84 | 35 | | 1713 | 119 | 526 | 1751 | 116 | 1962 | 1.05 | 229 |
| 2651 | 31/01/2021 | 6 | 172 | 17 | 122 | 14.3 | 4.10 | 3.60 | 1.10 | 4.61 | 74 | | 3502 | 275 | 1231 | 2290 | 60 | 2004 | 2.09 | 153 |
| 2657 | 17/02/2021 | 6 | 155 | 7 | 178 | 17.2 | 3.67 | 3.37 | 1.21 | 4.41 | 84 | | 3638 | 257 | 1174 | 2381 | 64 | 1996 | 2.38 | 111 |
| 2662 | 06/06/2021 | 6 | 48 | 33 | 88 | 21.0 | 3.88 | 3.26 | 1.50 | 4.54 | 1288 | | 1044 | 78 | 349 | 2438 | 85 | 1967 | 2.58 | 80 |
| 2669 | 27/02/2021 | 6 | 145 | -4 | 71 | 18.1 | 3.98 | 3.10 | 1.28 | 4.76 | 85 | | 3415 | 249 | 1108 | 2237 | 87 | 1997 | 2.00 | 167 |
| 2671 | 19/03/2021 | 6 | 125 | 31 | 51 | 18.4 | 4.04 | 3.36 | 1.38 | 4.59 | 64 | | 2997 | 222 | 1008 | 2125 | 80 | 2001 | 1.79 | 194 |
| 2683 | 21/02/2021 | 6 | 151 | 23 | 119 | 17.3 | 3.88 | 3.39 | 1.25 | 4.47 | 44 | | 2925 | 218 | 973 | 2117 | 84 | 2002 | 1.77 | 195 |

2635

- Retain this cow
- Ranked 5th in the herd
- Margin per day €3.41 – 5.5 Lactations
- Over lifetime €6,799 profit, €1,236 per lact
- Ideal candidate for breeding replacements



Key message – Avoid breeding replacements from cows with a red card for lifetime margin per day (column on far right of report)

Cow 2637

Red card in YTD milk value – this means this cow is in the bottom 20% in 3rd+ lactation group for margin per day in the current lactation. Note – this calculation is performed in the background.

Red card in Lifetime margin per day column – This calculation takes all this cow's lactations into account from when she calved in as a heifer. In other words she has consistently been in the bottom 20% in the herd.

Genetics – Cow 2637 has a production (milk) subindex of €-19. Cows with red cards will often have a poor milk subindex which is a powerful reinforcement of how genetics is influencing lifetime performance.

Sire Selection

When selecting a team of bulls, ensure the team will breed the type of cow that will suit your farm system into the future. In the current environment with Nitrates Banding, this is more important than ever.

Select a team of high EBI AI bulls from the ICBF Active Dairy Bull List. Use the team of bulls equally with no more than 15% of mating's to any individual bull. Once the bull team has been picked, use the ICBF Sire Advice or Sire Advice Plus tool to match the bulls to each individual cow in the herd. The mating program generates the best matings to maximise the genetic gain in your herd. It also minimises variation between Milk, Fertility and other traits, e.g. best bull on fertility will be mated to the poorest fertility cow. The sire advice tool eliminates inbreeding giving the farmer peace of mind and all Sire advice matings can be uploaded to AI technician handhelds & printed on breeding charts.

How to produce High Commercial Beef Value (CBV) calves?

Once the females identified to breed our replacements from have been selected, the remaining cows should be mated to high DBI beef bulls from the start of the breeding season. The Dairy Beef Index (DBI) is a tool for dairy farmers to improve the quality of their beef calves without compromising on essential characteristics such as easy calving and short gestation.

Particular focus should be selecting beef bulls with a high Beef Sub-Index from the DBI, to ensure we breed saleable, profitable and sustainable dairy-beef cattle that maximise the beef value of the calf crop.

The CBV is expressed as a euro value and will be generated for all cattle that are likely to be finished, including male and female stock bred from beef cows, dairy bred male and female calves sired by a



beef bull and male calves sired by a dairy bull, provided a sire is recorded.

Animals are assigned to one of three different breed types under the CBV, which is dependent on sire and dam breed. These are: beef x beef; beef x dairy; and dairy x dairy. Animals are assigned a star rating of one to five, with a five star animal being in the top 20% of the national population within that breed type, whereas a one star animal is within the bottom 20%.

| Star Rating | Beef x Dairy | Dairy x Dairy |
|-------------|--------------|---------------|
| Five Star | >€124 | >€44 |
| Four Star | >€79 | >€30 |
| Three Star | >€61 | >€18 |
| Two Star | >€44 | >€1 |
| One Star | <€44 | <€1 |

Threshold commercial beef values per star rating and animal type.

Farmers will need to drill down into the DBI figures and focus on the Beef Sub-Index to produce a calf that has a high CBV. The tables below show the minimum beef sub-index required in a bull to breed 4 – 5 star CBV calves from the different cow types that are common in Ireland.

Poor Beef Merit dairy cow

(EBI Beef Sub Index: -€35)

| Target | Bull Beef SI required |
|--------------------------------------------------|-----------------------|
| 4 star CBV calf (Top 40% of Beef x Dairy calves) | €108 |
| 5 star CBV calf (Top 20% of Beef x Dairy calves) | €151 |

Average Beef Merit dairy cow

(EBI Beef Sub Index: -€2)

| Target | Bull Beef SI required |
|--------------------------------------------------|-----------------------|
| 4 star CBV calf (Top 40% of Beef x Dairy calves) | €76 |
| 5 star CBV calf (Top 20% of Beef x Dairy calves) | €119 |

High Beef Merit dairy cow

(EBI Beef Sub Index: €10)

| Target | Bull Beef SI required |
|--------------------------------------------------|-----------------------|
| 4 star CBV calf (Top 40% of Beef x Dairy calves) | €63 |
| 5 star CBV calf (Top 20% of Beef x Dairy calves) | €106 |

Dairy farmers aiming to produce quality beef calves should group the cows according to the risk of having a difficult calving, eg. 1. maidens, 2. second calvers or smaller framed cows, and 3. mature cows. They then need to identify the maximum calving difficulty that they are happy with for each group and select bulls with the highest beef sub-index at their chosen level of calving difficulty to give them the highest possible CBV calves the following spring.