



# BREEDING SEASON

As we approach the 2023 breeding season, the two key areas of that drive efficiency and profitability in spring calving grass-based systems are **genetics** and **fertility**.

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.



**Dennis Howard**  
Munster Bovine

HerdPlus® Profit through Science		Herd EBI Scorecard		icbf	
Herd Number: D3360142 (Eval Jan 2023)	Your Herd	National Average	National Top 10%	Your National Rank	Star Rating <sup>1</sup>
<b>Herd EBI</b>	€182	€160	€185	74%	★★★★
<b>Milk Sub-Index</b> (Milk, Fat & Protein)	€69	€64	€60	96%	★★★★★
<b>Fertility Sub-Index</b> (Calving Interval & Survival)	€61	€66	€83	34%	★★
<b>Carbon Sub-Index</b>	€1	€7	€14	15%	★
<b>Calving Sub-Index</b> (Gestation, Calving Difficulty, Mortality)	€33	€26	€37	77%	★★★★
<b>Beef Sub-Index</b> (Carcase Weight, Conformation & Fat)	€-2	€-3	€4	59%	★★★
<b>Maintenance Sub-Index</b> (Cow Liveweight)	€12	€13	€20	32%	★★
<b>Management Sub-Index</b> (Milking speed & Temperament)	€1	€1	€3	59%	★★★
<b>Health Sub-Index</b> (SCC, Mastitis, & Lameness)	€6	€6	€9	42%	★★★
<sup>1</sup> Star Rating: ★ = 1 - 20% ★★ = 21 - 40% ★★★ = 41 - 60% ★★★★ = 61 - 80% ★★★★★ = 81 - 100%					

## 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 Patricks 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 2024 – 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 2024.
- 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																				
Junbo	Calving Date	Last	Days	Prod (kg)	Fert (IC)	Test Day					Year to Date (YTD)					Milk Recorded Lifetime				
						Current Test (kg)	Current Test (kg)	Current Test (kg)	Current Test (kg)	Current Test (kg)	YTD Milk (kg)	YTD Fat (kg)	YTD Protein (kg)	YTD Milk Value (€)	Lifetime Fat + Protein (kg)	App. Days to Last	Total Days	Margin Per Day (€)	Herd Rank	
2633	15/03/2021	6	128	30	82	16.9	4.12	3.31	1.26	4.56	31	2791	205	426	1969	76	1979	1.24	224	
2635	14/02/2021	6	156	67	80	21.3	3.60	3.30	1.47	4.54	178	4577	327	1441	2815	65	1964	0.41	5	
2637	17/04/2021	6	95	19	54	16.7	3.54	3.14	1.25	4.55	66	2172	144	544	1791	88	2011	1.02	230	
2650	30/04/2021	6	83	28	62	16.9	3.68	3.04	1.31	4.64	35	1713	119	526	1751	116	1992	1.05	229	
2651	31/01/2021	6	172	17	122	14.3	4.10	3.60	1.10	4.61	74	3002	275	1225	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	1998	2.38	111	
2662	06/06/2021	6	48	33	88	21.0	3.88	3.28	1.50	4.54	1288	1044	78	345	2438	85	1967	2.58	80	
2669	27/02/2021	6	145	4	71	16.1	3.68	3.10	1.28	4.75	85	3415	249	1158	2227	67	1967	2.00	167	
2671	19/03/2021	6	125	31	51	16.4	4.04	3.36	1.36	4.65	64	2997	222	1009	2125	80	2001	1.79	194	
2683	21/02/2021	6	161	23	119	17.3	3.88	3.39	1.25	4.47	44	2605	218	873	2117	94	2002	1.57	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

2637

- Double red - Lifetime Margin per day € and YTD Milk Value €
- Ranked 230th in the herd
- Consider not retaining this cow
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- Margin per day €1.02 - 5.5 Lactations
- Over lifetime €2,051 profit, €373 per lact
- Avoid breeding replacements from this cow

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#### 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.




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

## Sire Selection

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. 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.

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.



Sire Advice will assist you make more informed breeding decisions for your herd.

- Select a team of bulls based on your own breeding objectives.
- The mating program generates the best matings to maximise the genetic gain in your herd.
- Includes eliminating any inbreeding risk.
- All Sire advice matings can be uploaded to AI technician handhelds & printed on breeding charts.

**SIRE ADVICE**  
Manually Enter Bulls

**START**

[Sire Advice Help Video](#)

Directly enter AI bulls which you have already selected for your herd.

OR

Select Bull Team packs available from AI companies.

**SIRE ADVICE PLUS**

**START**

[Continue Current Run](#)

[Sire Advice Plus Help Video](#)

Find the most suitable AI bulls for your herd with an easy to use filtering system.

Assign cows for Culling, Contract or Beef mating. A crossbreeding option is also available which maximise heterosis.

Select Bull Team packs available from AI companies.

**Sire Advice Handheld/App Results Display:**

Currently Showing Dairy Results for Animals on handheld/apps.

[Show Dairy Matings](#) [Show Dairy Beef Matings](#) [Dairy Beef Sire Advice](#)

[Help Video](#)

Herd Size (incl. Heifers)	Recommended minimum number of Bulls for Dairy
0-100	7
100-150	8
150-200	10
200-250	11
250-300	12
300-350	13
350-400	14

The table above shows the recommended number of bulls to use for different herd sizes. This increases the reliability of the team of bulls and reduces risk.

**How to use Sire Advice**

- [Sire Advice Help Document](#)





## Fertility drives production and efficiency

- Achieving a high 6-week calving rate of over 80% (target 90%) will maximise your herds days in milk from grass in 2024.
- A low empty rate (less than 10%) after 12 weeks breeding will facilitate having a low replacement rate of 18-20% and allow for the sale of problem cows and poor performing cows.
- Calve 90% of your maidens in February 2024 – this will simplify management and give them the best chance to calve early in 2025 and survive long term in the herd

## Pre-Breeding Management

- Problem cows – 3 - 4 weeks out from mating start date (MSD) is the time to identify cows with uterine infections and have them treated. Draft all suspect cows (difficult calving, retained afterbirth, milk fever, bad mastitis cases, thin cows etc ), get them examined and treated by your vets.
- Thin Cows – Identify any thin cows (BCS less than 2.75). Once a day milking is a practical way to put these cows into positive energy balance. Milk them once daily but feed them twice. They will gain weight, start cycling and have a great chance of conceiving. Extra feeding is also an option but may not be practical.
- Late Calvers – Cows calving late will be fed the same as earlier calving cows but will have low dry matter intakes in the weeks after calving. Putting these cows on OAD milking will minimise BCS loss, they will cycle quickly and stand a great of being retained.
- Herd Health – Ensure all vaccines are up to date 3-4 weeks prebreeding. Monitor cows for parasites in the bulk milk results (worms) and for coughing (lungworm). Treat appropriately if necessary.
- Maiden Heifers – Ensure heifers have a good supply of grass and are on a rising plain of nutrition. Weighting the maidens will determine if they are on target. Heifers should be 60% of their mature weight at breeding. Avoid delayed breeding of heifers that are under target (within 10%). Plan for these heifers to catch up during the year through preferential grazing and extra feeding.

	Age (months)	% of Mature Body Weight	Maint €0 (641kg mature weight)	Maint €10 (591kg mature weight)	Maint €20 (541kg mature weight)
February	12	50%	320	296	270
May (Breeding)	15	60%	385	355	325
Feb (Calving)	24	90%	577	532	487

Target heifer weights based on EBI Maintenance Sub Index (Base cow €0 = 641kgs, every €1 = -5kgs)



**CONTACT US**

If you are interested in availing of our **FREE**  
Breeding Advice for 2023 please contact  
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