



How to review EBI/Herd reports to identify breeding objectives

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Department of Agriculture,
Food and the Marine



AgTech - it's in our DNA

Introduction

- What is EBI delivering?
- What are the breeding objectives of a dairy farmer?
- How to interpret your EBI report?
- Using other Herd Reports to help define your goals.
- Tools to help achieve your breeding objectives.
- Summary.

What is EBI delivering?



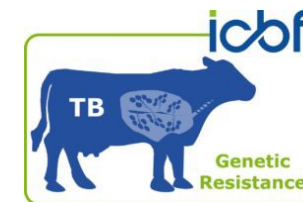
National Key Performance Indicators (KPI's) broken down by Herd EBI

KPI Metrics (2022)	Btm 20%	20-40%	40-60%	60-80%	Top 20%	Average
Average EBI	€98	€139	€158	€174	€196	€153
Average Milk Litres per Cow	5,237	5,116	5,302	5,476	5,663	5,321
Average Kgs Milk Solids per Cow	404	403	423	444	472	425
Butterfat %	4.08	4.17	4.23	4.31	4.44	4.23
Protein %	3.42	3.48	3.52	3.58	3.66	3.53
Milk Price (cpl)	57.8	58.8	59.6	60.6	62.3	59.7
AI Bred Replacements %	38	45	60	74	89	58
Average Calving Interval (days)	401	391	385	379	367	385
Average Six-Week Calving Rate	58	62	66	72	79	67
Kg CO2 / Kg FPCM	0.94	0.92	0.91	0.90	0.86	0.91

- Difference between Top and Average herd is ~€350/cow or €35,000 in a typical 100 cow herd.

Primary breeding objective of dairy farmers?

- The primary breeding objectives in dairy farming include milk production, fertility, health and disease resistance, and sustainability.
 - Milk Production – influenced by genetics and environmental factors e.g. nutrition
 - Fertility – cows that last longer and conceive faster → reduce replacement costs
 - Health and Disease Resistance – SCC, Mastitis, Lameness & TB
 - Sustainability – lower environmental impact, improved animal welfare, Dairy-Beef Integration



How to interpret your EBI report

- Same Herd EBI, very different Sub-Index make-up

Animal Group	Num of Cows	Milk Kg	Fat %	Prot %	Surv% CI Days	Milk	Fertility	Carbon	Calv	Beef	Maint	Mgmt	Health	EBI €
Cows with EBI	81	55				€ 64	€ 47	€ 11	€ 31	€ -23	€ 24	€ 4	€ 7	€ 164
Missing EBI*	8	10.4	0.14		1.6									
Total Cows	89	8.0	0.1		-2.1									
Animal Group	Num of Cows	Milk Kg	Fat %	Prot %	Surv% CI Days	Milk	Fertility	Carbon	Calv	Beef	Maint	Mgmt	Health	EBI €
Cows with EBI	21	-23				€ 10	€ 80	€ 19	€ 31	€ -6	€ 20	€ 0	€ 10	€ 164
Missing EBI*	1	0.3	0.02		2.1									
Total Cows	22	1.2	0.03		-4.3									

How to interpret your EBI report

- Same Herd EBI, same Milk Sub-Index, very different Milk Kgs

Animal Group	Num of Cows	Milk Kg Fat % Prot %	Surv% CI Days	Milk	Fertility	Carbon	Calv	Beef	Maint	Mgmt	Health	EBI €
Cows with EBI	89	142		€ 50	€ 67	€ 1	€ 33	€ 2	€ 8	€ 2	€ 9	€ 172
Missing EBI*	0	7.2	1.9									
Total Cows	89	8.1	-3.5									
Animal Group	Num of Cows	Milk Kg Fat % Prot %	Surv% CI Days	Milk	Fertility	Carbon	Calv	Beef	Maint	Mgmt	Health	EBI €
Cows with EBI	358	-117		€ 50	€ 55	€ 25	€ 33	€ -40	€ 37	€ 7	€ 5	€ 172
Missing EBI*	29	8.9	1.8									
Total Cows	387	3.5	-2.6									

How to interpret your EBI report

- Same Milk Kgs, very different Milk Sub-Index

Animal Group	Num of Cows	Milk Kg	Fat %	Prot %	Surv% CI Days	Milk	Fertility	Carbon	Calv	Beef	Maint	Mgmt	Health	EBI €
Cows with EBI	68	63				€ 20	€ 69	€ 8	€ 26	€ 3	€ 12	€ 2	€ 9	€ 151
Missing EBI*	0				0.01									
Total Cows	68				-0.03									
Cows with EBI	138	63				€ 50	€ 84	€ 7	€ 33	€ -3	€ 12	€ 1	€ 5	€ 188
Missing EBI*	0				0.09									
Total Cows	138				-0.07									

HerdPlus EBI Scorecard

Herd Number: V1950052 (Eval Nov 2022)	Your Herd	National Average	National Top 10%	Your National Rank	Star Rating ¹
Herd EBI	€201	€159	€194	95%	*****
Milk Sub-Index (Milk, Fat & Protein)	€ 28	€44	€60	29%	**
Fertility Sub-Index (Calving Interval & Survival)	€ 102	€66	€82	98%	*****
Carbon Sub-Index	€ 17	€7	€14	92%	*****
Calving Sub-Index (Gestation, Calving Difficulty, Mortality)	€ 30	€28	€37	66%	****
Beef Sub-Index (Carcass Weight, Conformation & Fat)	€ -4	€-2	€4	35%	**
Maintenance Sub-Index (Cow Liveweight)	€ 16	€13	€20	73%	****
Management Sub-Index (Milking speed & Temperament)	€ -1	€1	€3	6%	*
Health Sub-Index (SCC, Mastitis, & Lameness)	€ 13	€6	€9	97%	*****

- Use the ICBF HerdPlus Scorecard to identify areas for greatest improvement from a genetic perspective.
- Similar Herd EBI but with very different breeding objectives.

¹ Star Rating: * = 1 - 20% ** = 21 - 40% *** = 41 - 60% **** = 61 - 80% ***** = 81- 100%

Co-op Performance Report



Dairy Herd Performance Report Jan - Dec 2022



Herd Owner:

Phone 023-8820452

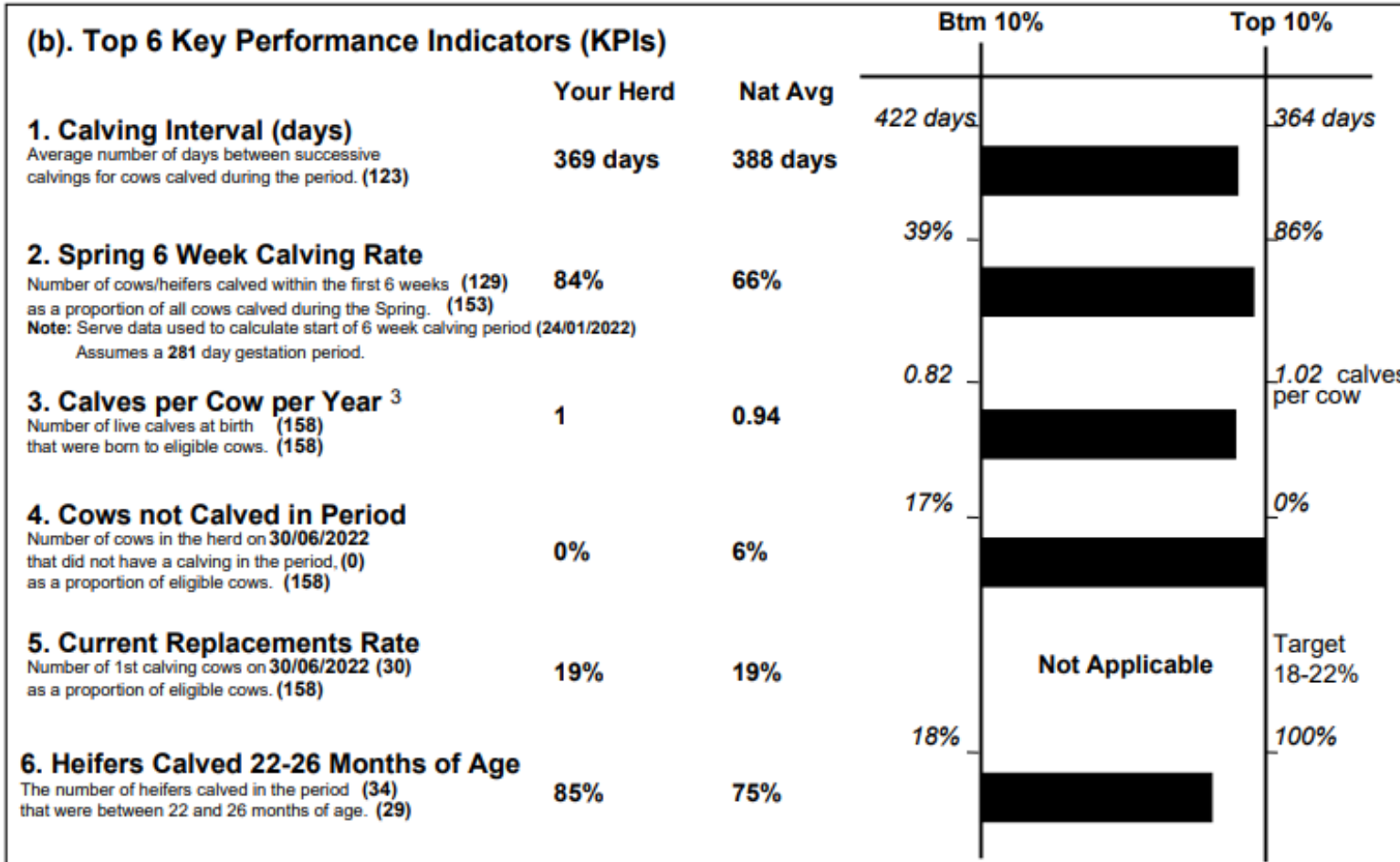
Supplier Number: 1047052 / Manufacturing

Table 3: Tirlán/ICBF Performance Score Card

	Your Herd	Tirlán Average	Tirlán Top 10%	Your Rank out of 100	Your Star Rating
Milk performance for 2022 (Jan - Dec) based on Tirlán data					
Fat + Protein (Kg/cow) Average Fat and Protein yield per cow for your herd	450	426	527	56%	* * *
Litres per Cow per Day Avg litres of Milk per cow from Jan - Dec 2022	15.16	14.42	17.6	57%	* * *
Fat % to end December 2022 Weighted average Fat % from Jan - Dec 2022	4.38	4.34	4.61	65%	* * * *
Protein % to end December 2022 Weighted average Protein % from Jan - Dec 2022	3.54	3.57	3.73	42%	* * *
Average Milk Price (cpl) Incl. VAT Average milk price received from Jan - Dec 2022, (Includes Bonuses/Penalties, Excludes Levies)	61.5	60	64.7	62%	* * * *
SCC (,000 cells/ml) The weighted average Somatic Cell Count for Jan - Dec 2022	154	171	85	51%	* * *
Fertility & Calving data based on HerdPlus 2022 Calving Report					
Calving Interval (days) Average number of days between successive calvings for cows calved during the period	370	384	363	69%	* * * *
Spring 6 Week Calving Rate Number of cows/heifers calved within the first 6 wks (63) as a proportion of all cows calved during the Spring (88)	72%	70%	88%	48%	* * *
% with known Sire and Calving Survey recorded Calves where sire (88) and calving survey (91) are recorded as a proportion of all births during the period (91)	98%	68%	100%	64%	* * * *
%AI bred replacements Calves born in the period from dairy AI (22) as a proportion of dairy females born (22)	100%	64%	100%	100%	* * * * *
% of Heifers Calved at 22-26 months No. of heifers calved (11) that were between 22 & 26 months of age (12)	92%	75%	100%	57%	* * *
EBI Statistics based on the latest HerdPlus EBI report 2023					
Herd EBI (2023) Average EBI for Cows (88) with EBI data	€159	€159	€195	47%	* * *
EBI of 2023 Inseminations Weighted Average EBI of dairy AI bulls recorded in Spring 2023	€329	€275	€329	90%	* * * * *

- Helps benchmark your herds performance within your co-op and amongst similar producer types e.g. Creamery, Liquid, Winter
- Compares your Milk Production, Fertility and Genetics.
- Ranks your performance out of 100 and gives you a target to aim for i.e. Top 10%
- Star rating to easily identify the strengths and weaknesses in your herd.

HerdPlus Dairy Calving Report



- Use the Herdplus Calving report to assess actual performance at farm level.
- Compare where you are compared with the National Average and Top 10% of herds.
- Will allow you to identify where your herd strengths and weaknesses lie.
 - Breeding Management
 - Calf Management
 - Heifer Management

Milk Recording

Lifetime Milk Recording - Total and Average Lifetime Production Data.



Showing 1 to 17 of 17 entries (filtered from 165 entries).

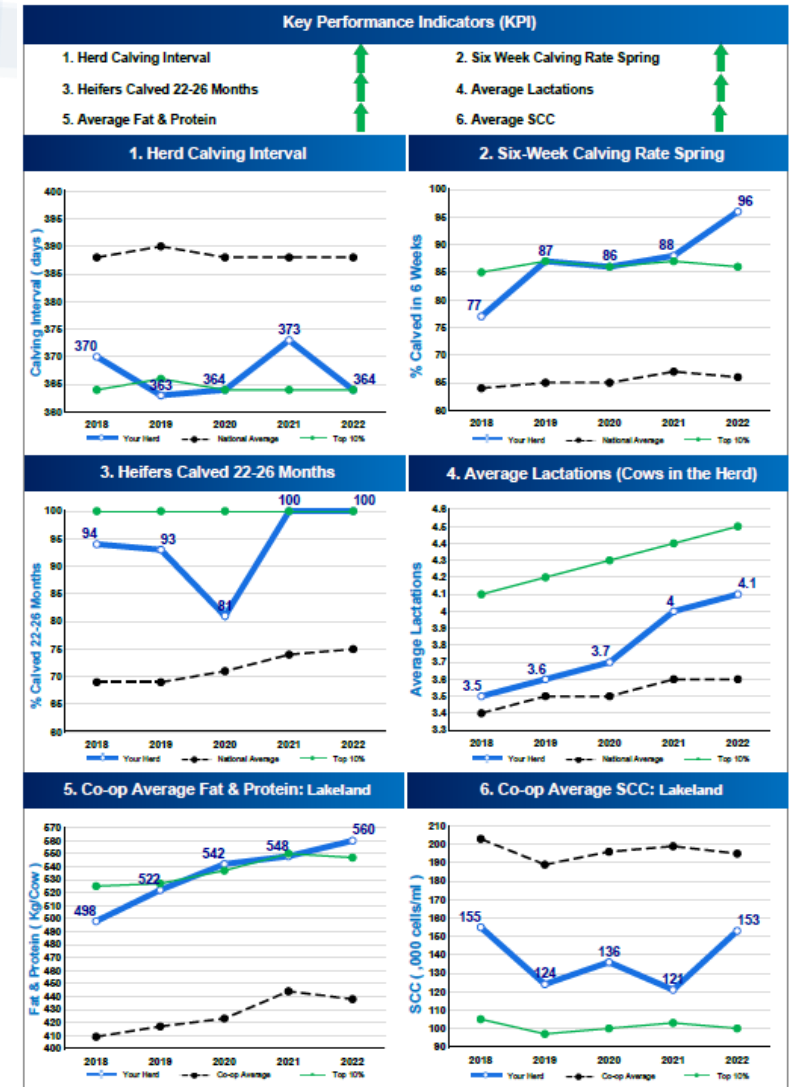
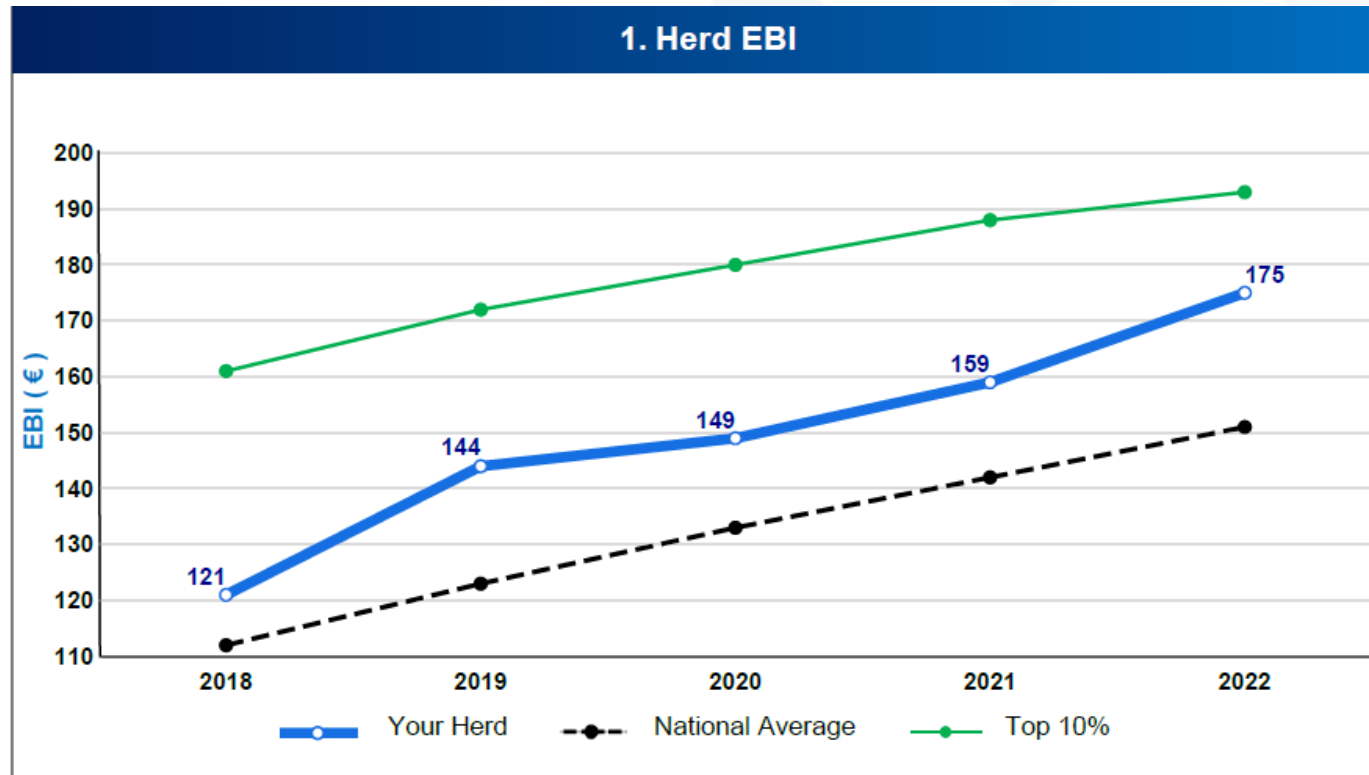
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Jumbo	Name	Breed	Sire	Lact	Last Calved	Status	EBI (€)	Prod SI (€)	Fert SI (€)	Total Days	Avg. Days Dry	M (Kgs)	F (Kgs)	P (Kgs)	F+P	F (%)	P (%)	SCC >250	Margin per Day (€)	Herd Rank					
1665	JILL 29	HO (94%) FR (6%)	LHZ	9	21-FEB-23	Milking	192	58	118	2956	64	72572	2951	2633	5584	4.07	3.63	1	3.79	1					
2876		HO (78%) FR (19%)	FR5803	1	16-FEB-23	Milking	274	65	106	5		288	15	10	25	5.21	3.47	1	17.2	1					
1579	MARGO 51 VGB8	HO (81%) FR (19%)	SOK	10	19-FEB-23	Milking	199	55	81	3310	62	82409	3228	2960	6188	3.92	3.59	3	3.87	2					
2834	NORA MAY 124	HO (75%) FR (25%)	FR5704	1	02-FEB-23	Milking	219	68	121	19		602	27	20	47	4.49	3.32	0	3.86	2					
1789	MARGO 62	HO (81%) FR (19%)	CHQ	7	03-FEB-22	Dry	257	92	84	2527	63	51859	2626	2032	4658	5.06	3.92	1	3.4	3					
2840	IRIS 144	HO (78%) FR (19%)	FR4728	1	31-JAN-23	Milking	265	107	112	21		510	36	17	53	7.06	3.33	0	3.33	3					
1864	JILL 34	HO (84%) FR (16%)	PKX	7	28-APR-22	Dry	146	48	38	2507	82	64379	2326	2169	4495	3.61	3.37	1	3.34	4					
2823	JERRI 131	HO (97%) FR (3%)	FR4573	1	22-JAN-23	Milking	198	111	61	30		900	45	28	73	5.00	3.11	1	5.1	4					
2849	RITA 97	HO (84%) FR (16%)	FR5803	1	08-FEB-23	Milking	243	55	123	13		382	18	12	30	4.71	3.14	1	4.82	5					
1800	NORA MAY 95 IE151013791800	OTL			04/02/2022 21/12/2022	7	305	25	23	10444	2231	3.18	3.30	677	3096	35	393	4117	59	2518	6219	888	2.47	42	
							320			10622	2269	3.21	3.31	692	3165										
1811	RITA 59 IE151013731811	YDE			10/01/2022 22/12/2022	7	305	62	77	8099	1730	4.40	3.75	661	3021	238	34	4447	61	2515	7721	1103	3.07	17	
							346			8813	1882	4.42	3.76	721	3294										

- Valuable tool to identify cows that are best suited to achieve their goals.
- Identify high and low performers e.g. milk yield, Protein %
- Cow health & fertility e.g. SCC
- Monitor progress of your breeding programme over time.

Dairy 5-Year Trend Report

- Allows you to track your KPI's over a 5-year period.
- Helps you analyze if your breeding objectives are leading to improved performance.



Tools to help achieve your breeding objectives

- **Genotyping - Identify genetically superior animals**

- Genomic Evaluation at earliest possible point in calf's life.
- Accelerated genetic gain.
- Reduced Carbon Footprint.



- **AI v's Stock Bull**

- Stock Bull progeny are consistently ~€80 behind AI progeny yet still 25% of dairy replacements are by Stock Bulls!



- **Sexed Semen**

- Farmers should strongly consider using sexed semen to generate some or all of their dairy heifer calves for 2024.
- Plan to use at least two sexed semen straws to generate each dairy female required.



Tools to help achieve your breeding objectives

- **Dairy Beef Index (DBI)**

- Females below €150 EBI should be considered for mating to beef bulls with a high DBI value from the start of the breeding season.
- Purchasing dairy female replacements should be considered by some low EBI Herds.



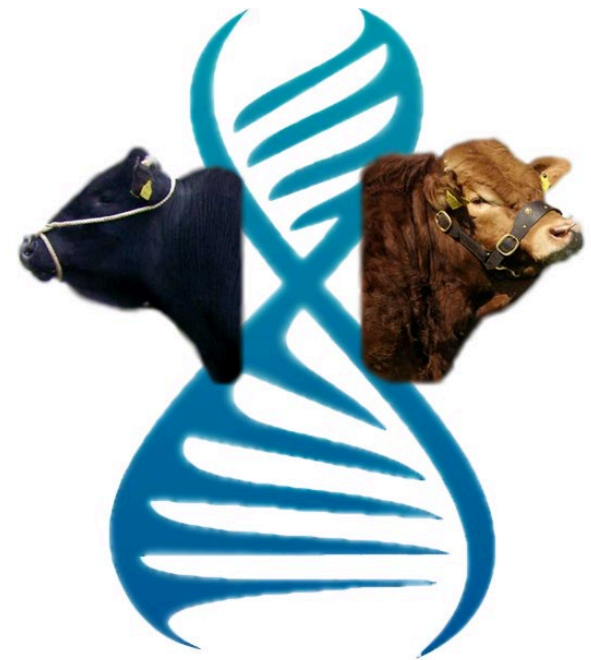
- **Use the ICBF HerdPlus Sire Advice**

- Simplify the process of bull selection and identify the optimum mating for both dairy & beef bulls.
- Allocate dairy bulls to cows based on their strengths & weaknesses, as well as manage inbreeding.
- Identifies the optimum beef AI bull mating to minimise calving issues & maximise beef merit.



Summary

- EBI is delivering more profit per cow while reducing carbon footprint.
- Know your Herd's genetic strengths & weaknesses – EBI Scorecard.
- Use the various ICBF reports to help set your breeding objectives.
- Genotype to identify your best replacements.
- Use high EBI AI bulls instead of stock bulls.
- Consider using sexed semen on you best genetic merit animals.
- Use high DBI AI from the start of the breeding on animals < €150.
- Use the ICBF HerdPlus Sire Advice tool.



Our Farmer & Government Representation



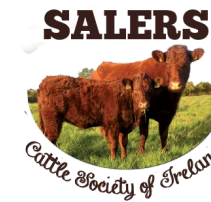
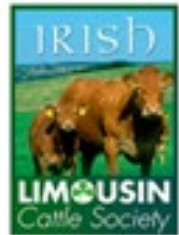
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Our AI & Milk Recording Organisations



Our Herdbooks



Acknowledging Our Members