

Setting the Sheep Sector up for the future

What has been done to date and a look towards the future

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#ISGC20

Our Why & How



*We exist to benefit
our farmers, our agri-food industry
and our wider communities*

We do this by

Developing
and applying

science and
technology



to ensure our
farmers and
our industry



make the most
profitable and



sustainable
decisions



2009



*Galway Sheep
Breeders Association*



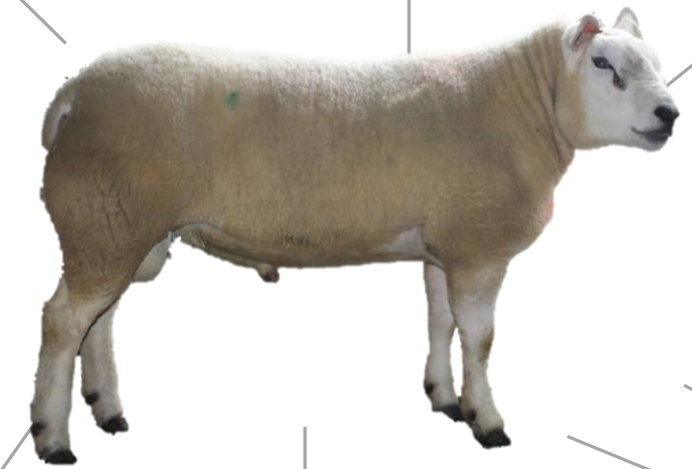
2020



Galway Sheep
Breeder's Association



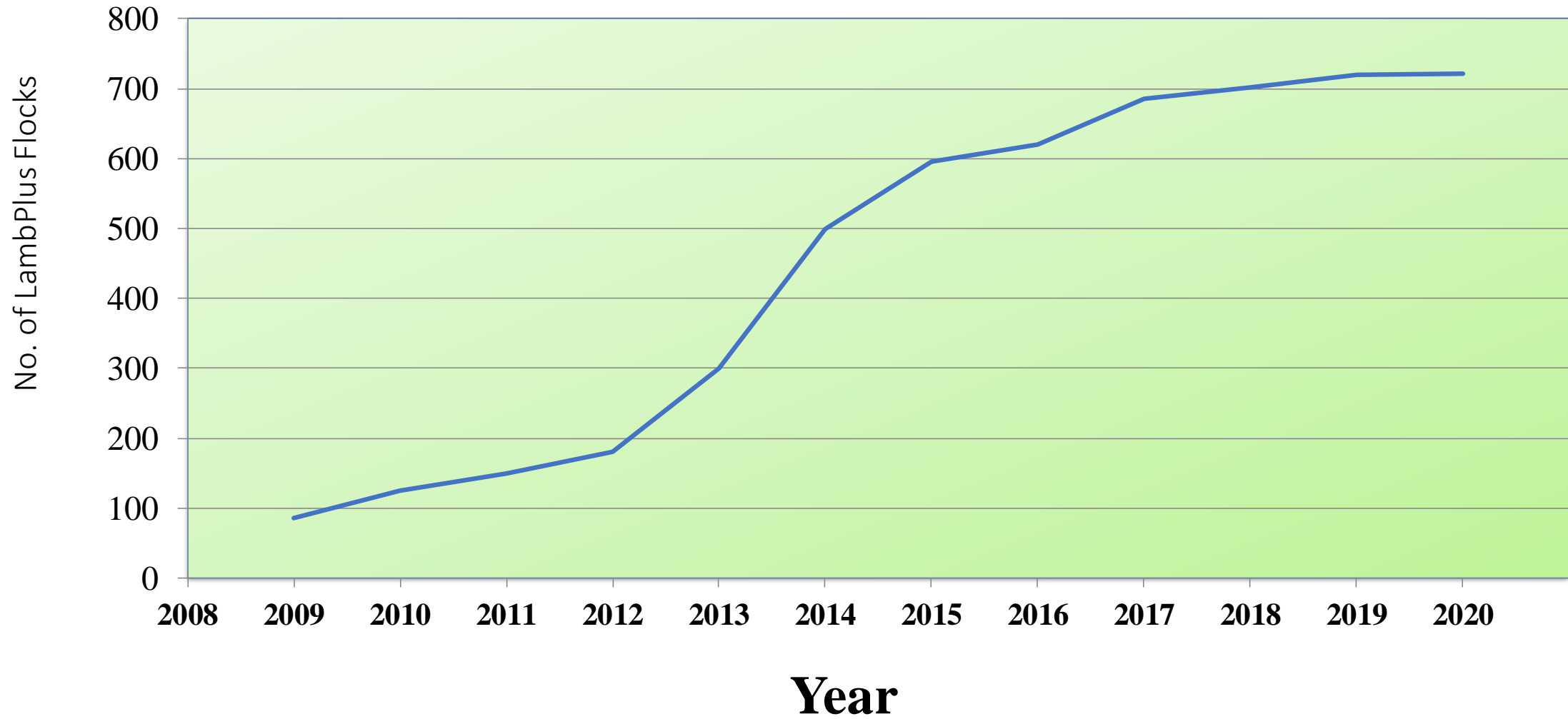
The database in Action – For the industry



*Galway Sheep
Breeders Association*



No. of LambPlus flocks by year

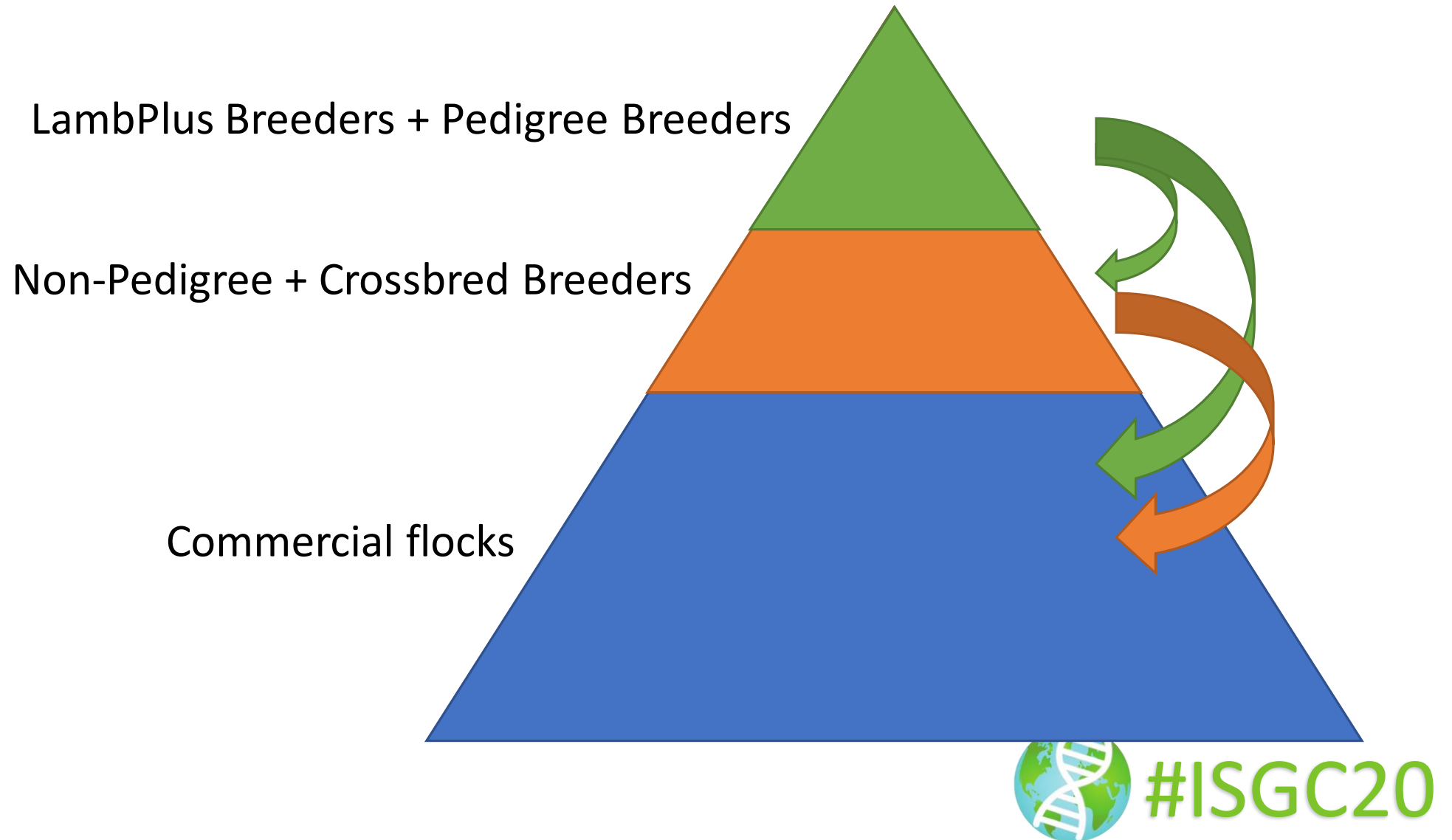


Proportion of Rams used Annually

-  • LP Lowland Sire
-  • Non-LP Lowland Ped Sire
-  • Cross-bred/Non Pedigree Sire
-  • Hill Sire



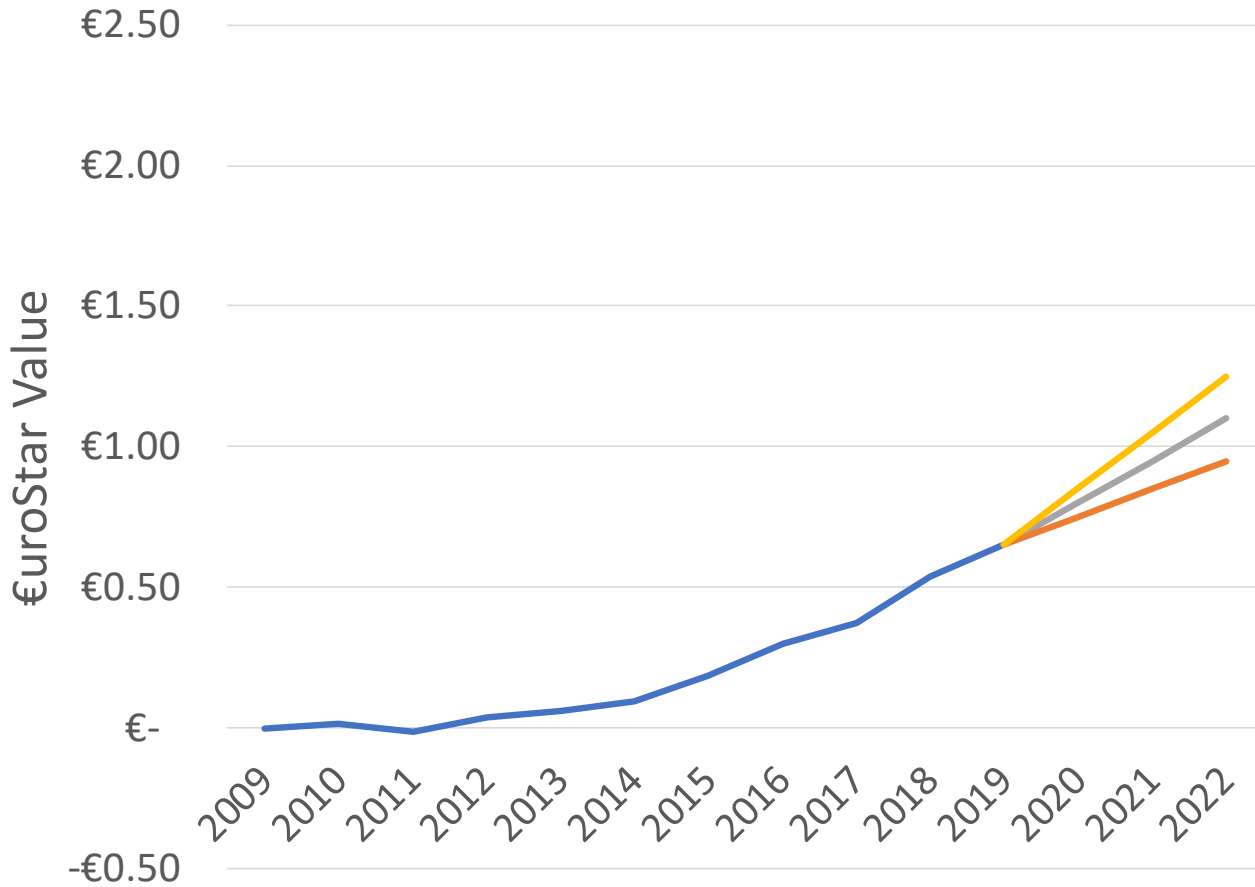
The Trickle down effect!!



Genetic Gain in Ireland since 2009

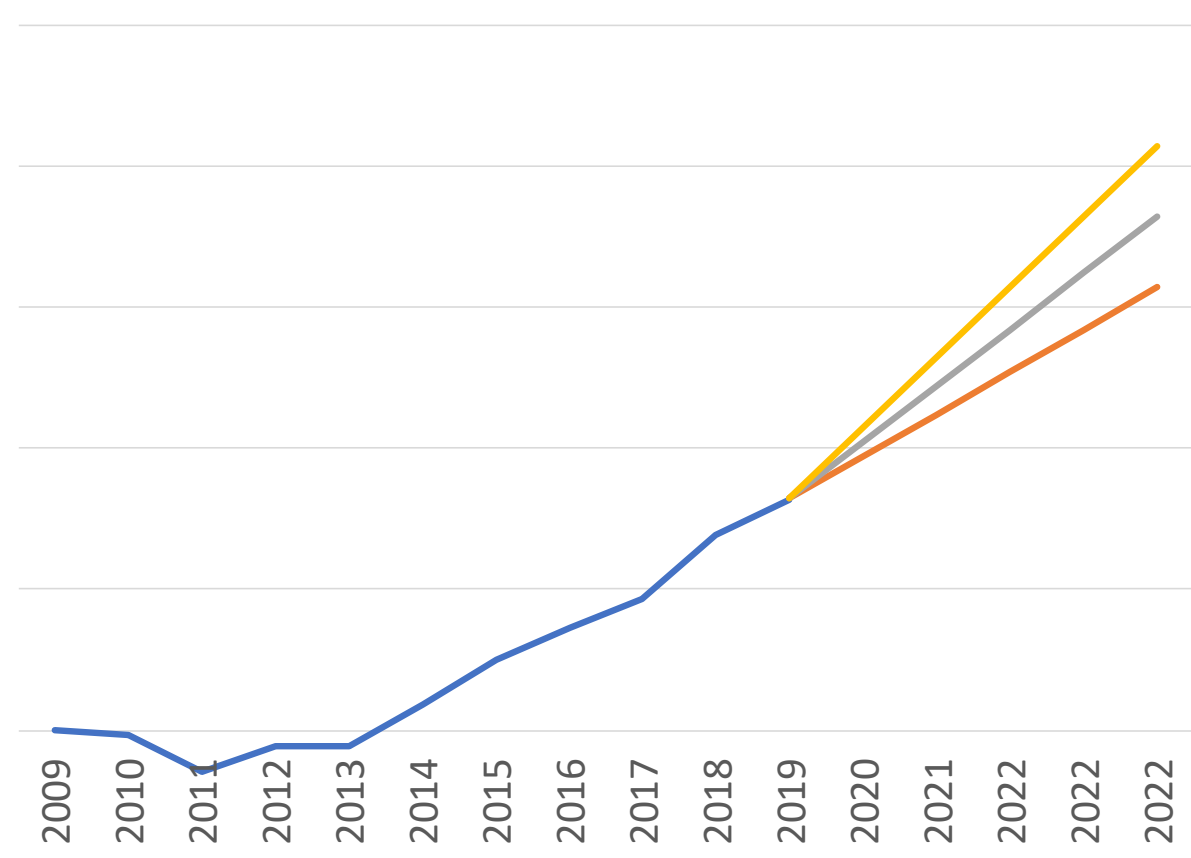
Terminal Index Genetic Gain

— Current Genetic Gain
— Potential (+.10c)
— Potential (+.15c)
— Potential (+.20c)



Replacement Index genetic gain

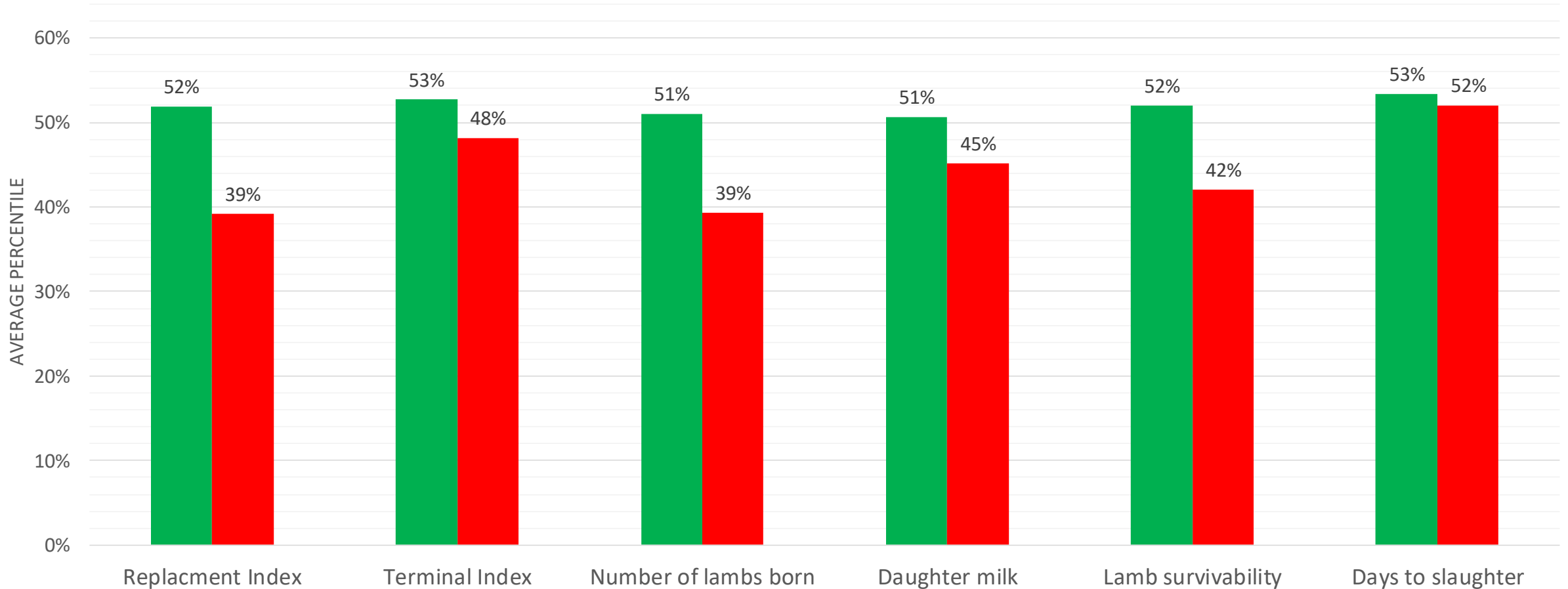
— Current Genetic Gain
— Potential (+.15c)
— Potential (+.20c)
— Potential (+.25c)



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Irish v UK Texel sires

■ Irish Sire ■ UK Sire

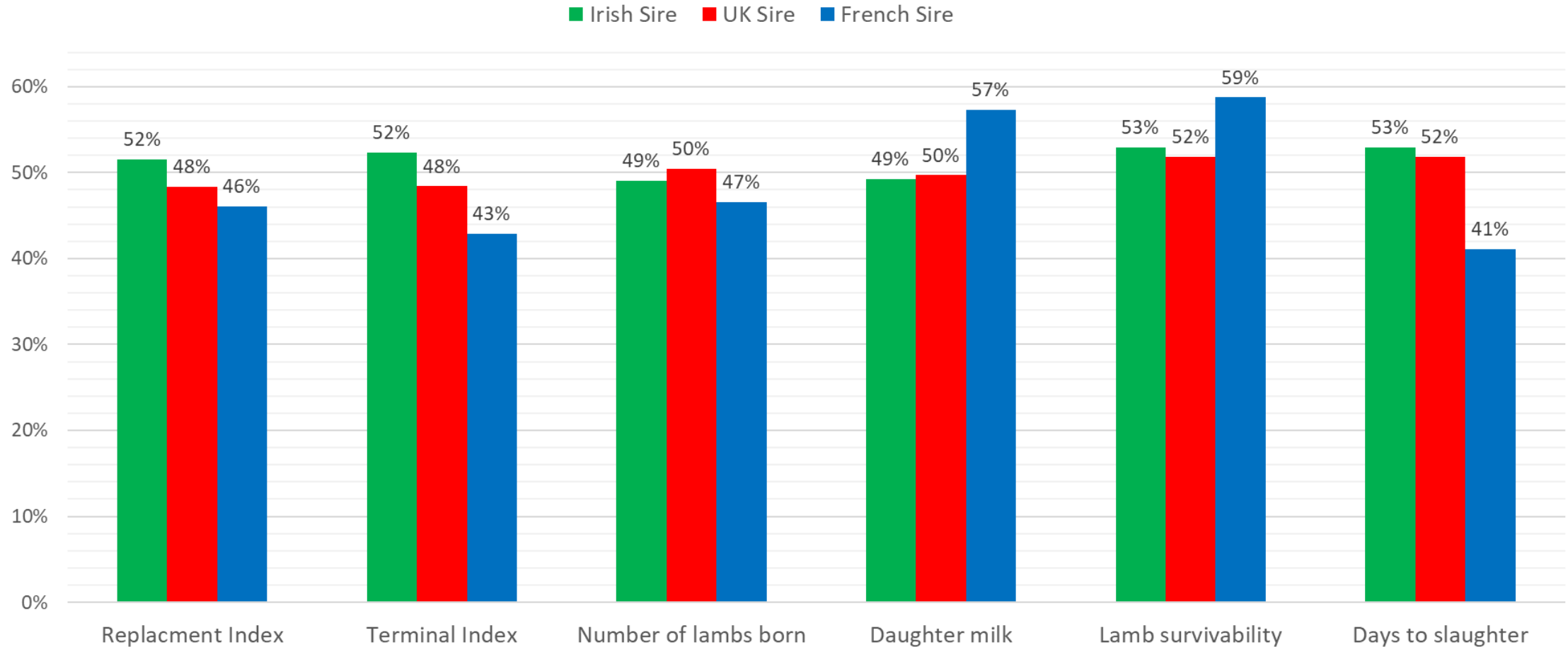


- Graph based on five years of Texel lamb data (2015 – 2019)



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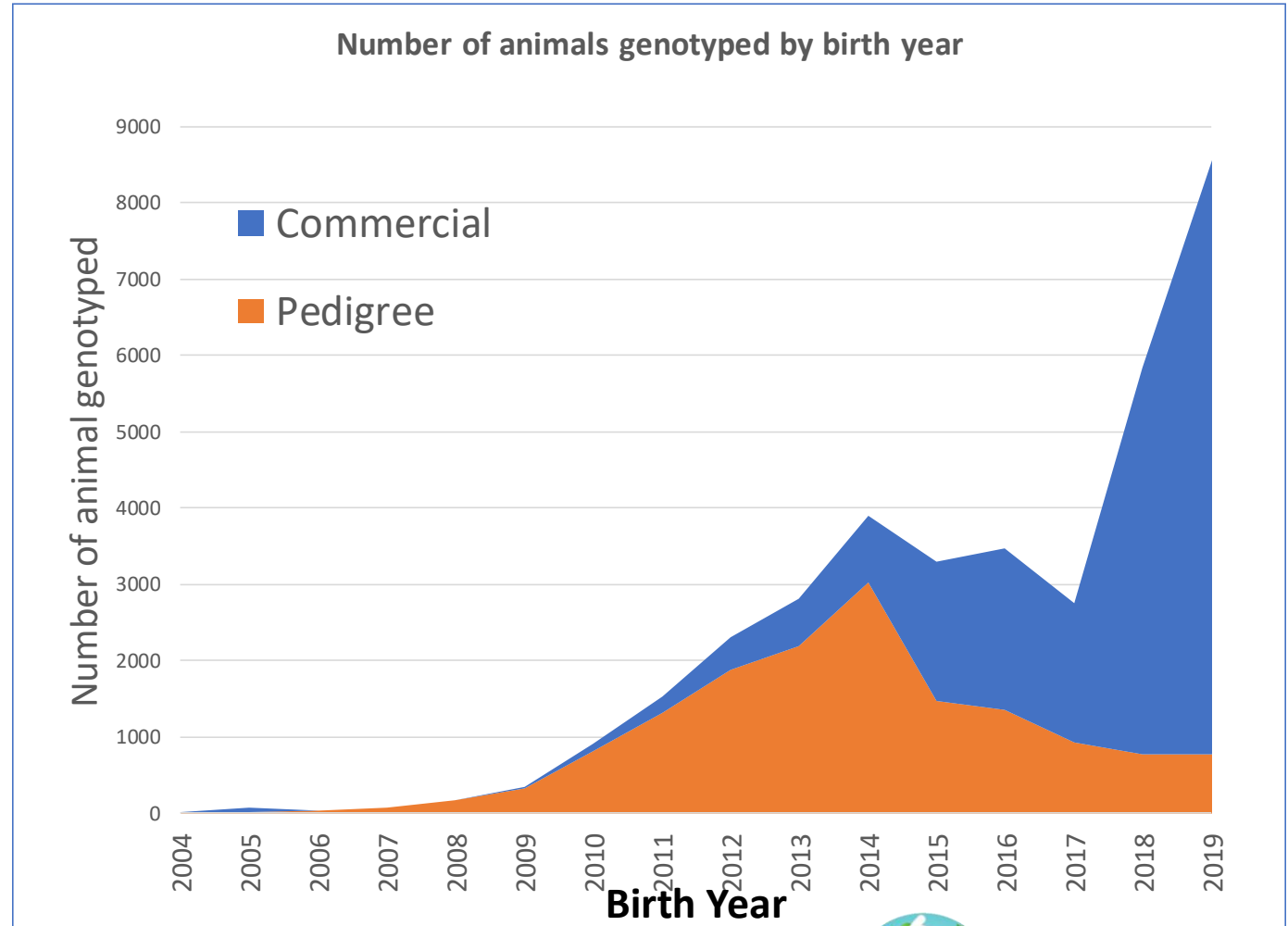
Sire Origin Effect - Charollais



- Graph based on five years of Charollais lamb data (2015 – 2019, Based on **29,198** records)

Genotyping

- We have positioned ourselves in a great place
- Central database is the key to harness the full benefits of genomics
- Ownness on
 - Sheep Ireland
 - Breed Societies
 - Breeders



Scrapie: Validation and Results



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



	Type 1	Type 2	Type 3	Type 4	Type 5
Belclare	70%	25%	4%	1%	0%
Charollais	81%	18%	1%	1%	0%
Suffolk	86%	14%	0%	0%	0%
Texel	45%	43%	11%	1%	0%
Vendeen	80%	19%	1%	0%	0%
Crossbred	63%	31%	4%	2%	0%
Average	71%	25%	4%	1%	0%

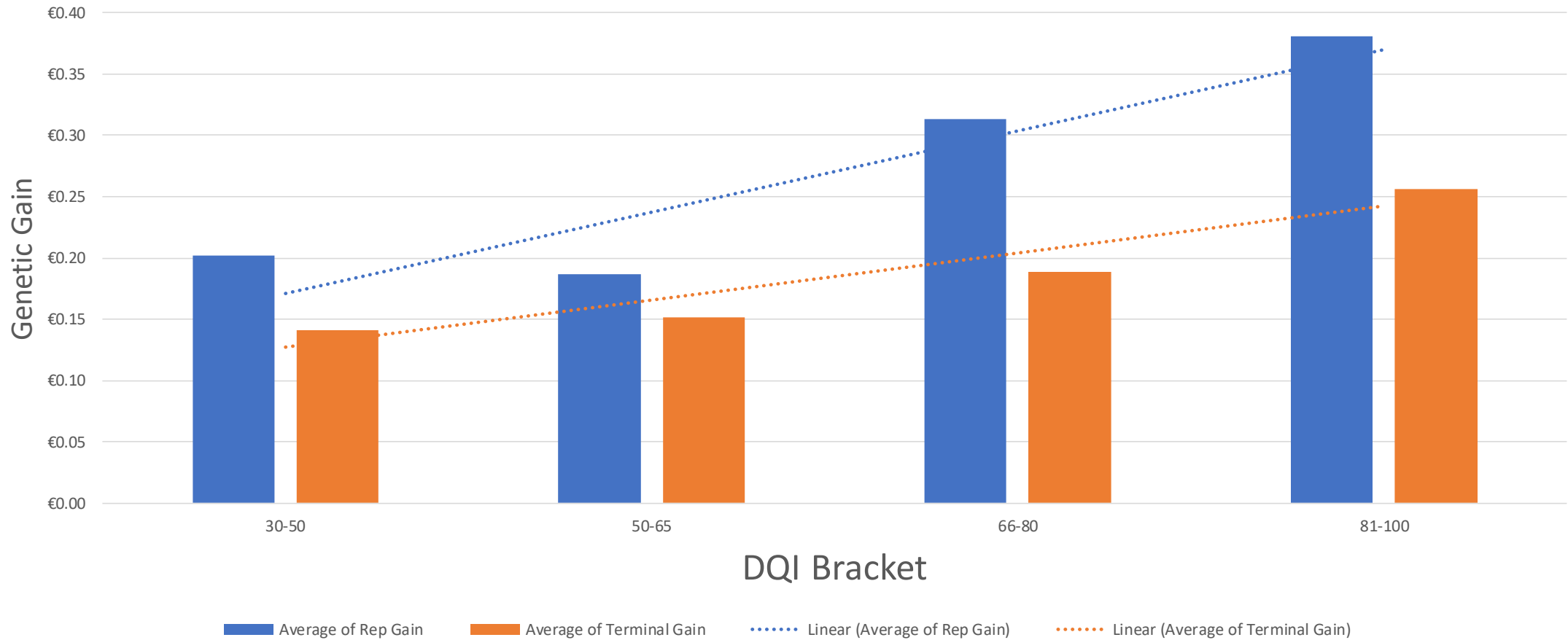
- Scrapie Type has no impact on an animals growth performance:

Scan Weight

- Type 1 → 45.03kg (0.99)
- Type 5 → 45.90kg (2.47)
- No significance



High DQI flocks making more Genetic Gain



LambPlus App

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Animal Details: [Animal](#) [Identification](#) [Breed](#) [Ancestry](#) [Parentage](#)

Performance: [DNA](#) [Weighing](#) [Health](#) [Scanning](#) [Mating](#) [Pregnancy](#) [Lambing Events](#) [Progeny](#) [EuroStars](#) [Sales Card](#)

Management: [Pedigree](#) [Death](#) [Ownership](#) [History](#) [Comments](#) [Category](#)

IE044267015658D, IE044267013741G

Belclare (75%), Unknown (25%), 11-MAR-2012, R1 (63%) T1 (60%), Female, Triplet

[Show link to this Tab](#)

Year	Total Offspring	Dead at Birth	Avg. Lambing Diff	Avg. Birth Weight	Adj. Avg. 40 day Weight	Adj. Avg. 100 day Weight	Adj. Repl. Stars	Adj. Term. Stars
2014	2	0		3.55	12.60	25.03	5.00	1.00
2015	3	0	1.00	3.30	12.44	28.36	5.00	1.33
2016	2	0	1.00	3.45	13.49	25.81	5.00	1.00
2017	2	0	1.00	4.15	18.37	34.30	5.00	1.00
ALL	9	0	1.00	3.58	14.45	28.85	5.00	1.11

Reset All

What Next?

- Continue to work with societies to increase the number of pedigree rams bred each year
- Continue to subsidise the cost of genotyping (to €15/Sample)
- Work with societies to increase the number of animals genotyped
- Increase the amount of Carcass data collected
- Increase the number of commercial records collected
- Establishing a baseline for GHG emissions in Sheep
- Lamb Eating Quality