

icbf

Health is the New Fertility

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AgTech - it's in our DNA

Motivation

'A vet won't sign off a prescription for 100 tubes for 100 cows anymore'



Contributor
October 3, 2019 9:35 am

IRISH FARMERS JOURNAL
BEEF DAIRY SHEEP AGRIBUSINESS MACHINERY TILLAGE PEDIGREE BUILDINGS PROPER

TB at highest level since testing began

Analysis of data going back over 60 years indicates disease rates are the highest they have ever been



IRISH FARMERS JOURNAL
BEEF DAIRY SHEEP AGRIBUSINESS MACHINERY TILLAGE PEDIGREE BUILDINGS PROPER

Animals on 16 farms 100% resistant to Ivermectin - study

Anthelmintic resistance is where worms in an animal survive a dose of wormer which would normally kill them.

'Antimicrobial resistance is putting human and animal health in danger'

Conor Finnerty
February 27, 2017 3:45 pm

Resistance to levamisole and m...

Hungry and confused: The winding road to conscious eating

October 6, 2022 | Article

The Ideal Dairy Cow

- Produces large quantity of quality product
- Good reproductive efficiency
- Good Longevity
- Consumes a small quantity of food
- Easy to manage
- Good conformation
- Low environmental footprint
- Resilient to external perturbations
- Healthy

Berry, 2014

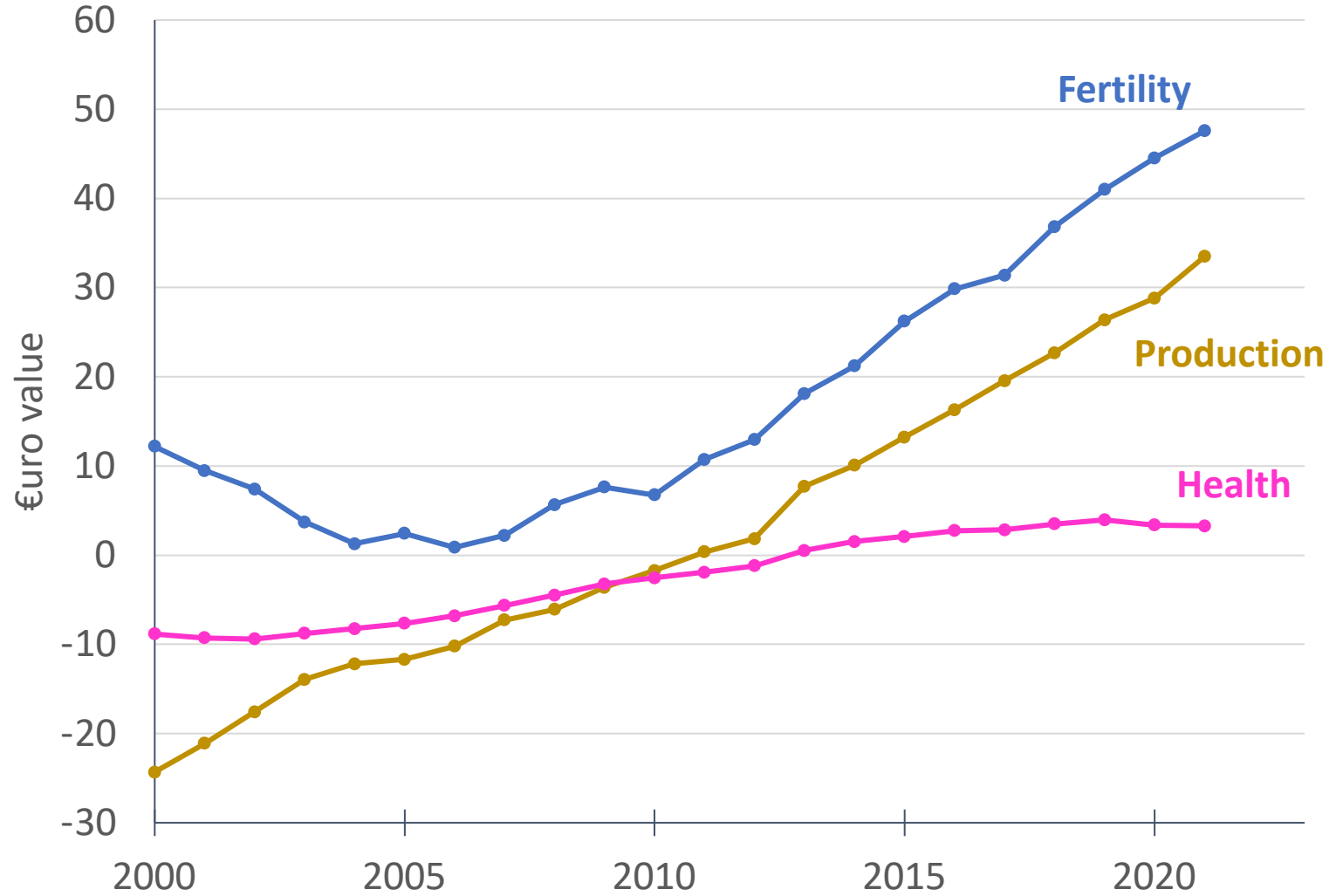
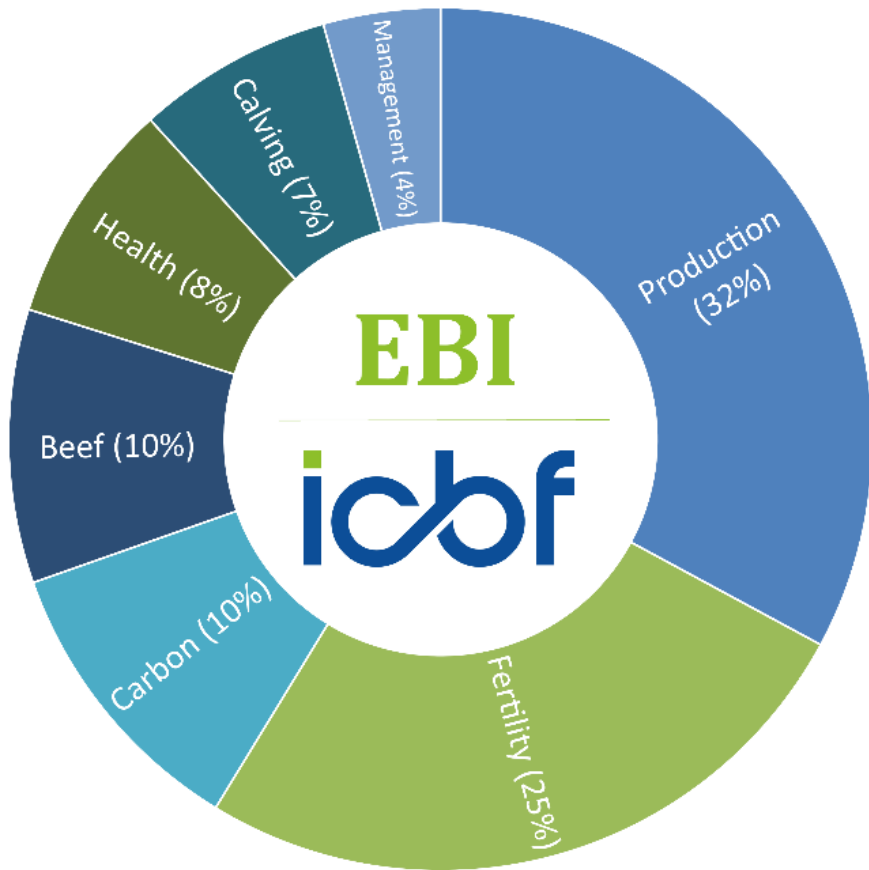


Health limiting

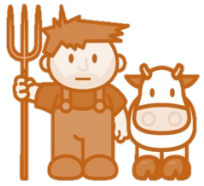
..potential wasted

Is it me?

The Irish Breeding Goal



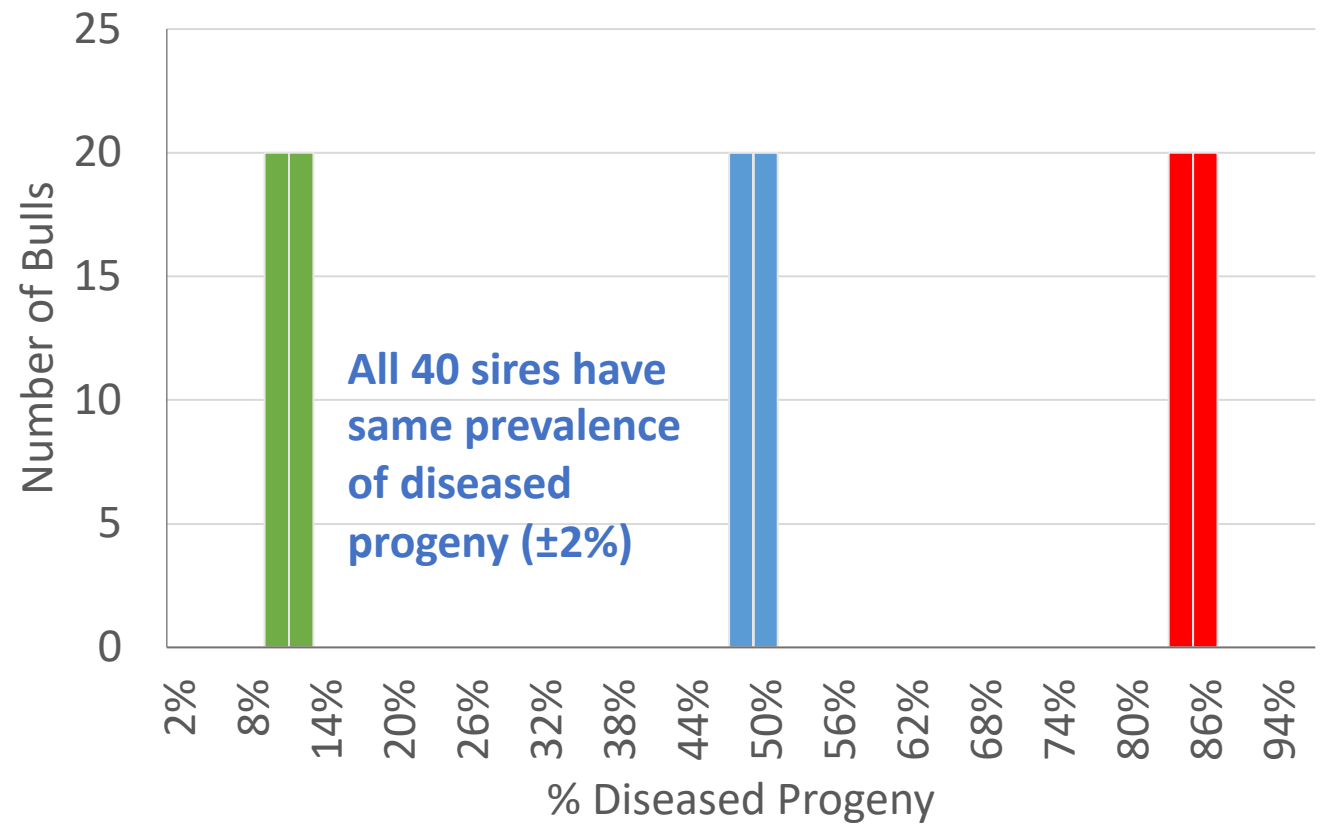
Disease Due to Chance?



Environment

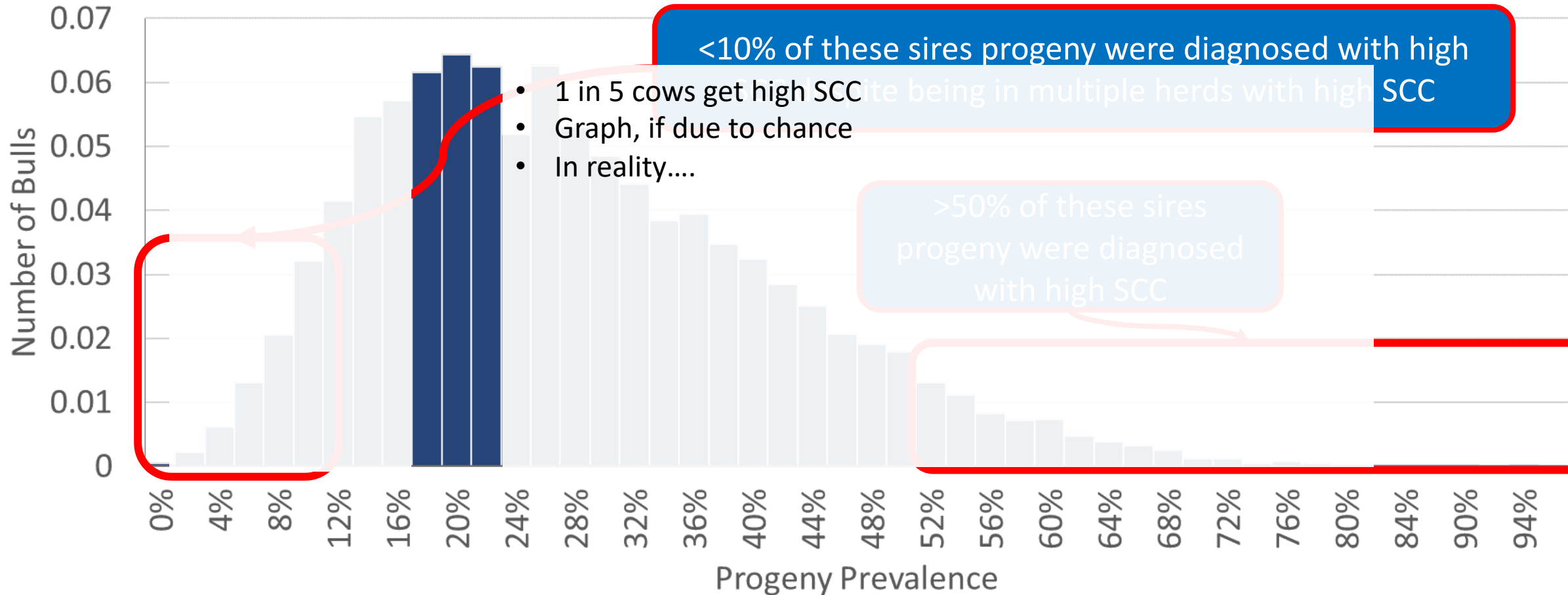


If Disease Due to Chance



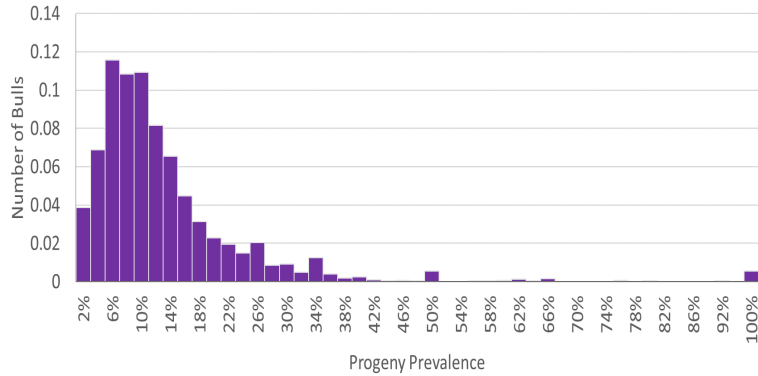
Health Is Under Genetic Control

SCC

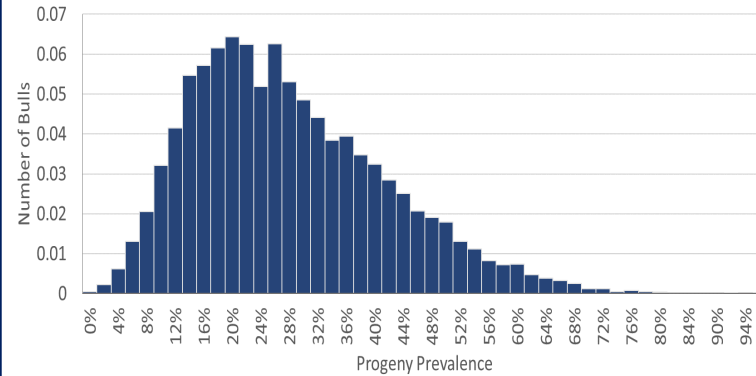


Health Is Under Genetic Control

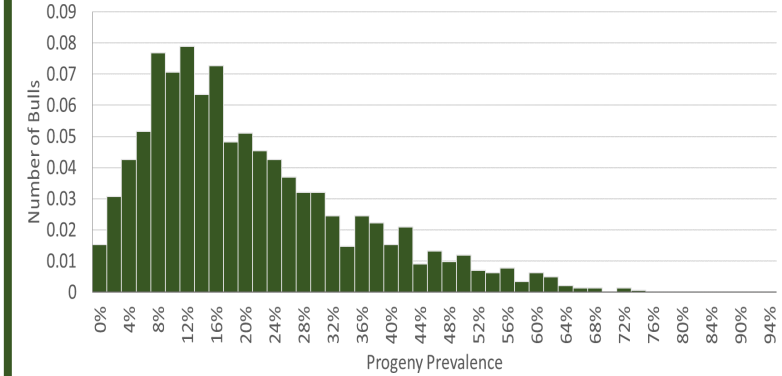
Lameness



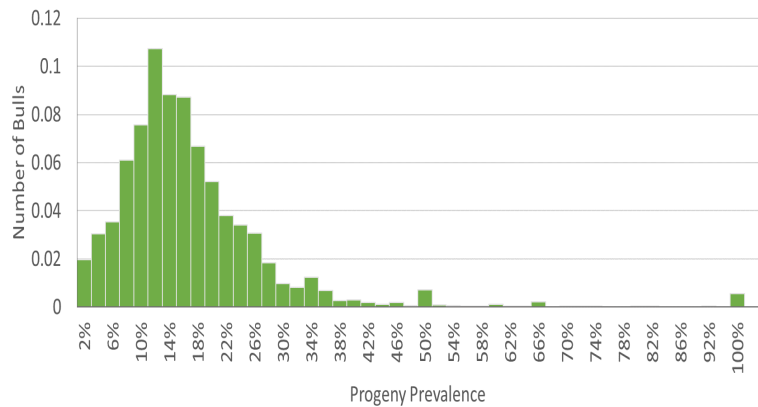
SCC



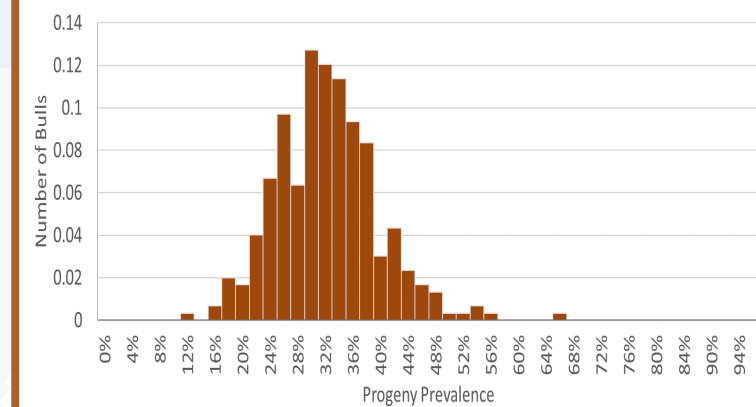
Liver Fluke



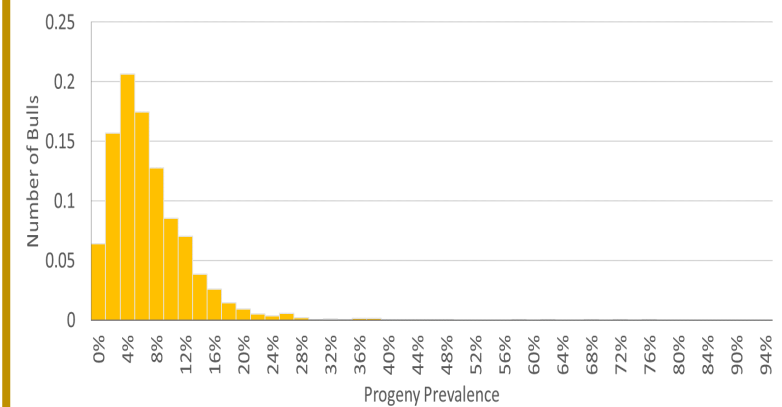
Mastitis



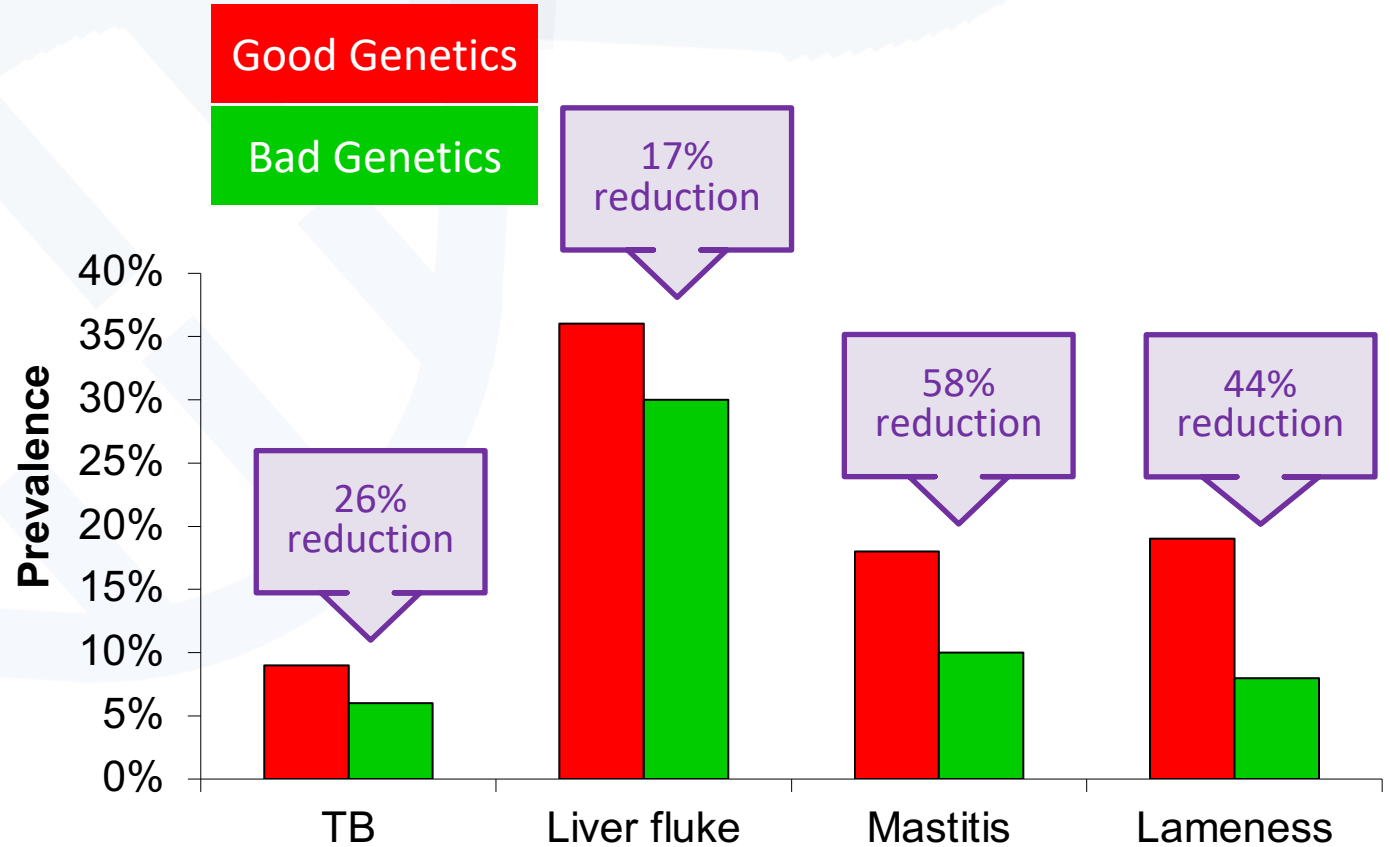
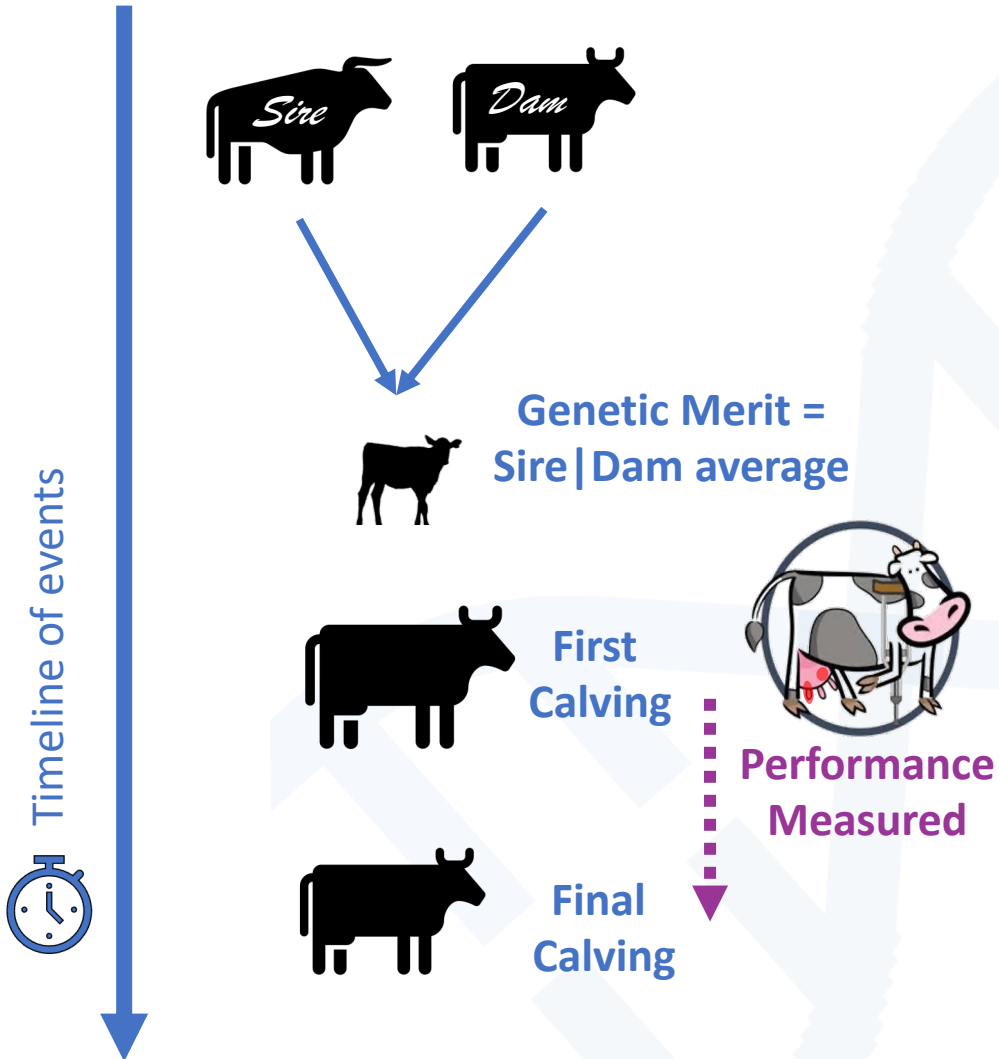
Culled due to Health



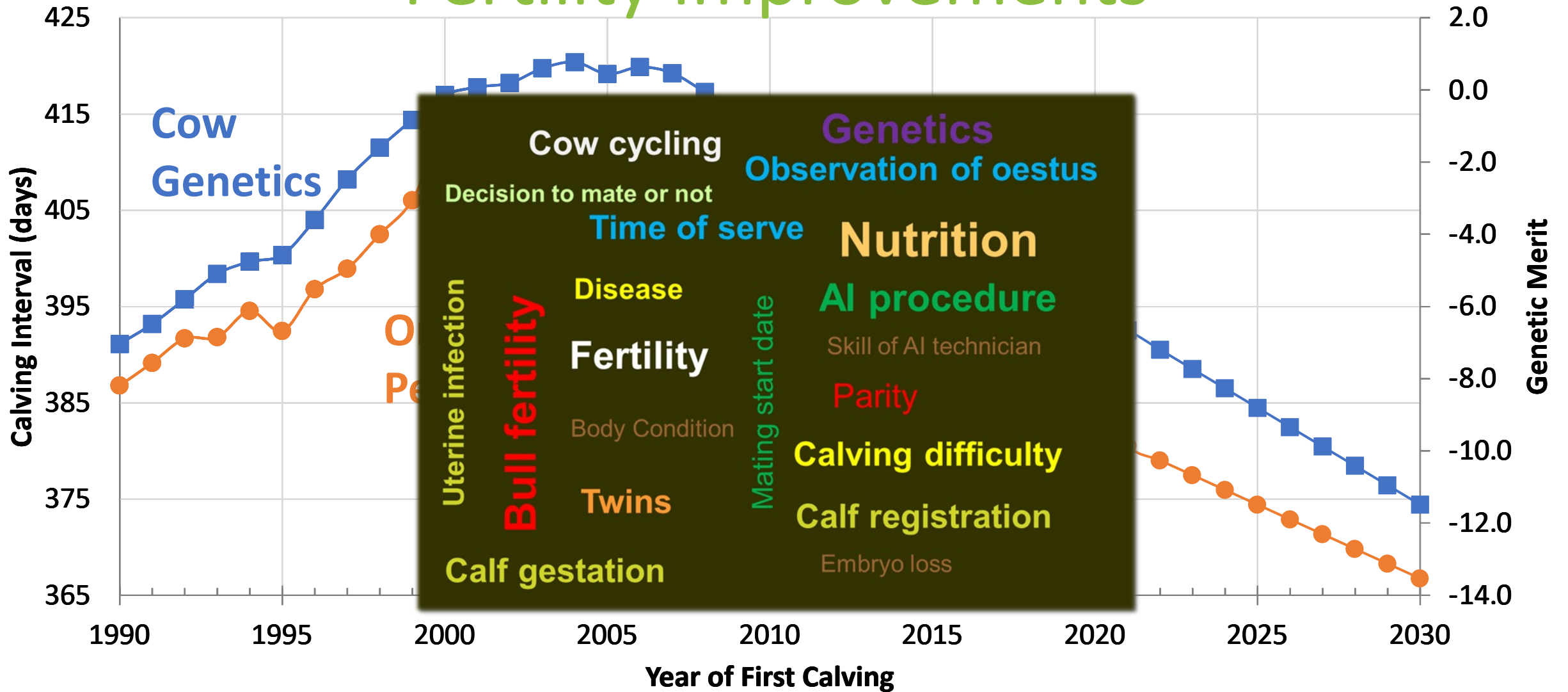
Bovine Tuberculosis (TB)



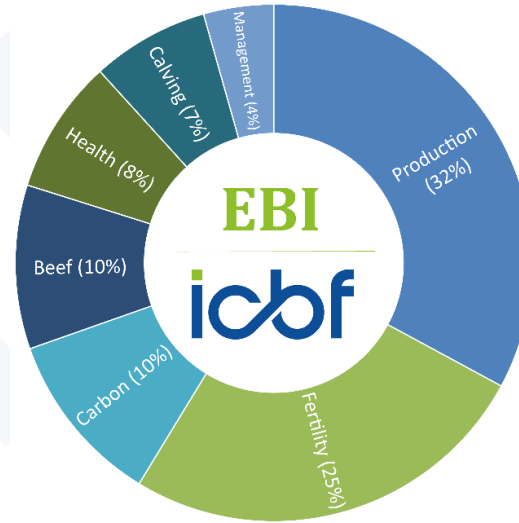
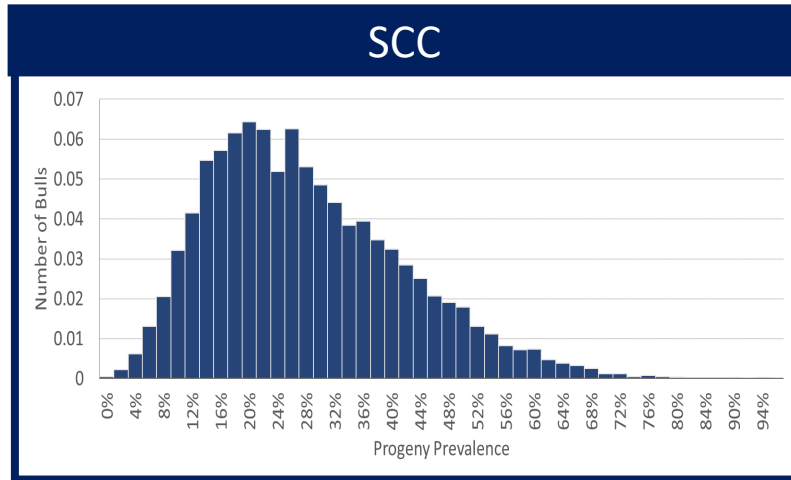
Genetics Can Differentiate Good from Bad



Fertility Improvements

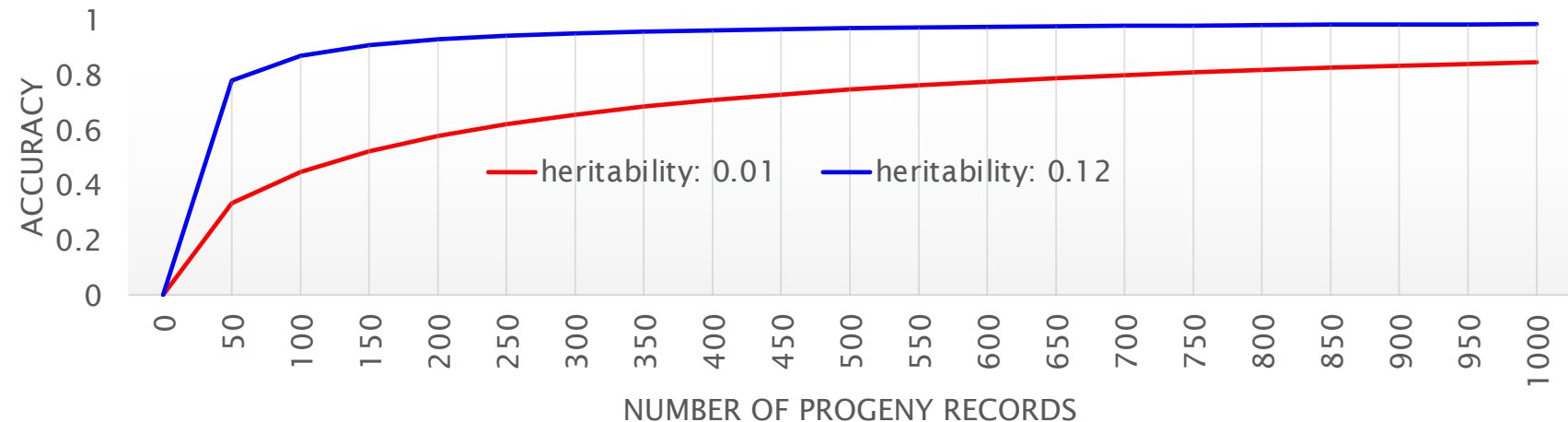


Why Smaller Gains in Health

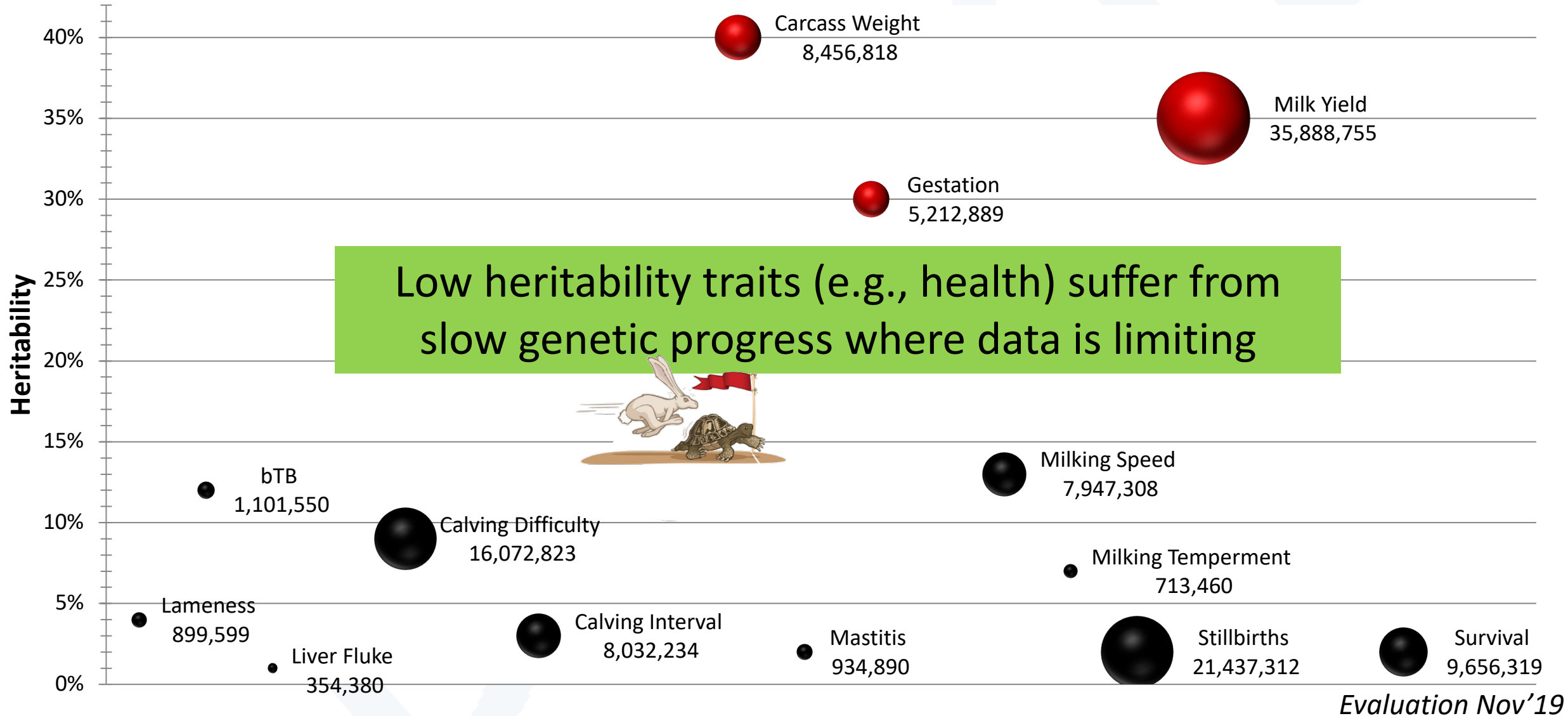


Rate of gain determine

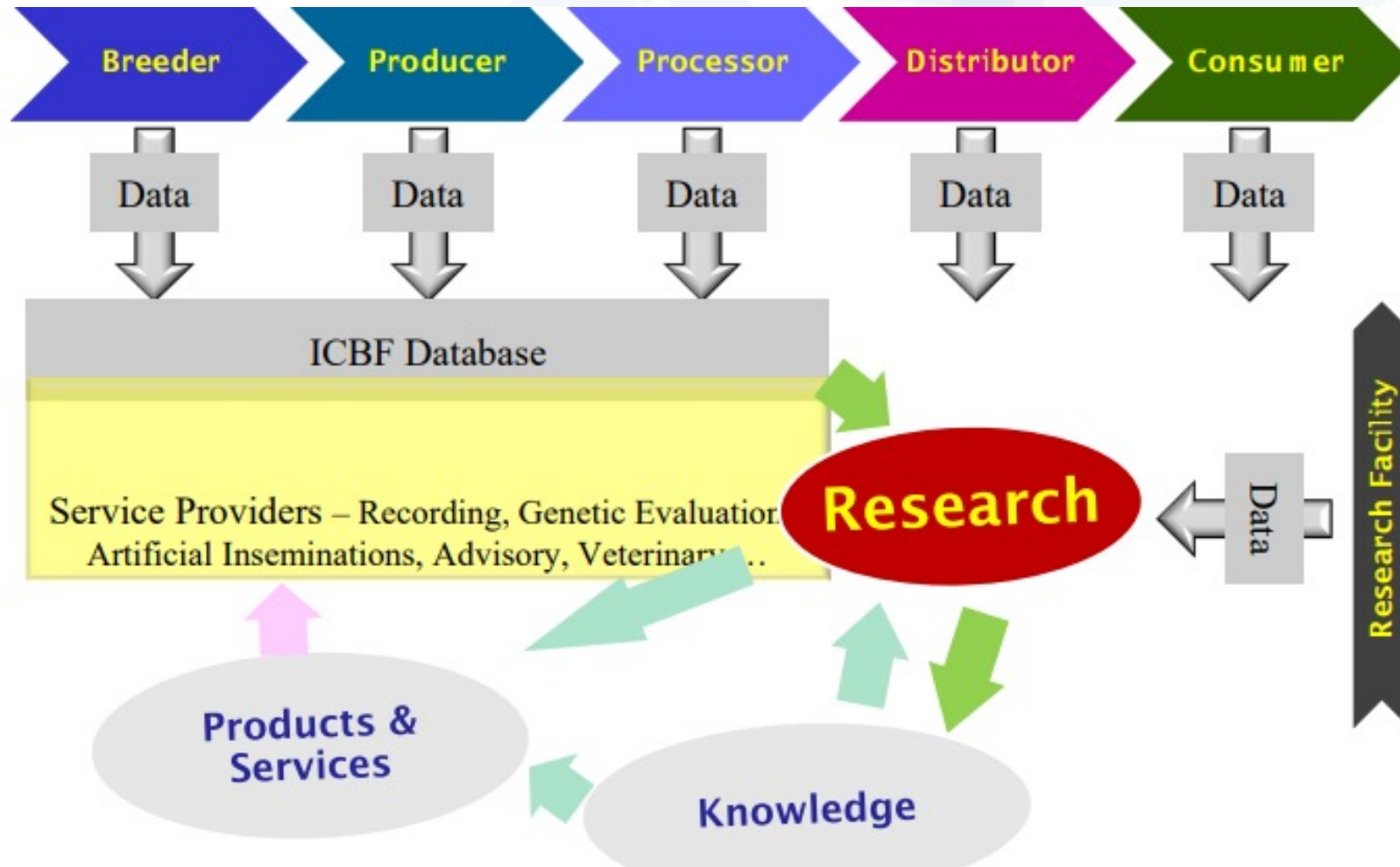
1. Variance
2. Selection intensity
3. Accuracy: data



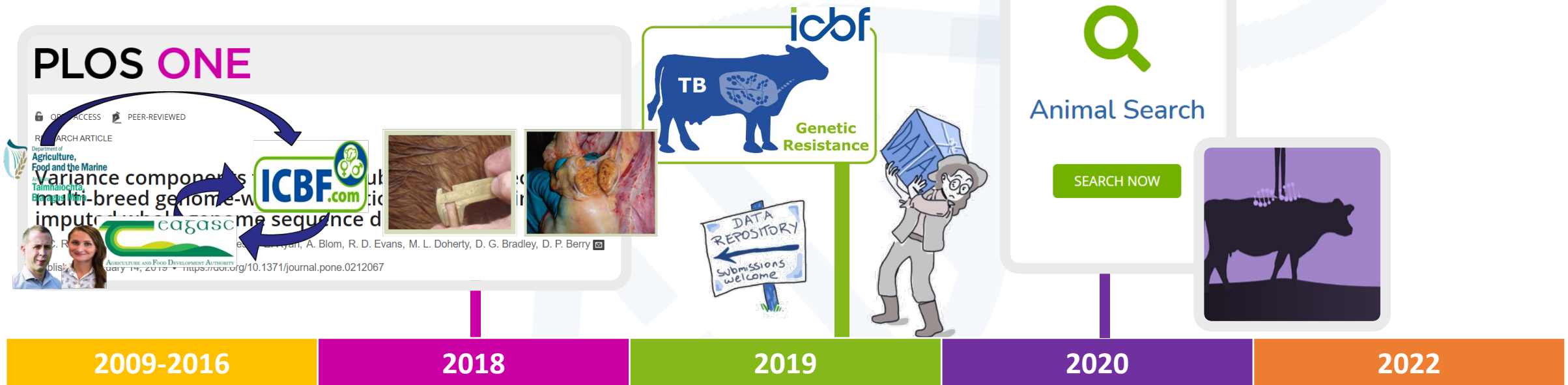
Data Limiting Genetic Progress in Health



Research, Innovation & Service Development

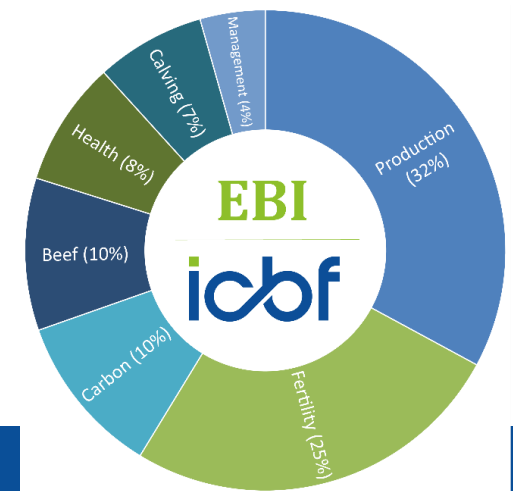
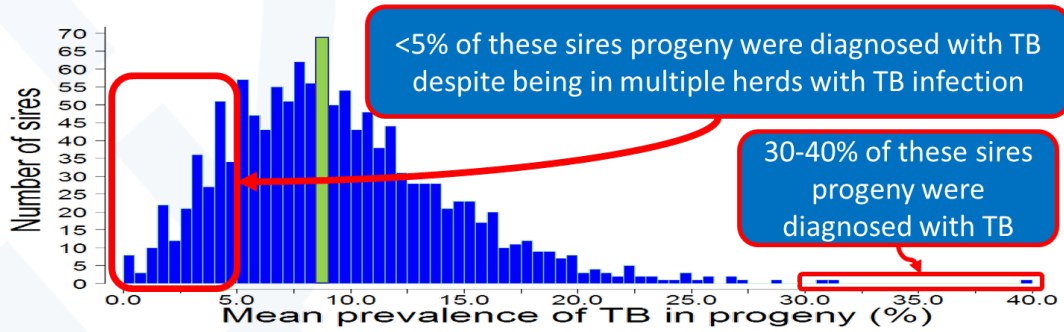


Timeline of Events



- Ample genetic variation in Irish cattle for susceptibility to bTB infection

Prevalence of TB among progeny of sires with ≥ 50 progeny in ≥ 10 herd-breakdowns



Health Data Available

- Ketosis
- Milk Fever
- Johnes
- IBR
- BVD
- Nesopora
- Detailed hoof health measurements
- Bloat
- LDA
- Retained Placenta
- Pneumonia
- Calf vigor



What You Can Do

- Use Best Genetics for Health
- Record Data
- Tell us how we can help you record the data
- What should we be recording

Scorecard (Mar 2023)	My Herd	National Average	Top 10%	Herd % Rank	Star Rating
Herd EBI	€211	€164	€200	96%	★★★★★
Milk	€67	€46	€63	95%	★★★★★
Fertility	€99	€68	€85	97%	★★★★★
Carbon	€2	€7	€14	18%	★☆☆☆☆
Calving	€35	€29	€37	81%	★★★★★
Beef	€-5	€-3	€4	32%	★★☆☆☆
Maintenance	€7	€13	€20	7%	★☆☆☆☆
Management	€2	€1	€3	82%	★★★★★
Health	€4	€6	€9	20%	★☆☆☆☆



Economic Breeding Index (EBI) Herd Summary - Nov 2019



1. EBI Herd Summary

Average EBI for all dairy cows with; (i) a known sire (or milk recorded progeny with a known sire) and (ii) are currently on your farm.

* Number of animals that are missing an EBI result

Animal Group	Num of Cows	Milk Fat %	Milk Prot %	Surv% CI Days	Milk % Cont	Fertility % Cont	Calv % Cont	Beef % Cont	Maint % Cont	Mgmt % Cont	Health % Cont	EBI €
Cows with EBI	97	94			€ 43	€ 52	€ 36	€ -7	€ 4	€ 2	€ 2	€ 133
Missing EBI*	0	7.2	0.06	1.5	29.5%	35.8%	24.6%	-4.5%	2.4%	1.5%	1.7%	
Total Cows	97	6.2	0.05	-2.7								
1st Lactation	23	132			€ 54	€ 54	€ 42	€ -8	€ 3	€ 2	€ 2	€ 148
		8.4	0.06	1.5	32.7%	33%	25.2%	-4.9%	1.6%	1.3%	1.2%	
		8.2	0.06	-2.8								
2nd Lactation	24	103			€ 48	€ 51	€ 38	€ -8	€ 4	€ 3	€ 2	€ 137
		8.1	0.07	1.5	31.6%	33.1%	24.5%	-5.2%	2.5%	1.8%	1.3%	
		7.0	0.06	-2.6								
3rd Lactation	12	119			€ 56	€ 42	€ 41	€ -6	€ 3	€ 3	€ 3	€ 140
		11.3	0.11	1.6	36.7%	27.3%	26.8%	-3.9%	1.8%	1.7%	1.8%	
		7.3	0.06	-1.7								
4th Lactation	12	73			€ 38	€ 35	€ 28	€ -6	€ 6	€ 1	€ 4	€ 107
		6.9	0.07	1.3	32%	29.8%	23.9%	-4.9%	4.9%	1%	3.4%	
		5.1	0.04	-1.5								
5th Lactation (+)	26	49			€ 25	€ 64	€ 31	€ -5	€ 3	€ 2	€ 3	€ 123
		3.7	0.03	1.5	18.9%	48.6%	23.2%	-3.4%	2.4%	1.5%	2%	
		3.7	0.03	-3.6								

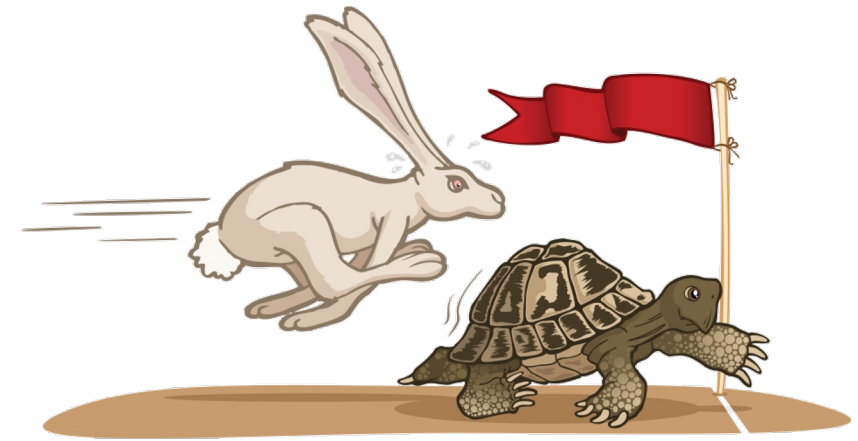
2. Dairy Youngstock

2019 Calves	30	75			€ 68	€ 87	€ 44	€ -10	€ 2	€ 4	€ 1	€ 196
Missing EBI*	0	10.0	0.12	2.4	31.4%	40.4%	20.3%	-4.7%	0.9%	1.9%	0.4%	
Total Calves	30	9.1	0.12	-4.6								
2018 Calves	28	122			€ 63	€ 64	€ 42	€ -8	€ 6	€ 3	€ 4	€ 173
Missing EBI*	0	9.8	0.08	2.0	33.2%	33.6%	22.2%	-4.2%	2.9%	1.6%	2.2%	
Total Calves	28	9.1	0.08	-3.1								

Summary

- Fertility solved!
- Healthy animal – necessity
- Health is under genetic control
- Gains will be limited without adequate data

**Genetics is cumulative
and permanent**



Our Farmer & Government Representation



An Roinn Talmhaíochta,
Bia agus Mara
Department of Agriculture,
Food and the Marine



Our AI & Milk Recording Organisations



Our Herdbooks



Acknowledging Our Members