Selection of breed and bulls for Beef x Dairy

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Huge amounts of high quality data is essential to Danish Cattle production

- Long history of collecting data on central databases
- Used for management and **BREEDING**
  - Value of common storing (management tools, **GENETIC EVALUATION**, data security, benchmark etc.)
  - Can’t manage, what you can’t measure
- Large amounts of high-quality data

Nordic farmers are excellent in phenotyping

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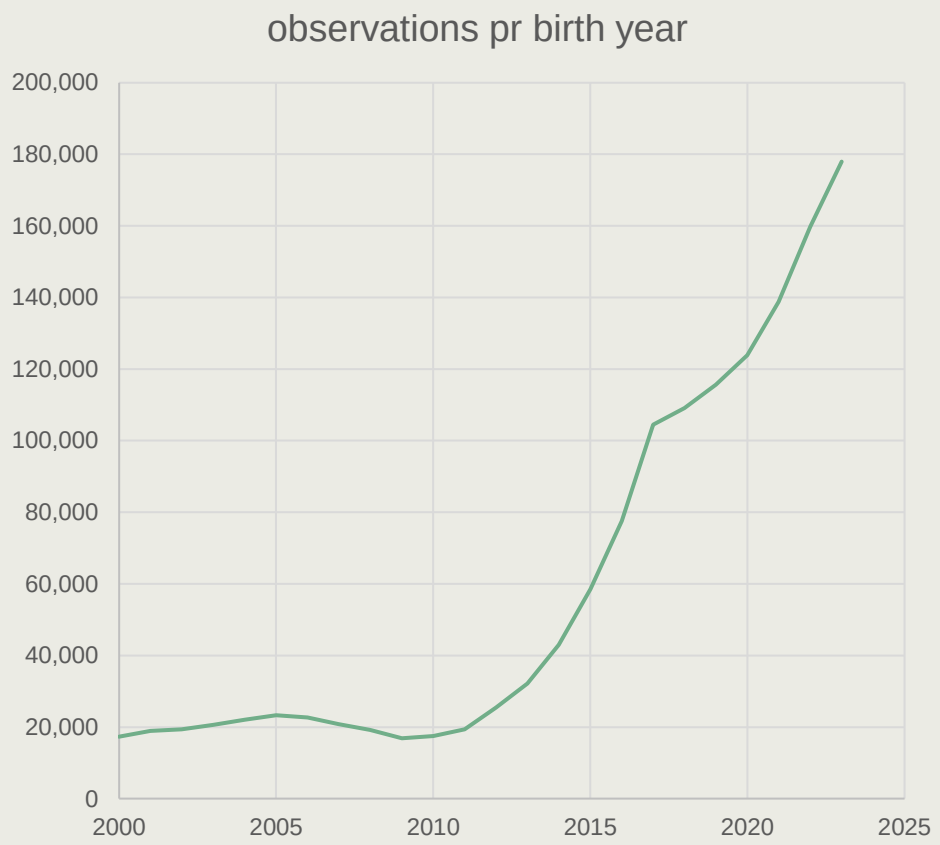
Data in NAV evaluation

Data from Beef on Dairy calves from Denmark, Sweden, and Finland

- HOL, RDC or JER dams
- Data since year 2000
- In 2023 approx. 180,000 observations for birth traits og which 23,000 have a JER dam



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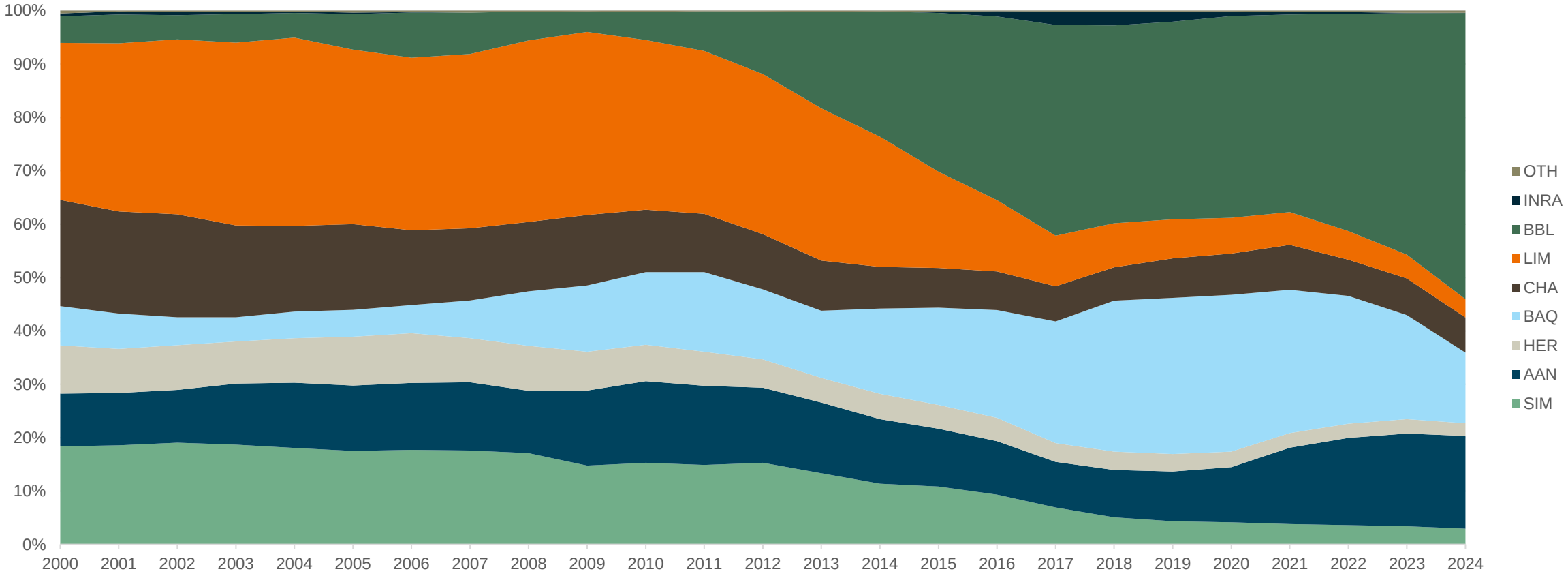
Sire breeds over year across DNK, FIN, SWE



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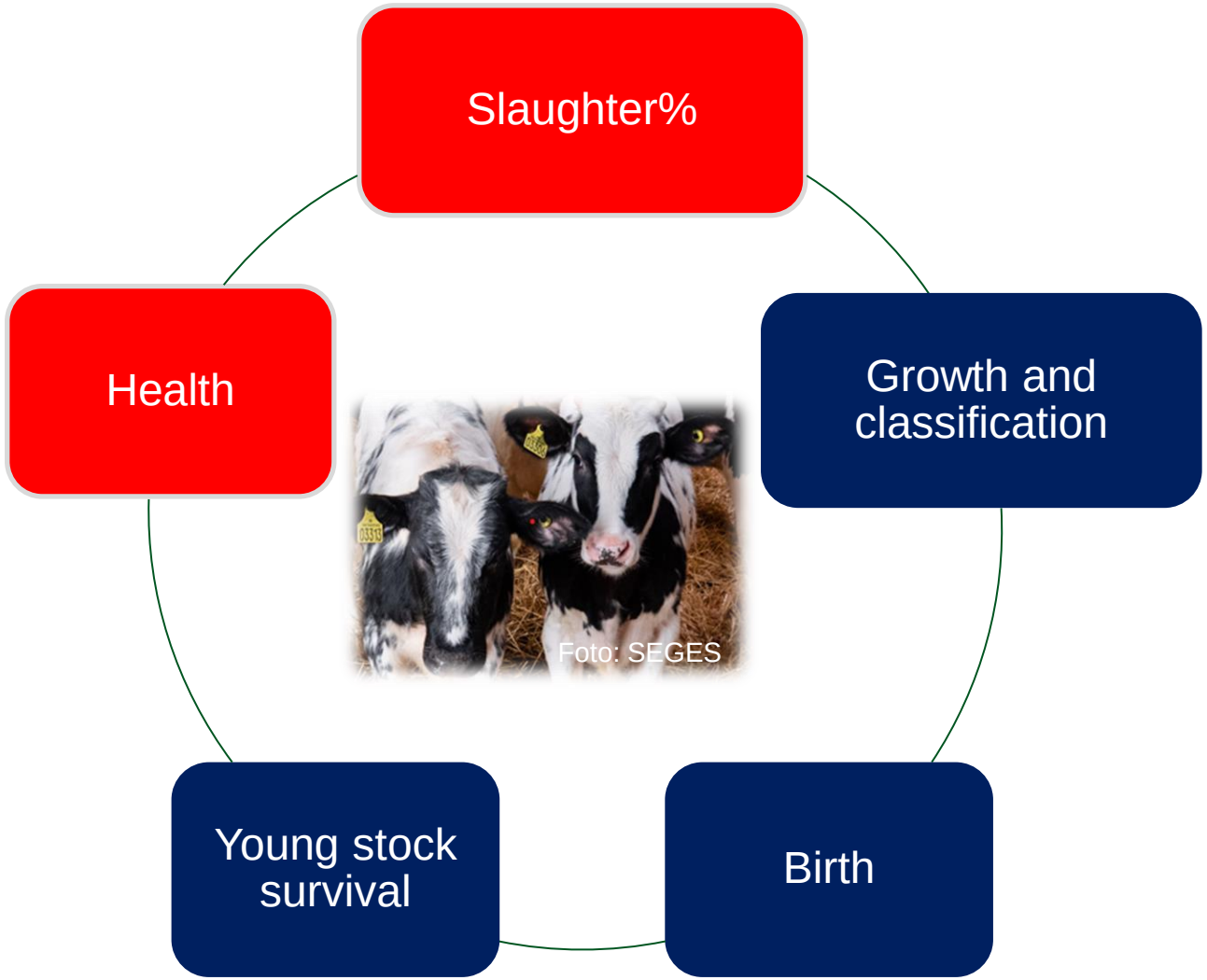
Breeding values for Beef on Dairy



DNK

NAV

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Example of published evaluation on NAV BEEF search

NAV Beef search — NAV Bull search — NAV Interbull search — English — ?

VB Maskot NBDI 5

Beef x Dairy | Beef | Interbeef — PDF — Search

Born	06/11/2016
Breed	Belgian Blue
Breeder	Gdr Britta Pedersen
Evaluation	Beef x Dairy
International ID	BBLDNKM002759501913

Herdbook number	
DNK	78397

Trait	# Crossbreed progeny	# Herds
Calf survival, 2nd and later lactations	8014	963
Carcass conformation score	3611	388

Sire	Geronimo BBLGBRM000020112066	PGS	Bringlee Ecstasy BBLGBRM000020090213
		PGD	Kersey Domino BBLGBRF000020081123
Dam	Fruerlund Evita BBLDNKF002759501678	MGS	Tornado BBLDNKM009245300180
		MGD	Fruerlund - Rosetta BBLDNKF002759501123
		MGDS	LUCAS BAKKEGÅRD BBLDNKM006947500026

Evaluation published **07.05.2024**

Show ☑ Reliabilities ☑ Previous evaluation

Trait	Current evaluation	70 80 90 100 110 120 130	Reliability	Previous evaluation
NBDI, short	5			5
Birth	95		92	95
Calf survival, Lact. 2+	96		92	96
Calving ease, Lact. 2+	95		96	95
Breeding values not in NBDI				
Calf survival, Lact. 1	97		79	97
Calving ease, Lact. 1	90		97	90
Growth, short	114		97	113
Daily carcass gain	108		96	107
Carcass conformation score	137		97	136
Carcass fat score	77		97	77
Youngstock survival (not in NBDI)	128		91	128
Early period	118		89	118
Late period	127		91	127
Gestation length, cow (not in NBDI)	2		98	2

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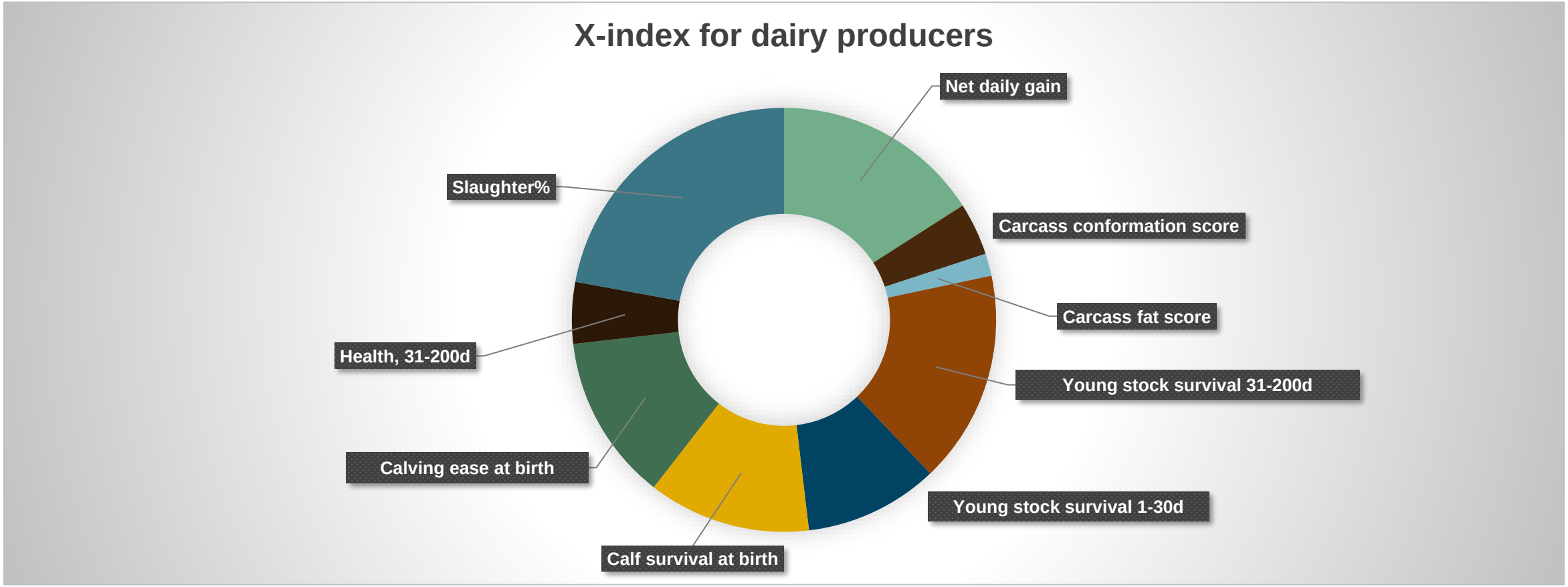
Weights in the Danish X-Index



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Level of X-index (dairy producer) for different sire breeds

BBL	6.8 €
INRA	-0.4 €
BAQ	-12.1 €
LIM	-21.2 €
CHA	-22.3 €
AAN	-24.3 €
SIM	-26.5 €
HER	-28.8 €

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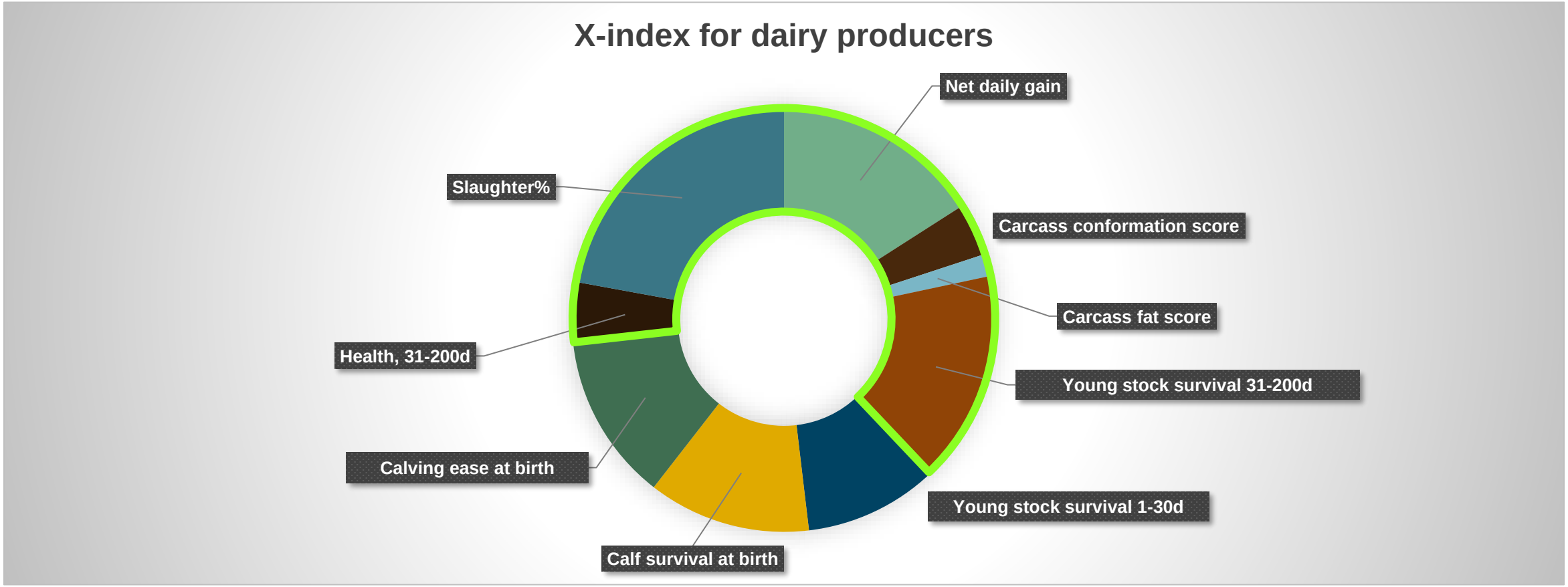
Weights in the Danish X-Index



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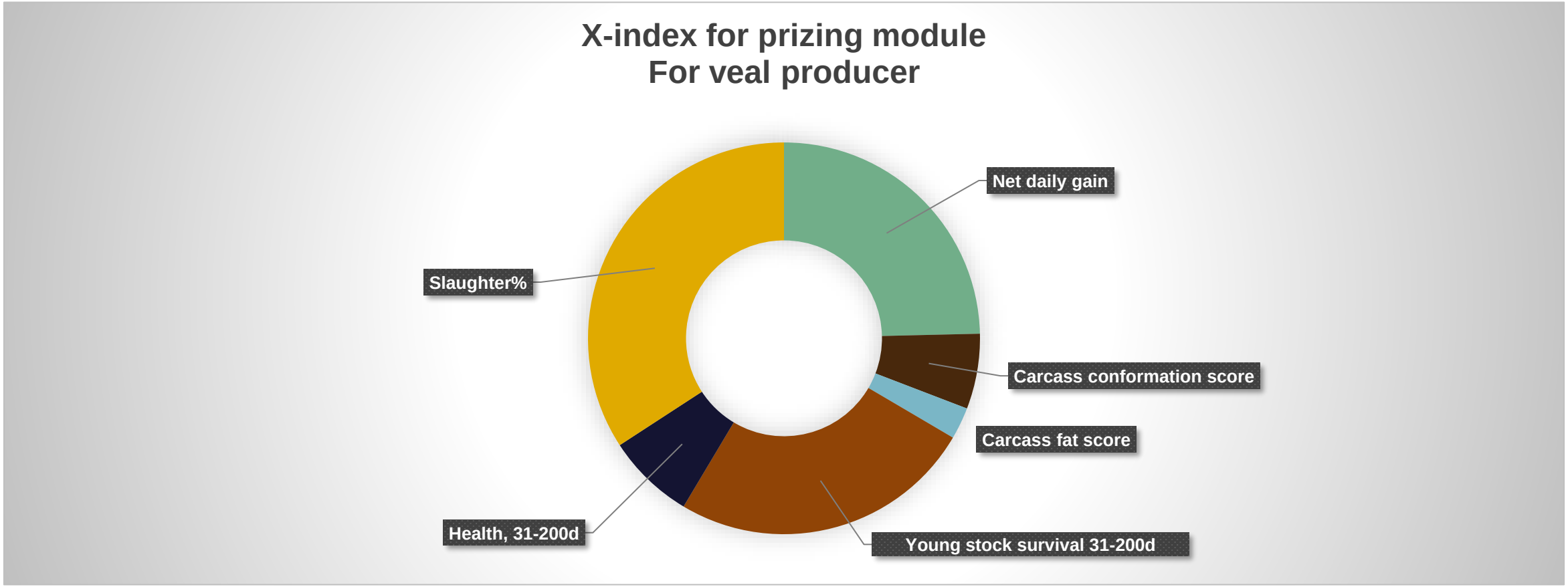
Weights in the Danish X-Index



DMS Prizing Module

- Purpose: **Ensure a fair and transparent prizing of calves for both veal and dairy producers.**
- The prizing module handles all types of calves, including bull calves of HOL, JER, RDC, and MILKxMILK, as well as BEEFxMILK calves.
- The prizing module is based on a fact-based model that includes relevant production data from the cattle database and price assumptions for Danish veal production (which are updated bi-annually).
- The prizing module takes into account each calf's potential for production, health, and survival

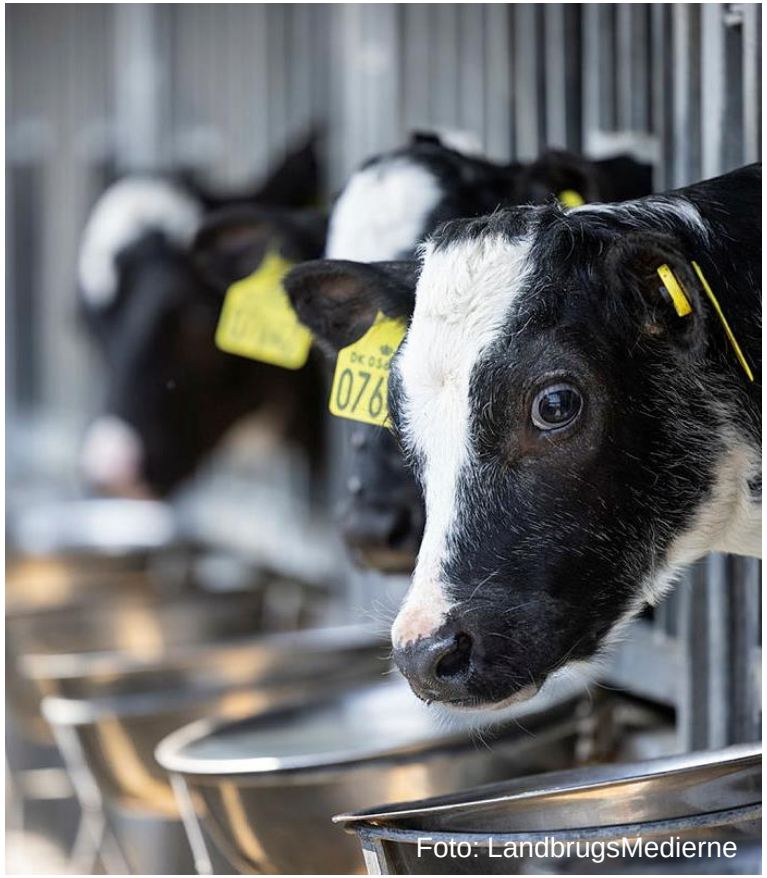


Foto: LandbrugsMedierne

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Example from DMS prizing module

Base price + weight adjustment.

Correction for dairy growth index

X-index (veal) for beef sire

Basic Beef supplement

Dyr til afregning

DYR NR.	ALDER	VÆGT	FARS RACE	FARS NAVN	MORS RACE	KØN	BASIS PRIS	VÆKST TILLÆG	JERSEY FRADRAG	MON/FLE TILLÆG	X-KALV TILLÆG	KØDKV. TILLÆG	INDV. TILLÆG	BEMÆRKNING	BEREGNET PRIS	GEMT PRIS
·08113	68	90,0	BLK	VB Picasso	HOL	Kvie	1450	-100	0	0	85	252	0		1687	1687
·08130	59	87,0	HOL	VH Mylan P	HOL	Tyr	1405	30	0	0	0	0	0		1435	1435
·08133	57	76,0	BLK	VB Nase	HOL	Tyr	1240	10	0	0	18	652	0		1920	1920
·08134	56	84,0	BLK	VB Picasso	HOL	Tyr	1360	0	0	0	85	652	0		2096	2096
·08137	53	76,0	ANG	Kong	HOL	Tyr	1240	30	0	0	UAFPRØV	386	0		1656	1656
·08139	51	95,0	BLK	VB Picasso	HOL	Tyr	1525	0	0	0	85	652	0		2262	2262
·08142	48	80,0	BLK	VB Picasso	HOL	Kvie	1300	-100	0	0	85	252	0		1537	1537
·08143	47	82,0	BLK	VB Picasso	HOL	Tyr	1330	-120	0	0	85	652	0		1946	1946
·08146	45	81,0	CHA	Disco	HOL	Kvie	1315	20	0	0	UAFPRØV	152	0		1487	1487
·08149	39	71,0	BLK	VB Picasso	HOL	Kvie	1165	10	0	0	85	252	0		1512	1512

Deduction/supplement for the share of JER and MON/FLE in crossbred dairy bull calves.

Opportunity for supplements/deductions on an individual animal basis

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Price differences between different categories in the prizing module – focus JER

- Asuming same weight of calf and BEEF sire has X-index (veal) = 0 then:
  - Price of JER bull calf is ~185€ less than a BEEFxJER bull calf.
  - Price of BEEFxJER heifer calf is ~100€ less than a BEEFxJER bull calf.
  - Price of BEEFxHOL heifer calf is ~10€ higher than a BEEFxJER bull calf.

- Quantity of meat is not a JER breed strength.

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And I did not even mention Future Beef Cross

- A project finished in 2024 aiming on improving
  - Feed effiency
  - Methane emissions
  - Meat quality (marbling)

- SS genomic predictions and genotypes from 12,000 crossbred calves

FutureBeefCross

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Thank you for your attention!

- Questions?