



Euroopa Maaelu Arengu
Põllumajandusfond:
Euroopa investeringud
maapiirkondadesse

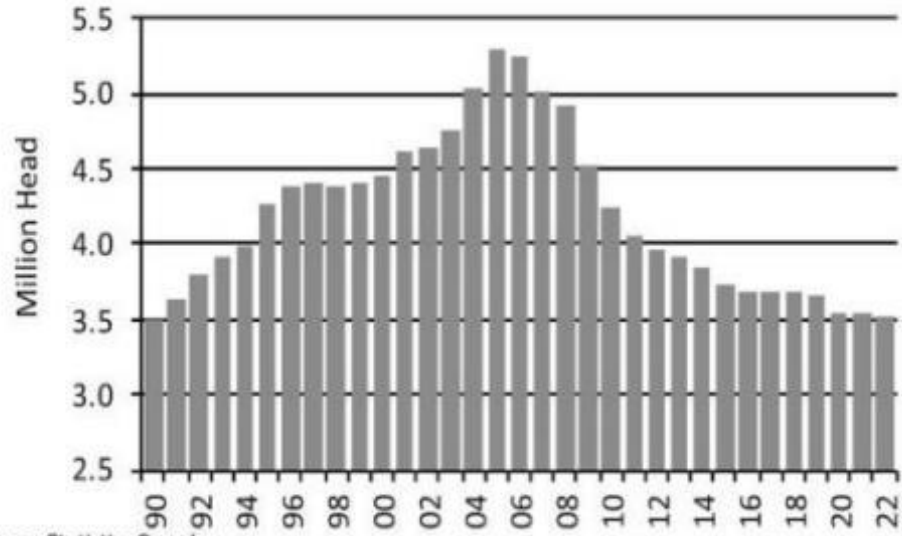


Beef Up, Adding Profitability to Dairies

Brad Gilchrist, Beef Marketing Manager



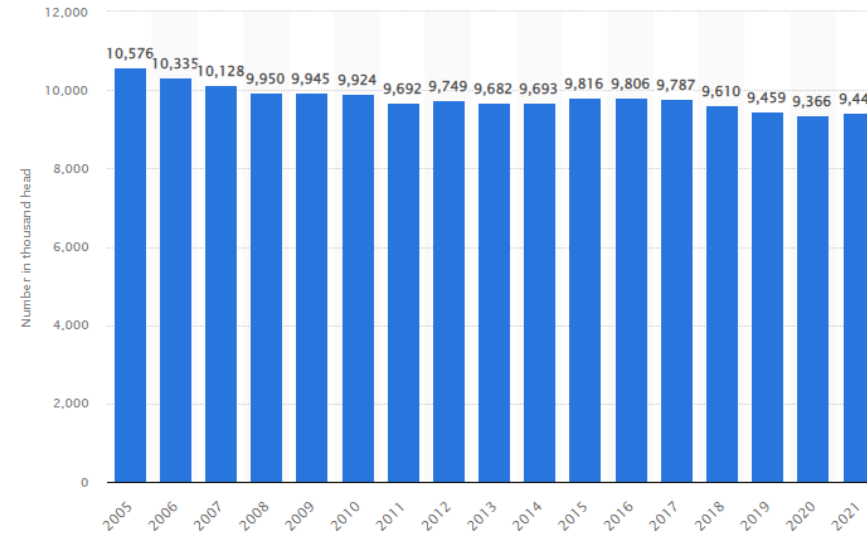
CANADIAN BEEF COW NUMBERS



Source: Statistics Canada

Number of cattle and calves on agricultural holdings in the United Kingdom (UK) from 2005 to 2021

(in 1000s)



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Release date

March 2022

Region

United Kingdom

Survey time period

2005 to 2021

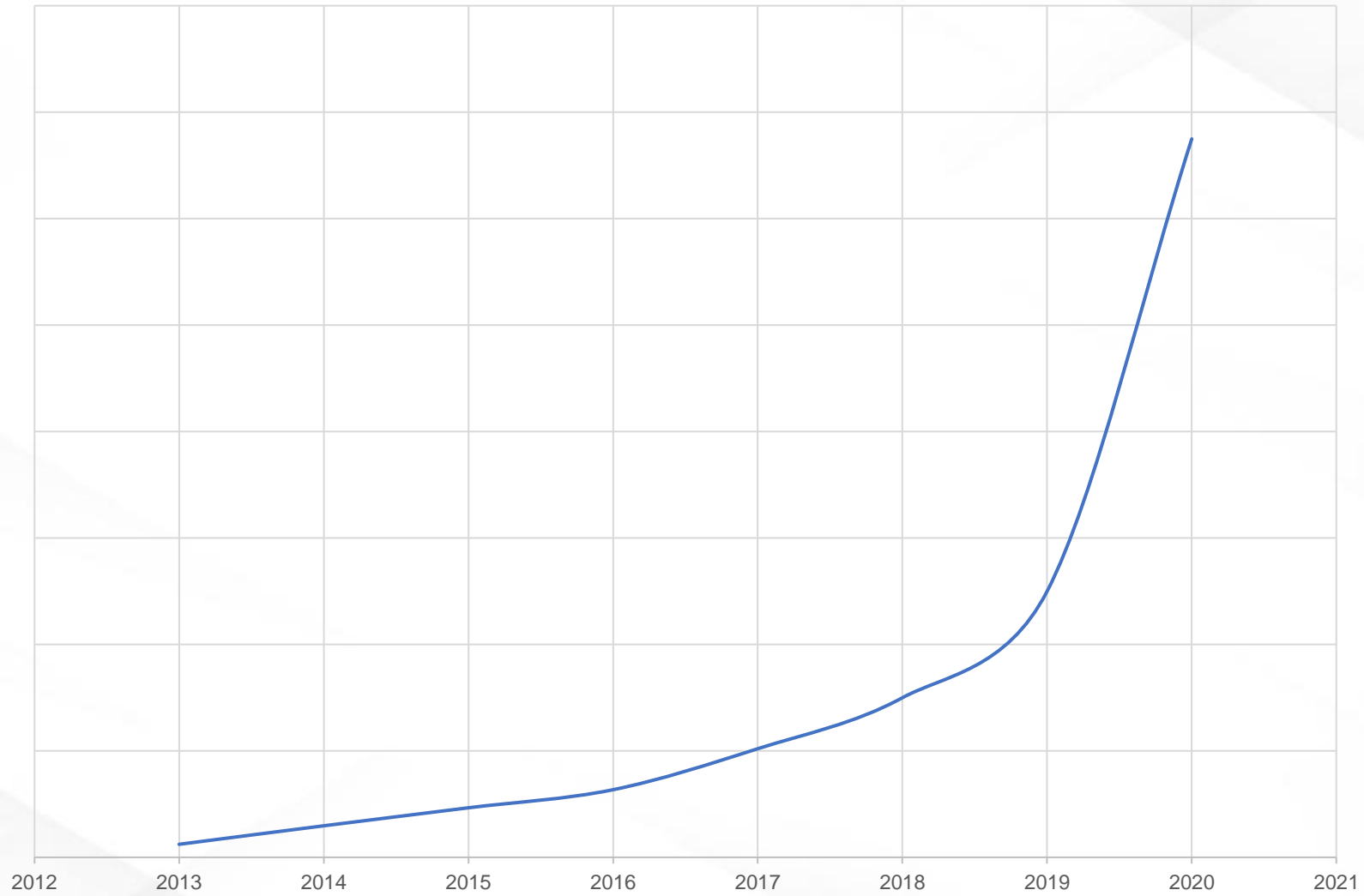
Citation formats

View options

MARCH 16, 2023

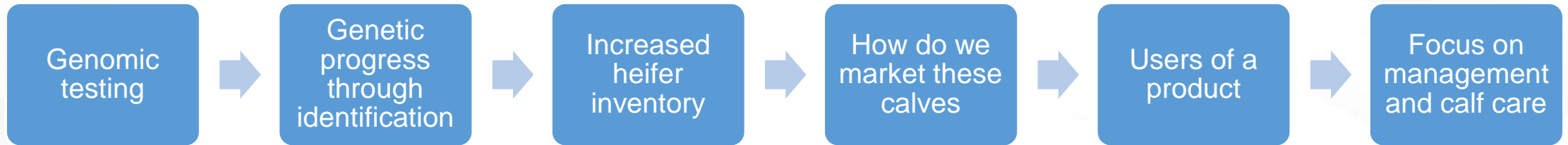
THE NUMBER OF BEEF COWS IN THE U.S. DROPS TO THE LOWEST LEVEL SINCE 1962 AS THE GLOBAL FOOD CRISIS INTENSIFIES



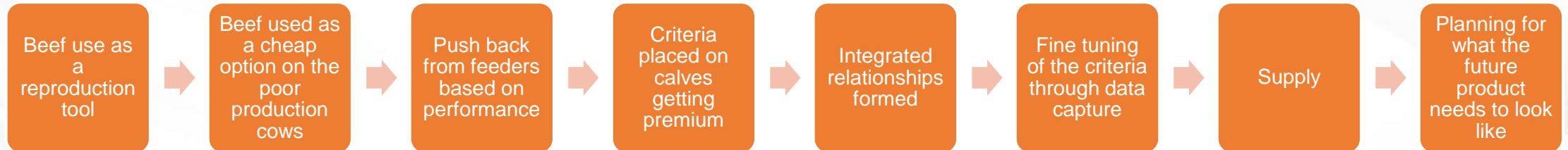


Beef cross timeline

Dairy timeline

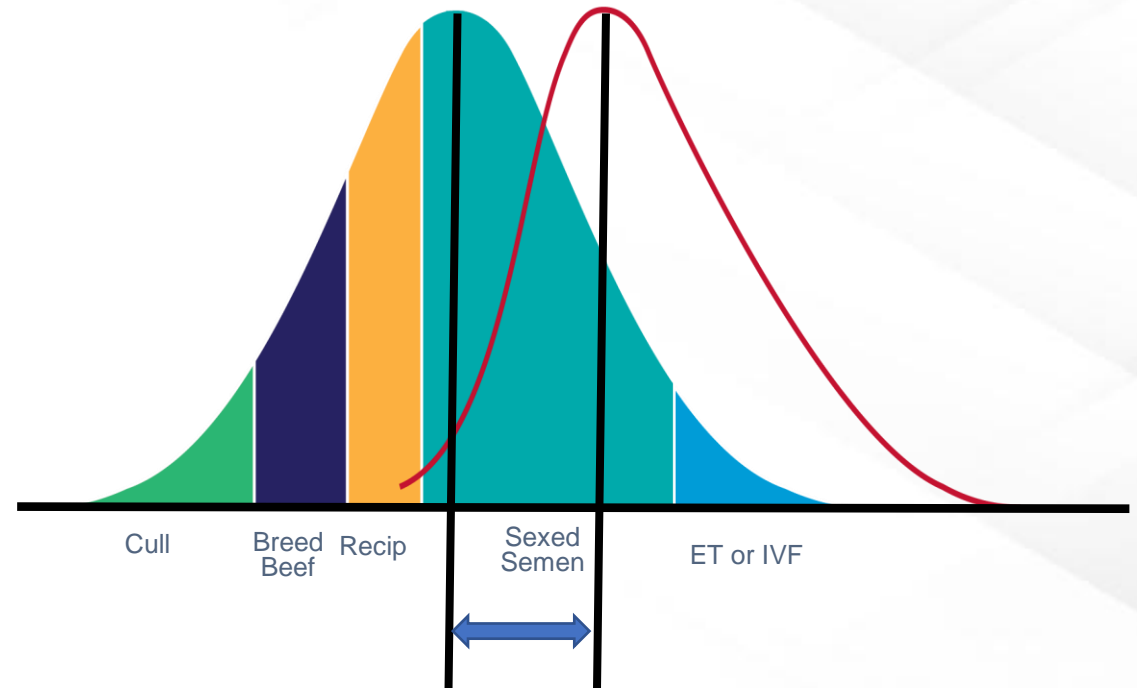


Beef timeline

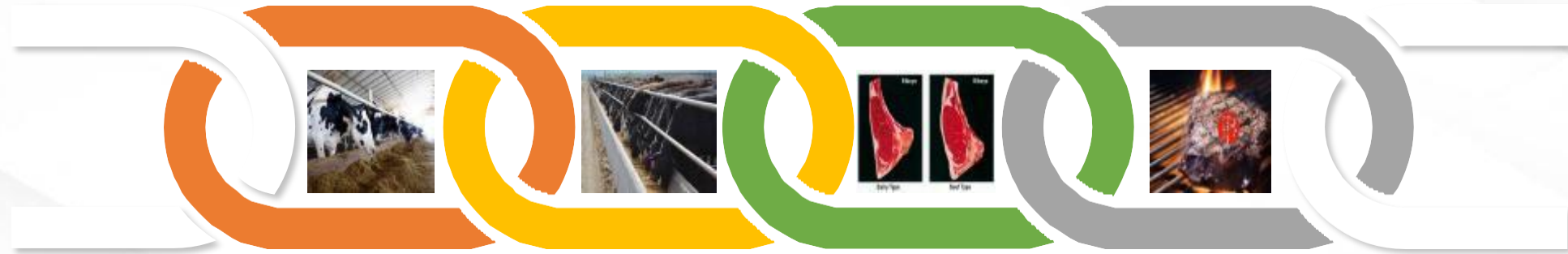


Changing times

- Conventional Semen across all cows
- Introduction of sorted semen
- Production of excess heifers
- Genomic testing to identify profitable females
- **Beef as a strategy for the bottom % of dairy herds**



Creating value for all links



Dairy

- Fertility
- Calving Ease
- Economics

Feedlot/Veal

- Feed efficiency
- Health
- Gain
- Grid value

Processor

- Carcass weight
- Ribeye size/shape
- Marbling

Consumer

- Cost
- Taste/Tenderness
- Sustainably produced
- Ethically produced

**Shifting a by-product of the dairy industry
into a core product for beef production**

How do we use beef sires?



What value does beef add to dairy?

Table 4. Feedlot closeout for Holsteins versus beef steers from Vetlife Benchmark Performance Program

Sex	In wt 100	Head	In wt, lb	Out wt, lb	DOF	DMI, lb/d	ADG, lb	F/G	Cost of gain, \$/lb	Vet, \$/hd	Death, %	HCW, lb	Dress, %	Prime, %	Choice, %
Holsteins	300	425,576	327	1,258	347	15.82	2.65	6	0.54	16.74	3.59	777	61.8	1.8	47.7
Holsteins	400	97,667	451	1,289	302	17.76	2.73	6.55	0.57	14.83	3.58	784	61.6	2.3	50.7
Holsteins	500	49,332	545	1,288	263	18.71	2.80	6.73	0.57	13.84	2.32	792	61.7	2.9	57.2
Holsteins	600	60,930	653	1,298	222	19.92	2.86	7.04	0.59	12.42	2.08	795	61.5	2.8	57.7
Holsteins	700	72,469	749	1,322	190	21.02	2.99	7.13	0.6	11.45	1.69	799	61.2	2.9	57.3
Holsteins	800	80,813	846	1,313	154	22.7	2.99	7.77	0.6	9.65	1.13	806	60.7	3.9	56.5
Holsteins	900	66,616	940	1,403	181	23.59	2.59	9.4	0.65	8.07	1.17	820	60.7	5.0	60.3
									Cost of gain, \$/lb						
Sex	In wt 100	Head	In wt, lb	Out wt, lb	DOF	DMI, lb/d	ADG, lb	F/G	Cost of gain, \$/lb	Vet, \$/hd	Death, %	HCW, lb	Dress, %	Prime, %	Choice, %
Steers	300	188,922	364	1,115	298	14.6	2.47	5.93	0.53	21.51	4.16	729.7	64.6	1.2	47.3
Steers	400	711,714	460	1,138	255	15.7	2.61	6.06	0.53	22.11	3.39	740.2	64.5	1.0	43.9
Steers	500	2,119,892	558	1,181	216	17.3	2.83	6.19	0.53	19.54	2.61	761.8	64.3	0.9	46.1
Steers	600	4,363,876	653	1,224	185	18.8	3.03	6.26	0.53	15.96	1.78	786.0	64.1	0.8	45.1
Steers	700	6,224,588	751	1,263	156	20.3	3.23	6.34	0.53	11.37	1.08	808.7	64.0	0.7	44.2
Steers	800	5,442,413	843	1,303	135	21.8	3.36	6.55	0.53	9.20	0.73	826.3	63.8	0.6	42.5
Steers	900	1,473,795	935	1,350	120	23.3	3.43	6.93	0.54	8.91	0.63	842.7	63.4	0.7	42.3

Rust, S. R., Abney, C. S., Tigner, R., & Lehmkuhler, J. (2005). Comparison of dairy versus beef steers. *Proc. Managing and Marketing Quality Holstein Steers*. R. Tigner and J. Lehmkuhler, ed. *Wis. Agric. Service Assoc., Madison, WI*, 161-174.





Diary vs beef genetics

DAYS ON FEED

Extended length of time to finish straight dairy calves

DRY MATTER INTAKE

Higher volume of feed required

AVERAGE DAILY GAIN

Lower average daily gain

DRESSING %

Low volume of product produced per head

MARBLING

Higher % of cattle grade in the top grading tier

Male calves vs females

BeefBuilder™ Carcass Performance

Performance

Sex of BeefBuilder™	Breed of Dam	Avg. Birthweight	Hot Carcass Weight	Carcass Adjusted Out-Weight	Ribeye Area
Steer	Holstein	96	917	1455	14.7
Steer	Jersey	80	847	1344	14.8
Heifer	Holstein	88	839	1331	14.7
Heifer	Jersey	74	756	1201	14.5

Quality Grading

Sex of BeefBuilder™	Breed of Dam	Prime	Choice	Select	CAB
Steer	Holstein	2.5%	71.2%	25.1%	10.3%
Steer	Jersey	2.7%	78.3%	18.0%	12.2%
Heifer	Holstein	3.0%	77.1%	18.7%	17.1%
Heifer	Jersey	3.3%	76.8%	18.2%	12.8%

Yield Grading

Sex of BeefBuilder™	Breed of Dam	Yield Grade 1 & 2	Yield Grade 3	Yield Grade 4 & 5	Dairy Confirmation Carcass
Steer	Holstein	56.9%	35.5%	7.7%	0.60%
Steer	Jersey	76.2%	21.6%	2.2%	0.25%
Heifer	Holstein	63.5%	30.3%	6.1%	0.57%
Heifer	Jersey	81.8%	16.6%	1.7%	0.69%



Turning a by product into a core product

Change the mindset of dairy producers

Produce beef calves with the same selection pressure as what is placed on replacement dairy females

How

- Understanding feeder needs
- Understanding the consumer and processor needs
- Connect dairies with buyers

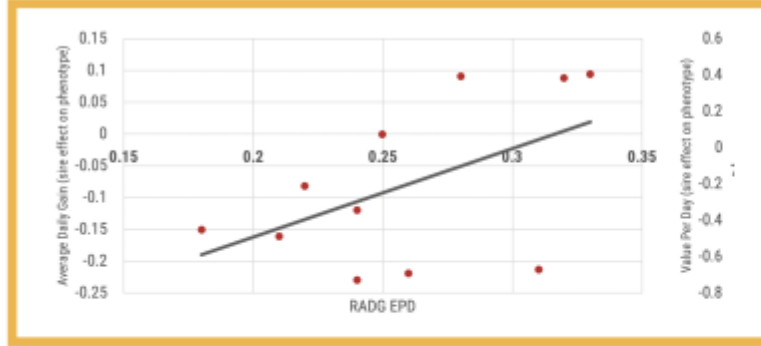


Preliminary field study results

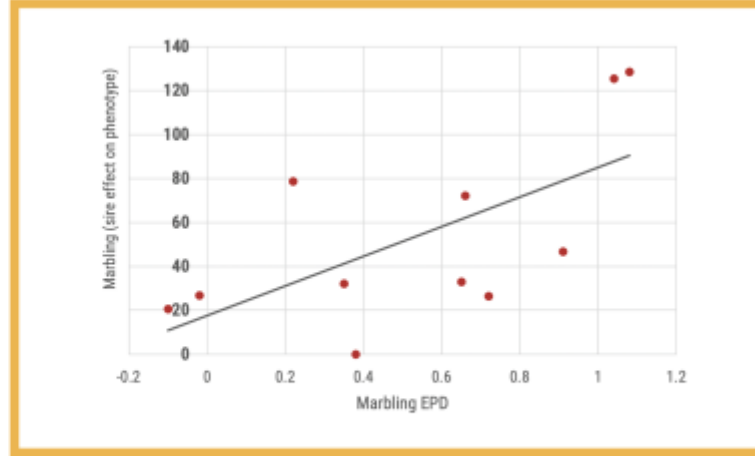
Bull	Age in days	Sex	Hot Carcass weight	Value @\$3.25
Better Genetics Bull A	531	F	834 lbs	\$2710.50
Average Genetics Bull B	543	F	790 lbs	- \$143 & 12 extra days
Barn yard Billy group of bulls	562	F	847 lbs	\$42.25 & 31 extra days



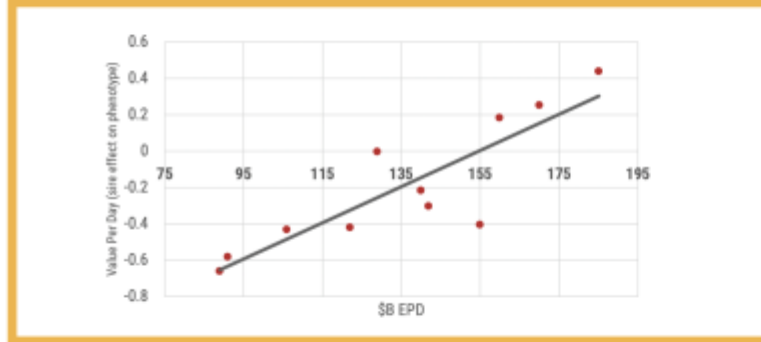
RESIDUAL AVERAGE DAILY GAIN (RADG) EPD



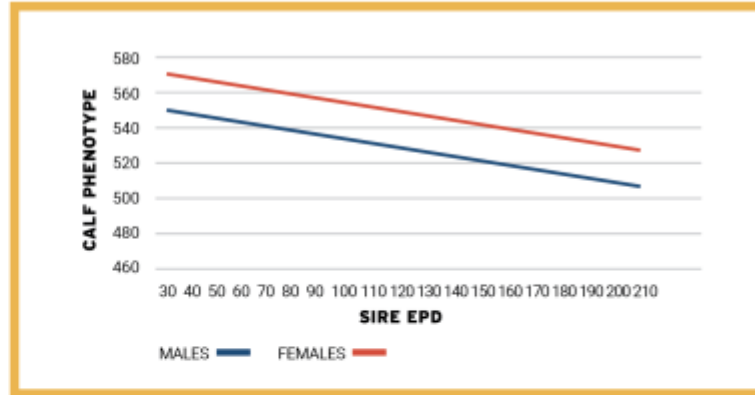
MARBLING BY MARBLING EPD



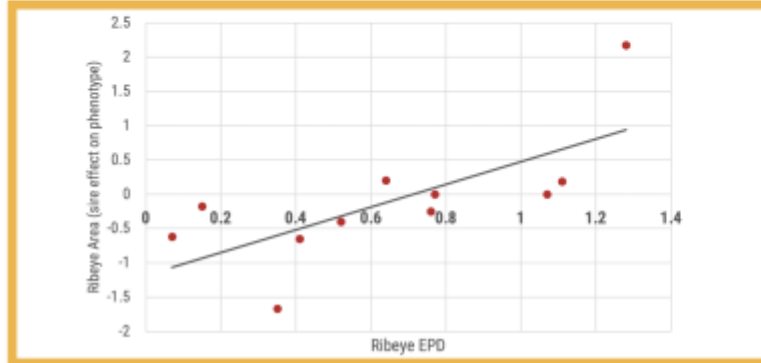
VALUE PER DAY BY \$B EPD



DAYS TO SLAUGHTER



RIBEYE AREA BY RIBEYE EPD



Beef breeds

Good



Bad

Birth Weights	Muscle	Feeding Ability	Marbling	Rib eye
Wagyu	Belgium Blue	Lim-Flex / SimAngus	Wagyu	Charolais
Angus	Charolais	Charolais	Angus	Limousin
Lim- Flex / SimAngus	Limousin	Belgium Blue	Lim – Flex / SimAngus	Lim-Flex / SimAngus
Limousin	Lim-Flex / SimAngus	Limousin	Charolais	Belgium Blue
Charolais	Angus	Angus	Limousin	Angus
Belgium Blue	Wagyu	Wagyu	Belgium Blue	Wagyu



Angus



Lim-Flex /SimAngus



Wagyu



Limousin



Charolais



Belgium Blue



Where is beef on dairy going?

Data, data and more data

- Cuttability, feed efficiency and health

Beef Products

- Conventional semen
- Sorted male semen
- Male beef embryos



Internal Semex genetics program

- #1 feed efficiency female in the breed
- #1 AxHol bull in the breed
- #5 \$B sire who is the only one in the top 10 with a 10% CED, next closest is top 45%
- All sires born are in the top 1% for AxHol
- Boviteq Research and Development



Review

- **Beef cattle numbers are decreasing**
 - Pressure on supply
- **Feed and input costs are increasing**
 - Pressure on the quality of cattle fed
- **Growing demand globally for beef protein**
 - Population growth and need for nutrition
- **Public perception of the industry**
- **Environmental impact and carbon credits**
- **Volume of meat produced**
- **Quality of meat produced**



Selecting the right sire is critical

- Our sires have been pre selected to meet the needs of the entire supply chain
- All Black calves are not created equal
- The right beef x dairy calves are more sustainable, more environmentally friendly and create more volume of high quality high value product for the enjoyment of consumers



BEEFUP™





Thank You

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