



# Dairy Beef Index

*An index to deliver quality beef calves from the dairy herd.*

*How it can benefit you and how to use it*

Siobhán Ring



#ISGC20

# Motivation



- Easy calving
- Short gestation
- **Carcass merit**

- Market demands



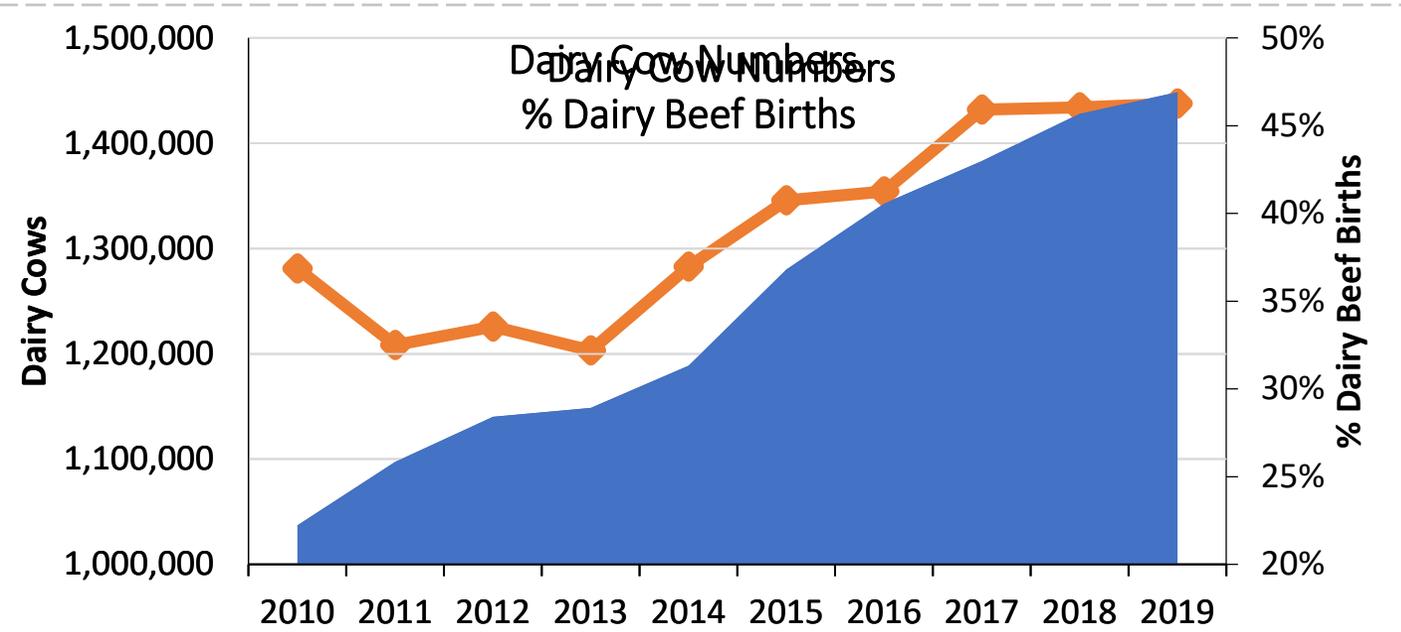
- Cow back in-milk & in-calf
- Value for calf
- Calf sold off-farm



- Return on investment:
  - Production costs
  - Carcass merit



# Motivation: Why Now?

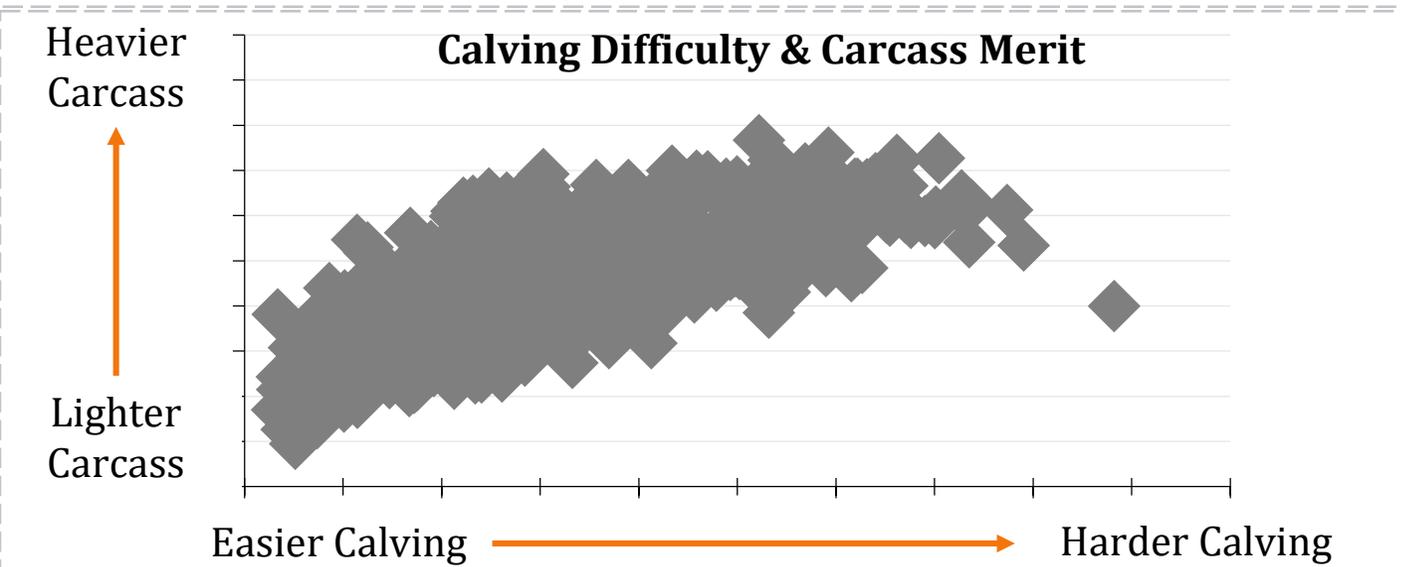


- **Dairy Herd Expansion**

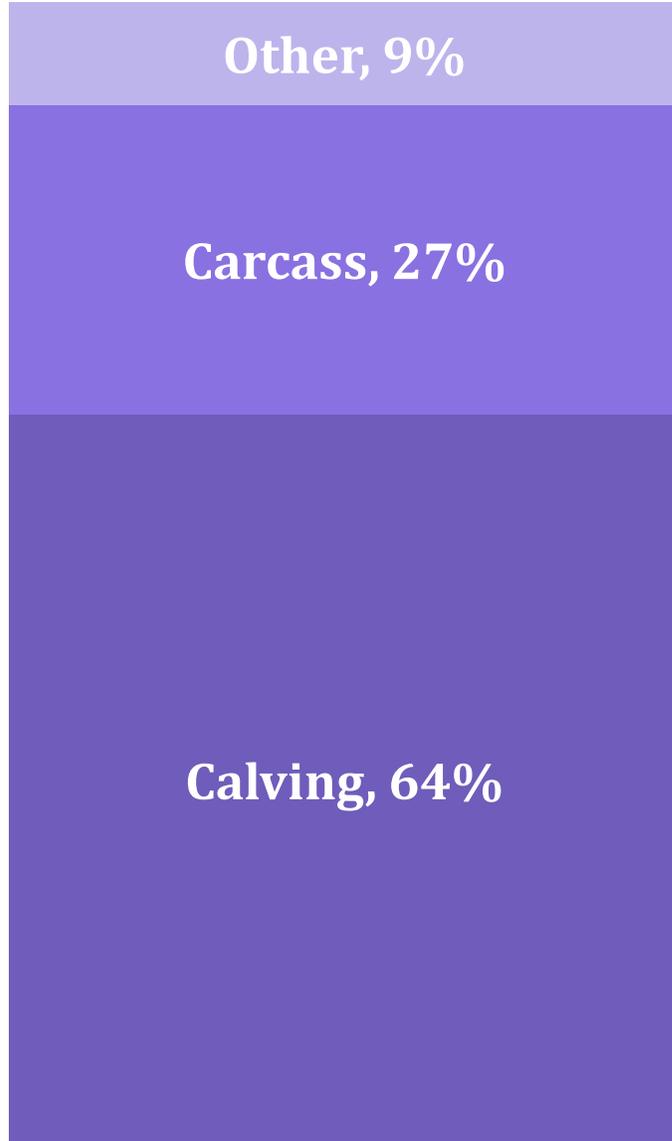
- Improved fertility
- More beef from dairy

- **Consequences of Selection Decisions**

- Priority: easy calving, short gestation
- Easier calving tendency for lower carcass merit
- Dairy beef cattle not meeting spec
- Viability of dairy beef system?



# DBI Composition



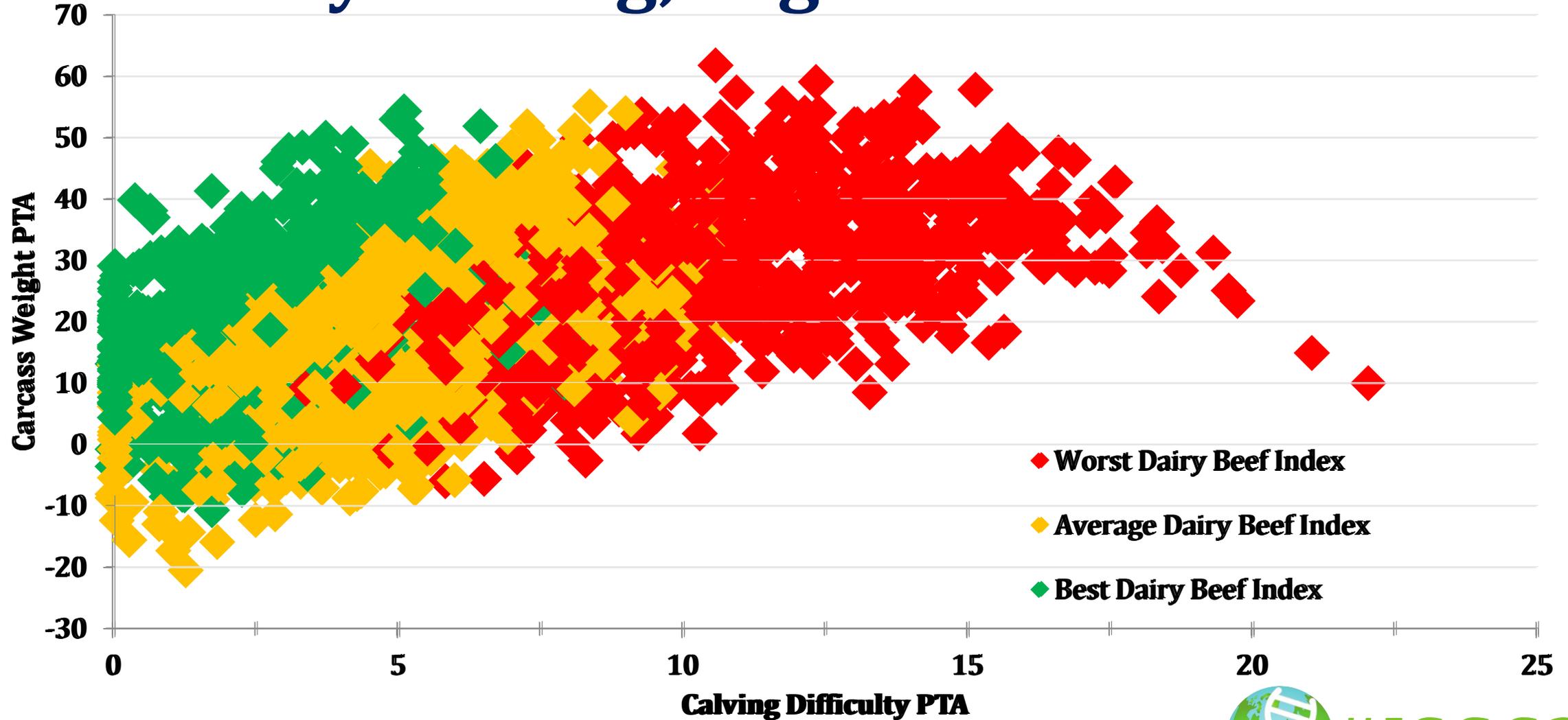
- **Dairy Focused:**

- Easy calving (53%)
- Shorter gestation (10%)
- Less mortality (1%)

- **Beef Focused:**

- Higher carcass merit (wt, conf, fat, spec; 27%)
- Less feed consumed (5%)
- Polled (3%)
- Docile (1%)

# Moving the Cloud: Easy Calving, High Carcass Merit



# What's in a €uro

- Each €1 increase in Dairy Beef Index can be interpreted as a €1 expected increase in profit for that bull's progeny



DBI = €20



DBI = €100

- €80 additional profit expected from Bull B
  - Combination of calving and beef merit traits
  - Full benefit not achieved at sale of animal (mart/factory)



#ISGC20

# Changing Mindset

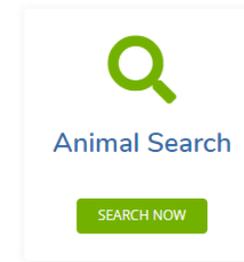
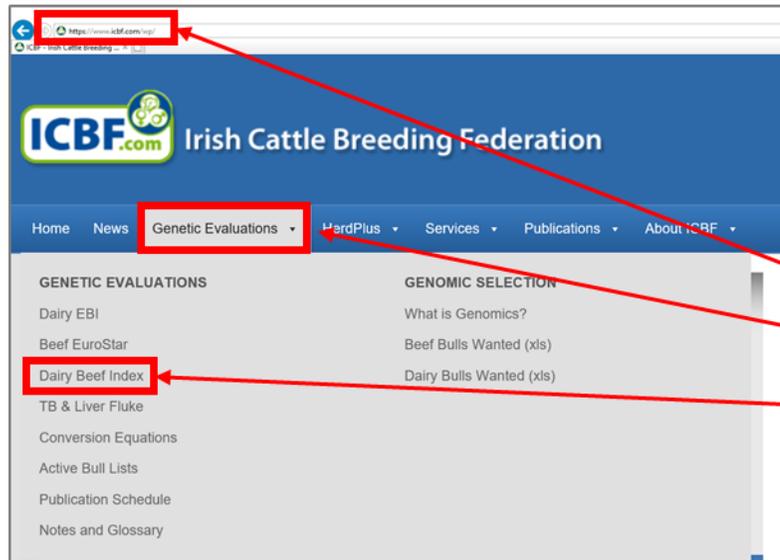
	On-farm difference	Value
Dairy Beef Index	€57 higher	
<b>Dairy Farmer Traits</b>		
Gestation	1 day longer	<b>Value to Dairy Farmer +€9.67</b>
CD% Heifers	Assist 1 extra	
CD% Cows	Assist 1 less	
Mortality	No difference	
Calf Price	€18 higher	
<b>Finisher Traits</b>		
Carc. Weight	17 kg heavier	<b>Value to Finisher +€104.54</b>
Carc. Conf.	1 grade better	
Carc. Fat	No difference	

- Benefit of using top DBI bulls (Spring '19) vs most used AI bulls (2015-2015)
  - Expected €57
  - Observed €114.57
  - (Feed intake, out of spec etc. not included)

# Accessing DBI



- 1 Log on to [www.icbf.com](http://www.icbf.com)
- 2 Press 'Genetic Evaluations'
- 3 Press 'Dairy Beef Index'
- 4 Download the proofs by selecting from the available options



Animal Search  
from next week

Lot 1 CILL CORMAIC QUARTZ			
ID: 17222008004	Sex: Male	DOB: 27-Oct-2017	
Owner: David Lykin - The Hermitage Kilomac Beir Co Offaly			
Breeder:			
Bred by: Gageboro Morgan	Gageboro Expans	Charline from 10th	
DOB: 08/03/2016	Gageboro Jubilee	Expans from 10th	
DOB: 08/03/2016	Cedar Lane	Expans from 10th	
DOB: 08/03/2016	ICBF Common Sully	Expans from 10th	
Genetic Evaluations		Genetic Evaluations	Genetic Evaluations
Terminal Index	431	46%	★
Replacement Index	440	45%	★
Maternal Progeny Traits	49	47%	
<b>Dairy Beef</b>			
Expected progeny performance		Index	Feed
Culling difficulty (1-5 scale)		-1.7%	50%
Droptail (1-5 scale)		0.12	45%
Carcass weight (kg)		+0.8kg	46%
Carcass conformation (1-10 scale)		+0.49	46%
Expected daughter breeding performance			
Daughter culling diff (1-5 scale)		-0.7%	44%
Daughter MB (kg)		+3.2kg	45%
Daughter carcass weight (kg)		+0.4kg	46%
Daughter carcass conformation (1-10 scale)		+0.77kg	46%

Sales Catalogue  
from next week

# DBI Active Bull List (Nov'19)

Prominent Breeds	Bulls	Dairy Beef Index	Value of Calving	Value of Beef	Gest	Old CD%	Carc Wt.	Carc Conf.
AA	27	€65	€30	€35	-1.7 d	2.1%	6.0	0.7
HE	5	€44	€12	€32	-0.9 d	3.2%	1.9	0.5
AU	6	€111	€1	€110	+0.2 d	3.0%	19.2	1.9
BB	15	€79	-€64	€143	-0.3 d	6.7%	24.3	2.5
LM	12	€82	-€53	€135	+3.2 d	5.1%	25.6	2.2

- Gestation -0.09 days
- Carcass weight 15 kg

# DBI Active Bull List

## ICBF Bull List of Active Beef AI Bulls with at least 100 Dairy Calvings, Ranked on the Dairy Beef Index

©ICBF2019. For more information please call 0238820452 or log onto [www.icbf.com](http://www.icbf.com)

Bull Details		Dairy Beef Index (DBI) Summary						Calving Value Traits				Beef Value Traits				Progeny Records	
Rank	Breed	DBI	DBI Rel	Calving Value	Calving Value Rel	Beef Value	Beef Value Rel	Gest	Risk of Dairy Heifer CDiff	Dairy Heifer Calv Diff	Dairy Cow Calv Diff	Carc. Wt. (kg)	Spec: Carc. Wt.	Carc. Conf.	Spec: Carc. Conf.	Calving Diff	Carc. Wt.
1	AU	€149	58%	€36	75%	€113	41%	-1.33	Low	5.8%	2.6%	17.1	11%	2.38	1%	205	0
2	AU	€141	71%	€18	86%	€123	54%	-0.54	Moderate	7.6%	3.4%	23.1	9%	1.92	2%	468	3
3	BB	€135	93%	-€9	95%	€144	91%	-1.43	High	8.6%	4.0%	18.4	11%	2.5	1%	10686	5529
4	SA	€134	83%	€37	79%	€97	88%	-0.93	High	9.1%	3.6%	23.5	9%	1.17	5%	2570	363
5	AU	€133	65%	€10	73%	€122	56%	0.31	Low	5.7%	2.7%	24.4	9%	2.1	1%	182	6
6	LM	€129	91%	-€20	87%	€149	95%	3	Moderate	6.2%	3.4%	31.2	7%	2.48	1%	5153	568
7	BB	€109	80%	-€26	86%	€135	75%	-0.74	High	9.0%	3.5%	25	8%	2.21	1%	671	129
8	LM	€109	95%	-€11	98%	€120	92%	2.36	Moderate	7.7%	2.8%	19.7	10%	2.17	1%	31398	9550
9	BB	€107	90%	€3	92%	€104	88%	-0.18	Moderate	7.2%	2.8%	15.8	12%	1.93	2%	1340	1393
10	LM	€104	77%	-€25	80%	€128	75%	2.8	Low	5.9%	2.3%	20.6	10%	2.12	1%	2432	17

- Higher € values always more desirable

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- Separate CDiff for heifers & cows, with risk – use most appropriate trait

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- Higher values for the value of beef traits is better

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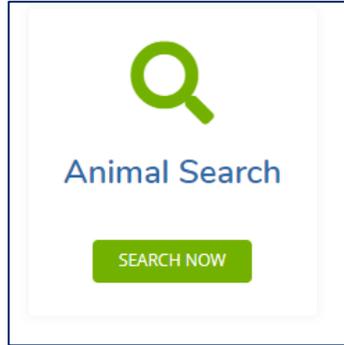
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- Indication of progeny performance

# DBI on Animal Search



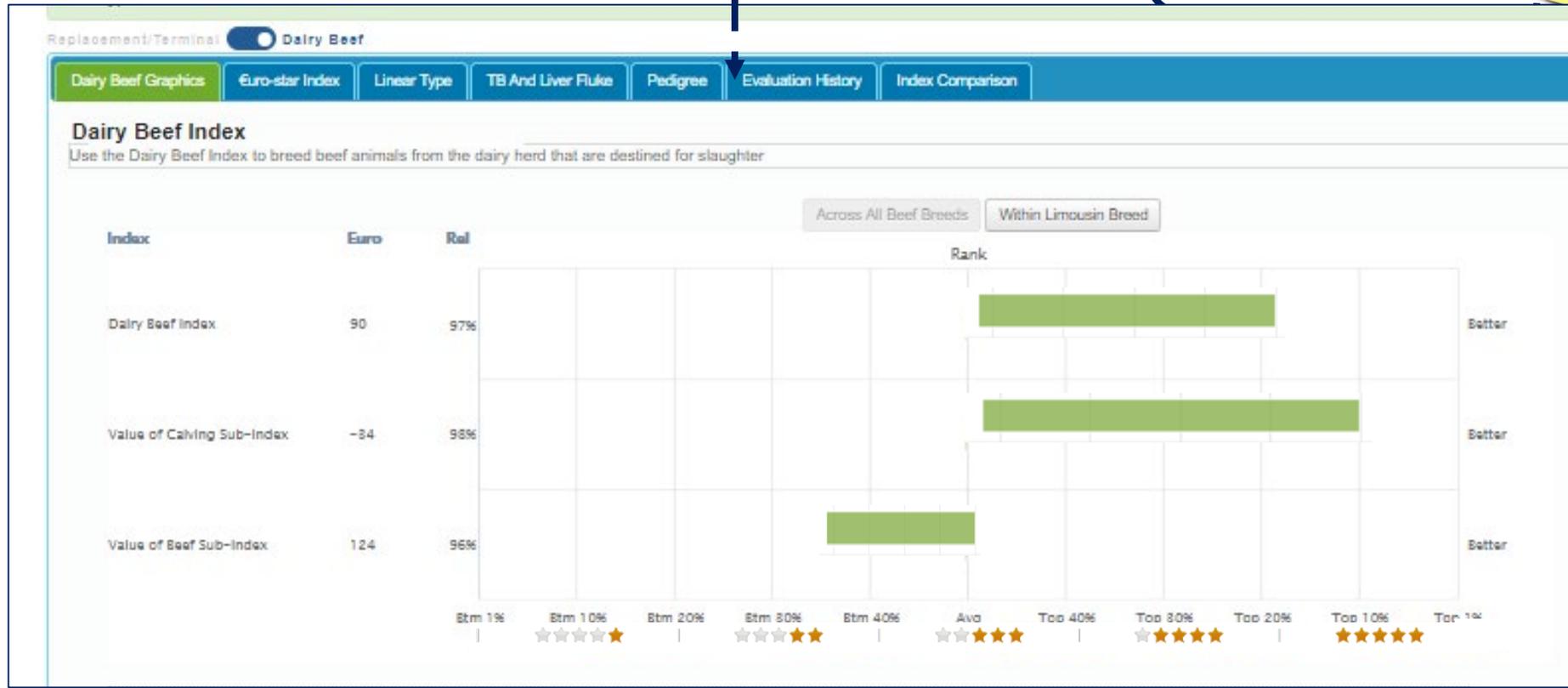
ICBF.com Irish Cattle Breeding Federation

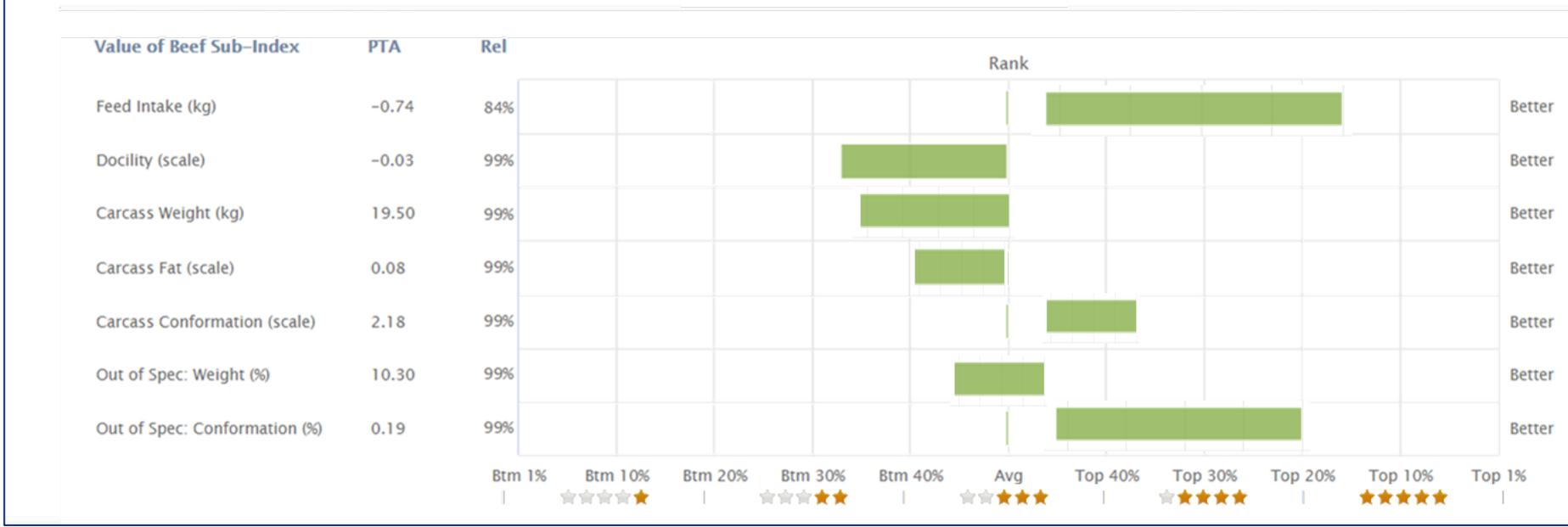
ICBF Animal Search

Search By:

- Animal Tag, AI Code, Herd Book Number
- Name or part of name (Males Only)

IE151225390616





# DBI on Sales Catalogue



Mid-Section:  
Front Cover:  
Dairy Beef  
Replacement & Terminal Index  
(Beef Farmer)  
(Dairy Farmer)

## Dairy-Beef

Evaluation Date: S

ry	Calving	
Index	Value SI	Val
5	-€12.13	€
2	-€74.96	€
2	-€74.96	€
2	-€74.96	€

WARD

*Dairy Beef Index* **Dairy Beef Index**  
€48 (Rel:40%)

*Calving Traits* **Gestation**  
-2.4 days (Rel:38%)

*Beef Traits* **Carcass Weight**  
4.7 kg (Rel:46%)

*Additional Information* **Myostatin: F94L**

**Lot 1 RYLE GLEN EDWARD** [Modified suckler page](#)  
 ID: 372224752030955 Breed: Hereford  
 Sex: Male DOB: 11-Nov-2017  
 Owner: Joe Bloggs - Timbucktwo, Co. Clare  
 Breeder: John Murphy - Causeway, Co. Kerry

Sire: Portanob Peter IE281398910327 **Sire Verified (SNP)**  
 Ardmulchan Goodman — Westwood Uplifter  
 Portanob Julia 2 — Ardmulchan Clover 39th  
 Dam: Ryle Glen Sheila V IE331186220499 **Dam Verified (SNP)**  
 Maclone Ger (X) — Maclone Bruno  
 Ryle Glen Sheila 2nd (X) — Breaney Sam Ryle Glen Sheila (X)

Evaluation Date: Sep 2019; Next Evaluation Date: 21 Nov 2019

Star Rating (Within Hereford breed)	Economic Indexes	Euro value per progeny	Index Reliability	Star rating (across all beef breeds)
★	<b>Replacement</b>	€28	40% (Average)	★
★★★★★	<b>Terminal</b>	€48	44% (Average)	★

**Calving Difficulty (Births requiring considerable assistance)**

When Mated With:	Value	Reliability
<b>Beef cows</b> Breed avg: 2.9%, All breeds avg: 4.0%	2.1%	70% (High)
<b>Beef heifers</b> Breed avg: 8.8%, All breeds avg: 8.4%	4.1%	64% (High)

Star Rating (within Hereford breed)	Key Replacement Profit Traits	Value	Reliability	Star Rating (across all beef breeds)
★★	<b>Docility (1-5 scale)</b> Breed avg: 0.1, All breeds avg: 0.01	0.07	38% (Low)	★★★★★
★★★	<b>Carcass weight (kg)</b> Breed avg: 4.43kg, All breeds avg: 16.19kg	+4.7kg	46% (Average)	★
★★★★★	<b>Carcass conformation (1-15 scale)</b> Breed avg: 0.49, All breeds avg: 1.38	+0.77 scale	45% (Average)	★

Expected Daughter Breeding Performance				
	<b>Daughter calving diff (% 3 &amp; 4)</b> Breed avg: 5.96%, All breeds avg: 5.79%	+6.01%	39% (Low)	
★★	<b>Daughter milk (kg)</b> Breed avg: 3.28kg, All breeds avg: 2.24kg	+2.2 kg	37% (Low)	★★★
★	<b>Daughter calving interval (days)</b> Breed avg: -3.27days, All breeds avg: -0.77days	-0.76 days	37% (Low)	★★★

**Additional Information:**  
 Myostatin: F94L Non Carrier; NT821 Non Carrier

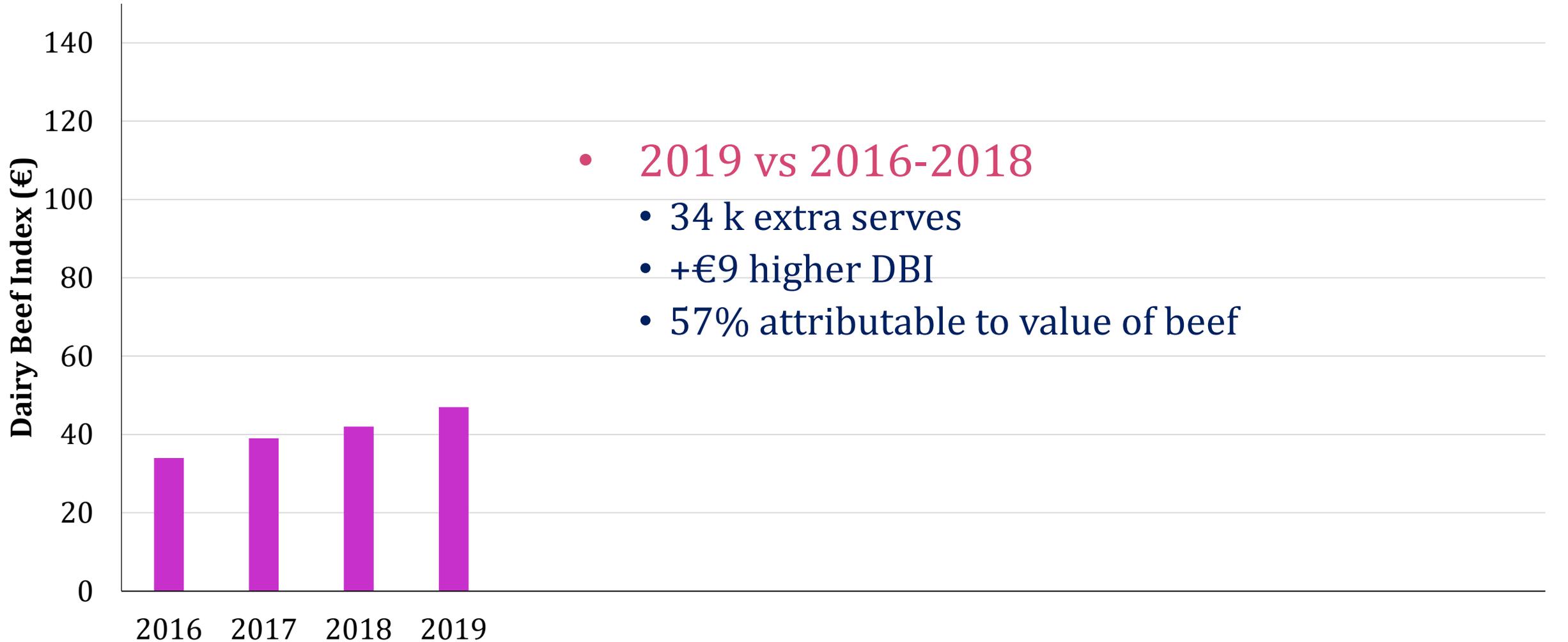
Linear composites	Value	Reliability
Muscle		
Skeletal		
Function		
Herd data quality index		
N/A		

Animal not scored.

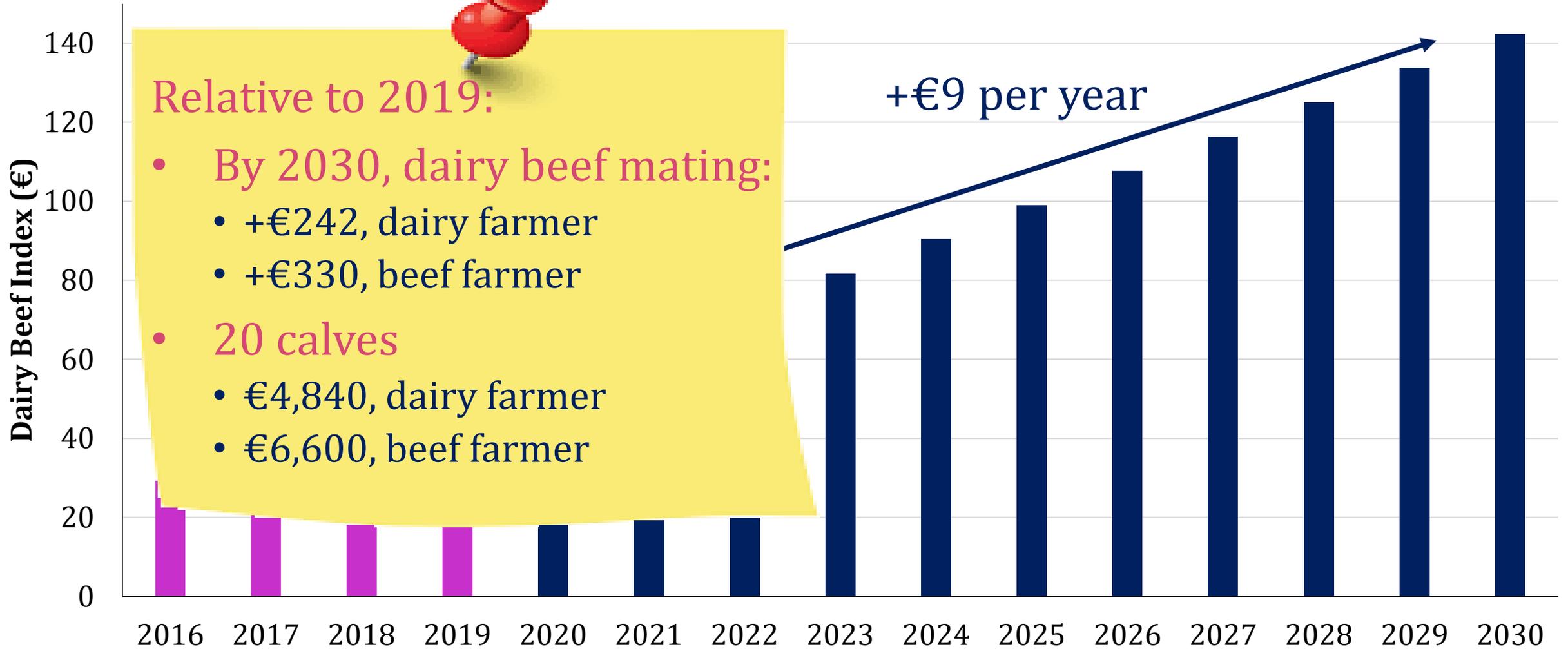
Carcass Weight	Carcass Conf
4.4 kg	+0.49
16.2 kg	+1.38
16.2 kg	+1.38
16.2 kg	+1.38

GENOTYPED   
 Verified (SNP)  
 Dam Verified (SNP)  
**Dairy Heifer CDiff**  
 12.1% (Rel:53%)

# DBI, 2019 Serves in Review



# DBI, Projecting Forward



# Guidelines

- For 2019, only beef AI bulls with  $\geq 30$  progeny in dairy herds
  - Select a team of bulls from the Active Bull List
- For 2020, extended to stock bulls
  - Ask breeder for DBI / animal tag
    - Sales Catalogue / Animal Search
  - Use DBI as tool to aid purchasing decisions
- For AI or stock bull usage
  - Select bulls with the highest Dairy Beef Index € value to maximize overall profitability
  - Use CD% for dairy cows and risk category for dairy heifers
    - Low risk category only for heifers (17% (AI) & 25% (stock bull) dairy\*beef AI to heifers)
    - Cows generally can take more difficulty

# Summary



- Easy calving
- Short gestation
- Carcass merit

- Market demands



- Cow back in-milk & in-calf
- Value for calf
- Calf moved off-farm



- Return on investment:
  - Production costs
  - Carcass merit

