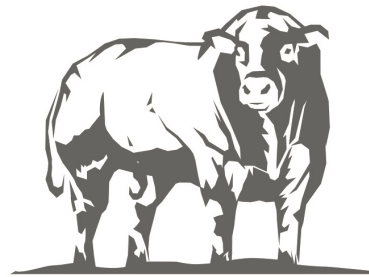


# Adding Value in the Supply Chain

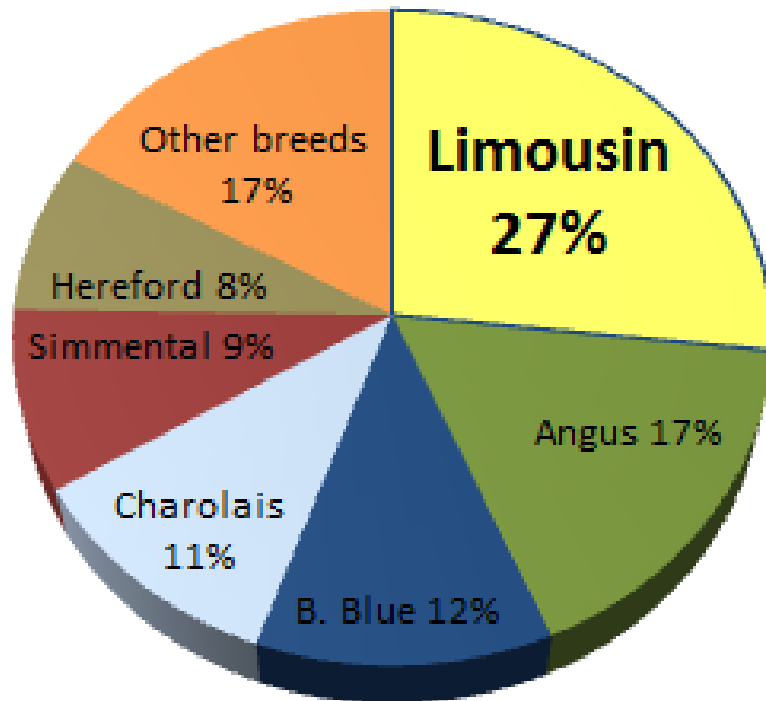


LIMOUSIN

**16<sup>th</sup> November 2019**

# LIMOUSIN: BUILDING THE FUTURE

## Quick Background:



Proportion of GB Prime Slaughter by Breed: BCMS 2016

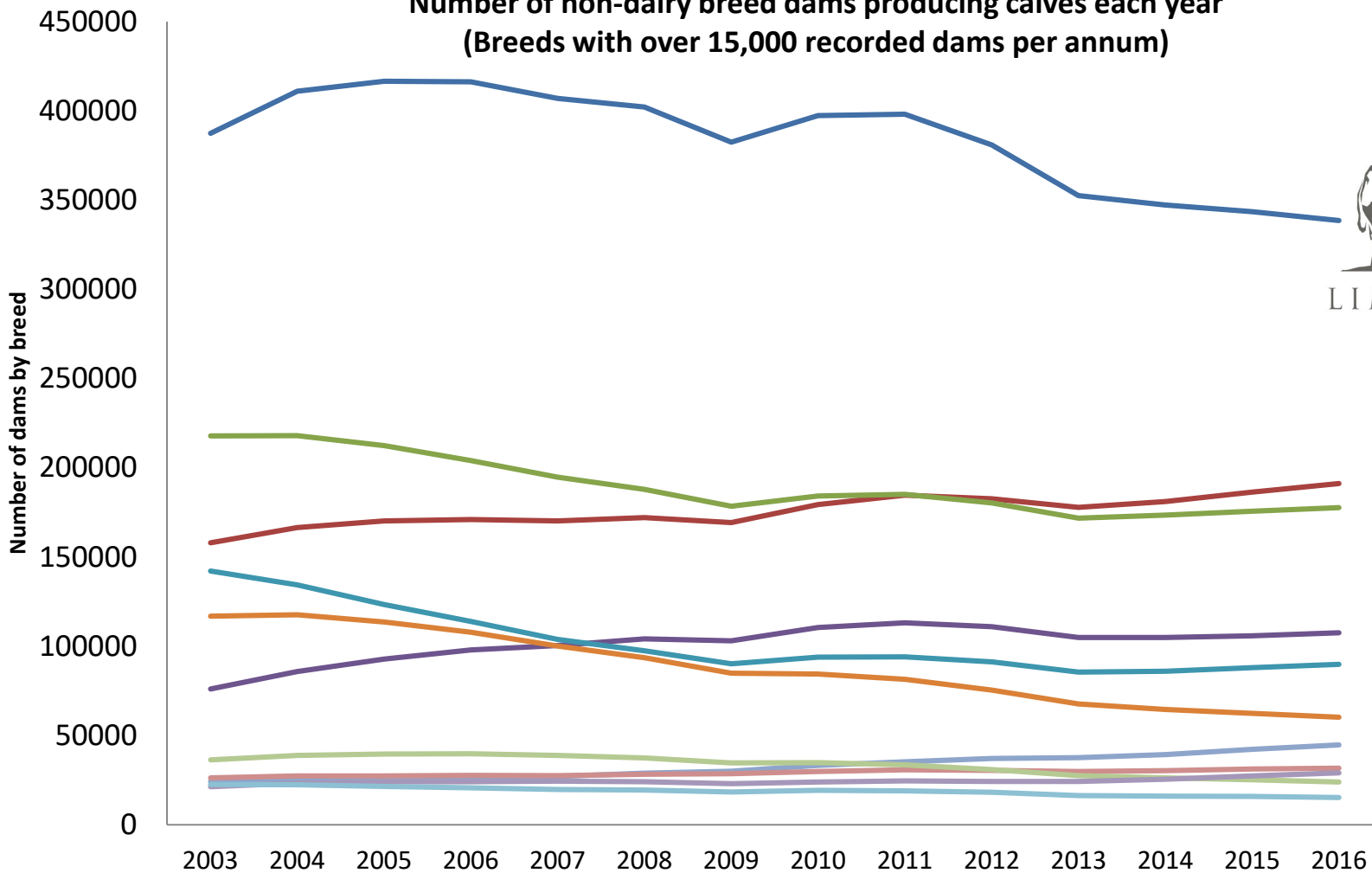


# LIMOUSIN: BUILDING THE FUTURE

Number of non-dairy breed dams producing calves each year  
(Breeds with over 15,000 recorded dams per annum)



LIMOUSIN



Source: AHDB/Signet

# LIMOUSIN: BUILDING THE FUTURE

## 10 Year Plan of Breed Improvement

Commercial sector demands will change over time – markets, pricing structures and trading environments.

### Outcome

Creation of a population of market-relevant genetics that deliver key income opportunities across all supply chain sectors

Consistent supply of volumes of beef to the market within reqd. specification

Growth of Limousin market share

New markets and income streams  
for Limousin breeders

## 10 Year Plan of Breed Improvement

Commercial sector demands will change over time – markets, pricing structures and trading environments.



As the breed changes, the Improvement Plan...

- ensures the change is addressing industry need and is desirable
- helps prioritises and plan investment – from within BLCS and from external sources
- Is valued amongst funding and project partners

# LIMOUSIN: BUILDING THE FUTURE

## 10 Key Areas...

Increase  
Perf Rec  
Popn.

Calving  
Ease

Animal  
Health

Growth  
&  
Carcase  
Traits

Feed  
Effic.

Meat  
quality

Docility

Mater'l  
Effic.

Long-  
evity

Milk

# LIMOUSIN: BUILDING THE FUTURE

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## Myostatin

Research demonstrates +ve relationships with:

**Meat yield** – up to 19% increase

**Meat Quality:** increased tenderness, reduced fat content and a higher proportion of polyunsaturated fats.

**Feed efficiency:** lower intake per kg meat

**Calving ease:** production and welfare values



## Carcase Trait GEBVs: A First in UK

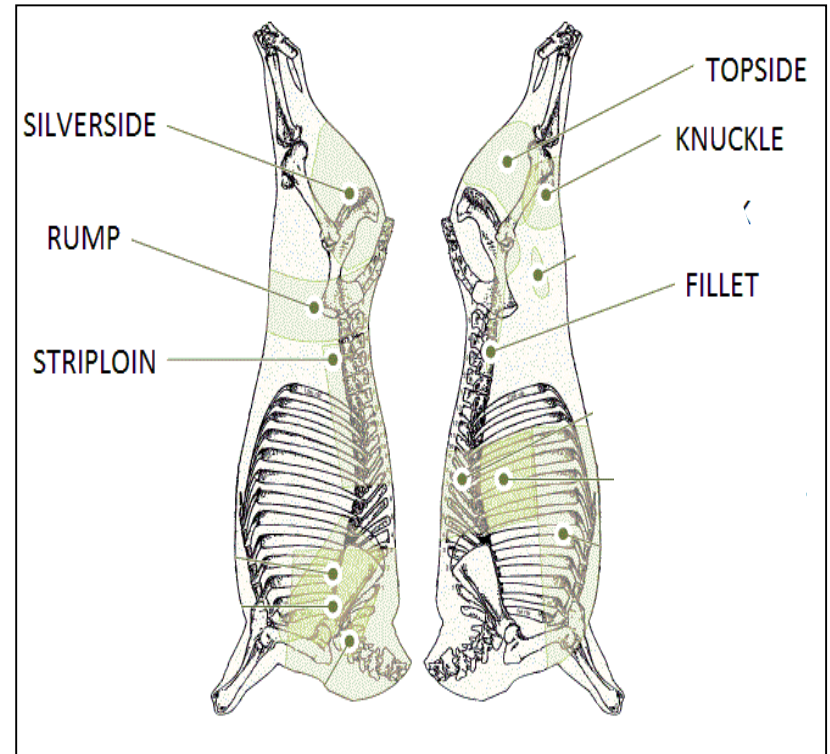
- £1.5m project funded by Govt Technology Strategy Board
- BLCS, ABP and SRUC are partners
- To use VIA measurements, BCMS records and information from DNA in breeding values to identify superior genetics for carcase traits



# LIMOUSIN: BUILDING THE FUTURE

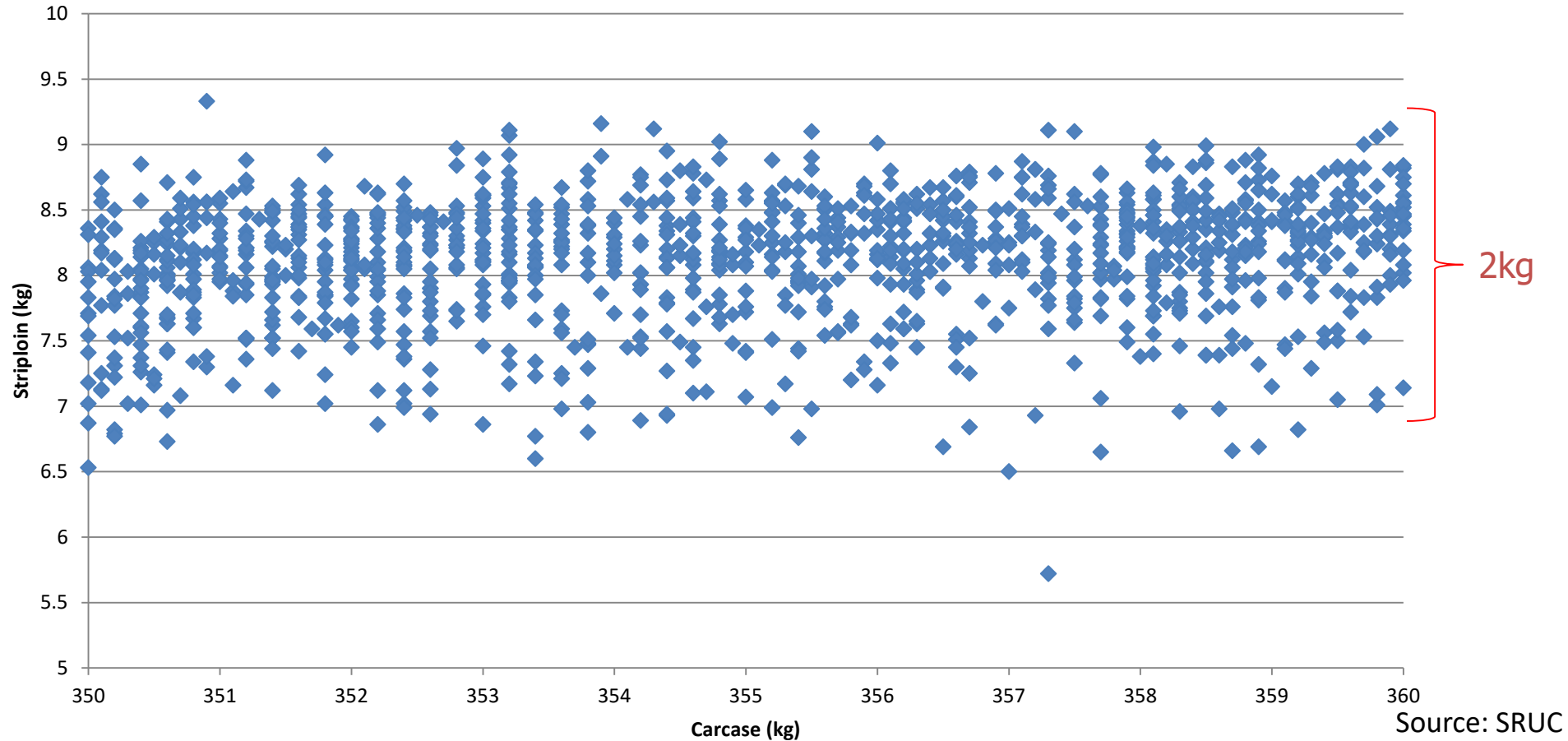
## The New Traits...

- ✓ Age at Slaughter
- ✓ Carcase Weight
- ✓ 6 Primal Cuts...



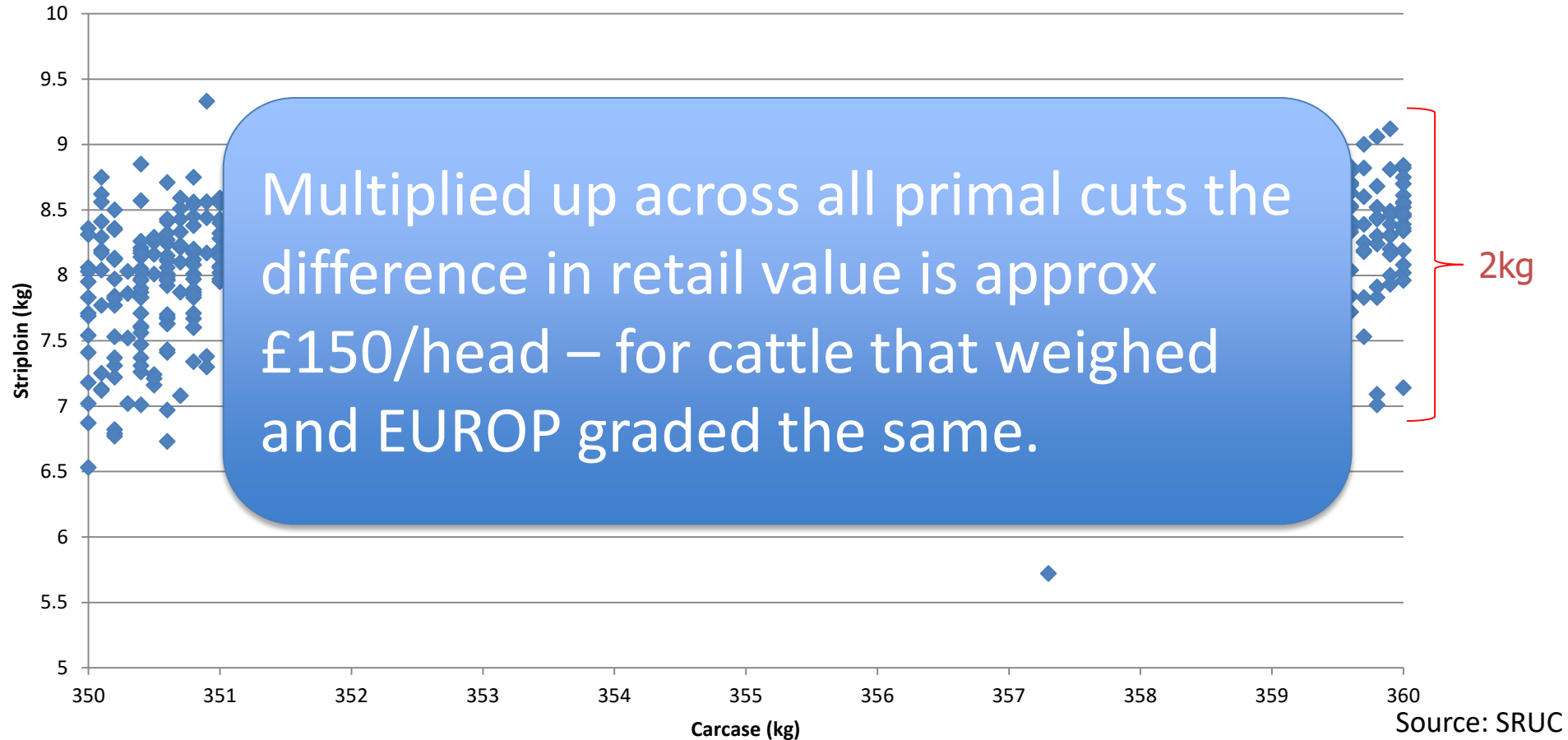
# LIMOUSIN: BUILDING THE FUTURE

## Variation in Striploin (kg) – Carcase Weight 350-360kg



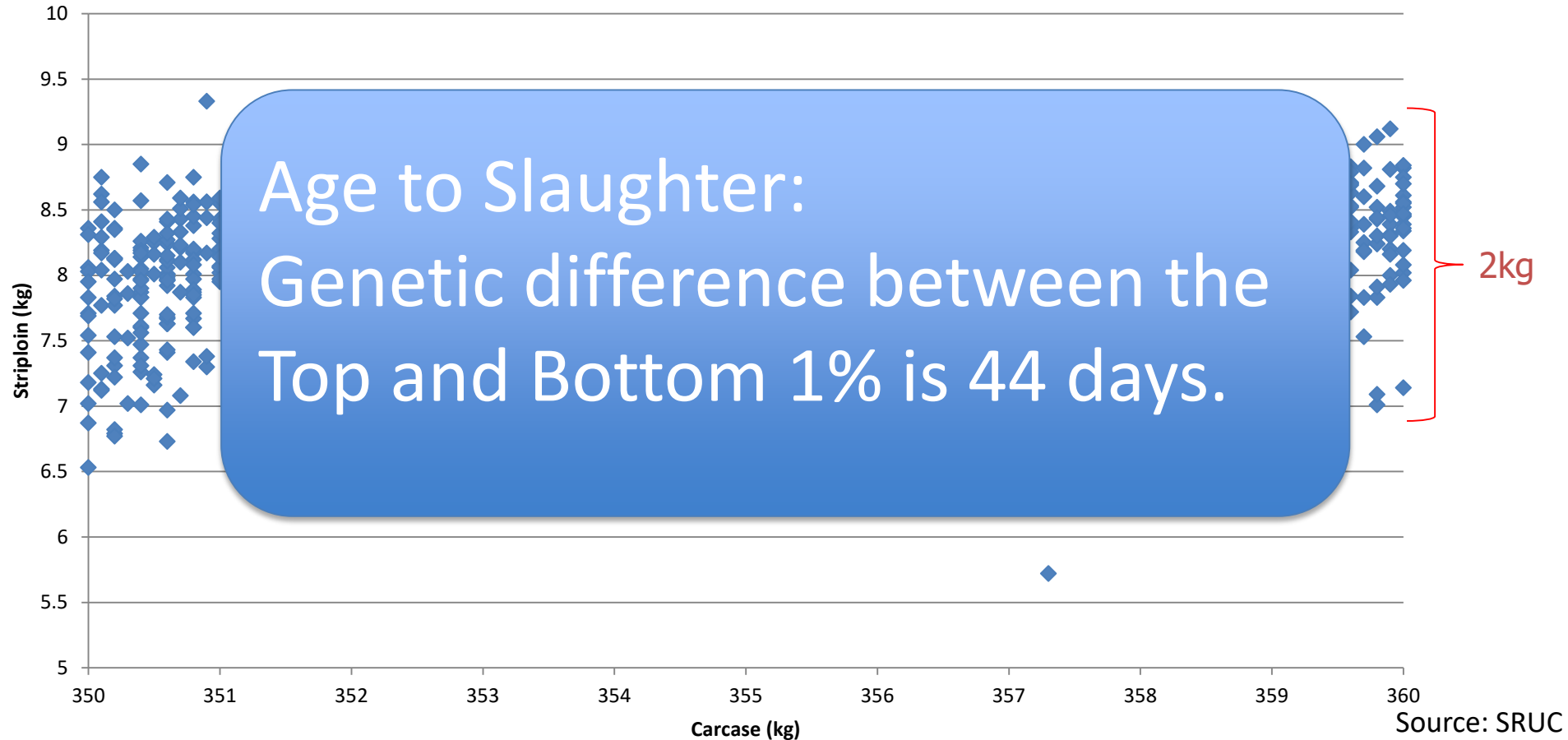
# LIMOUSIN: BUILDING THE FUTURE

## Variation in Striploin (kg) – Carcase Weight 350-360kg



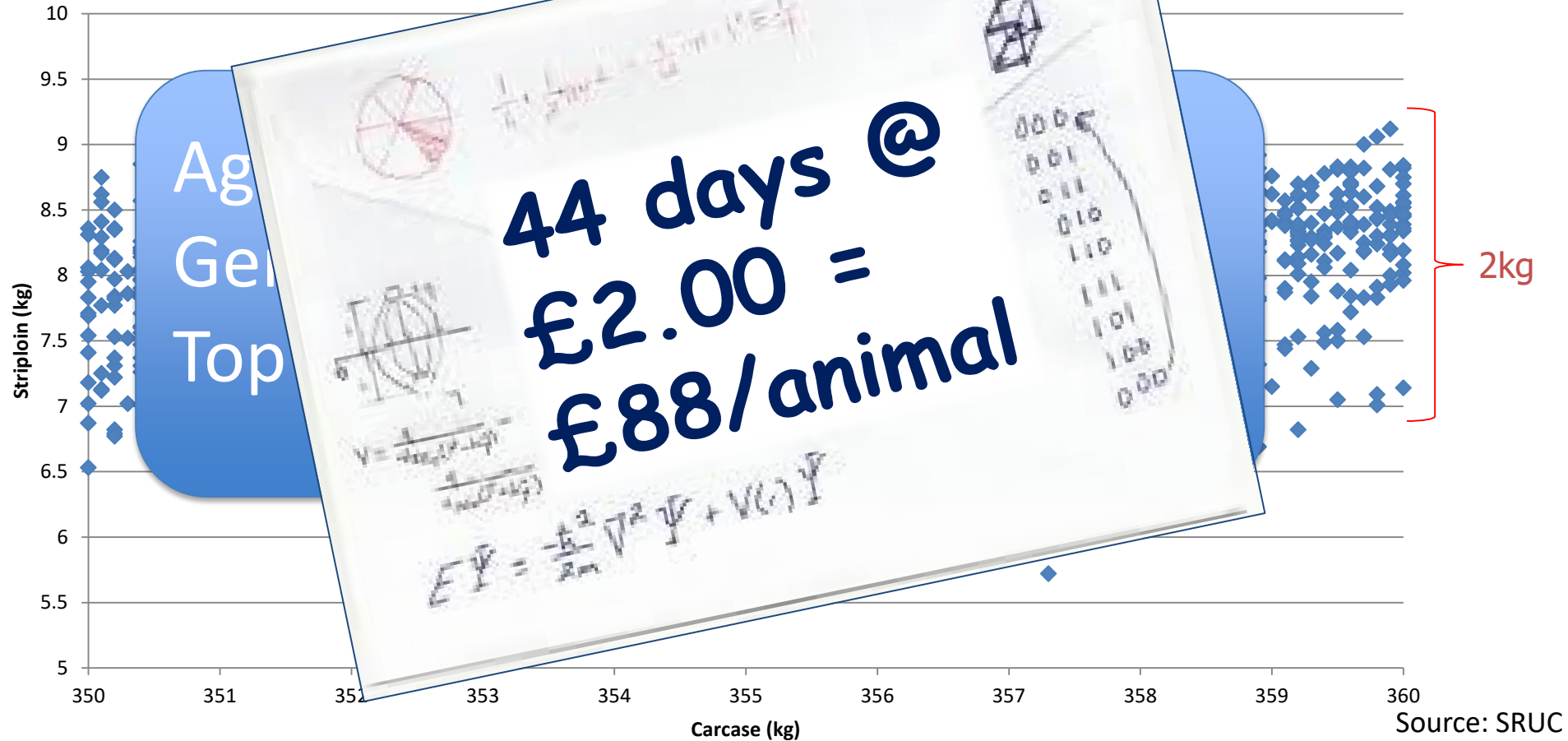
# LIMOUSIN: BUILDING THE FUTURE

## Variation in Striploin (kg) – Carcase Weight 350-360kg

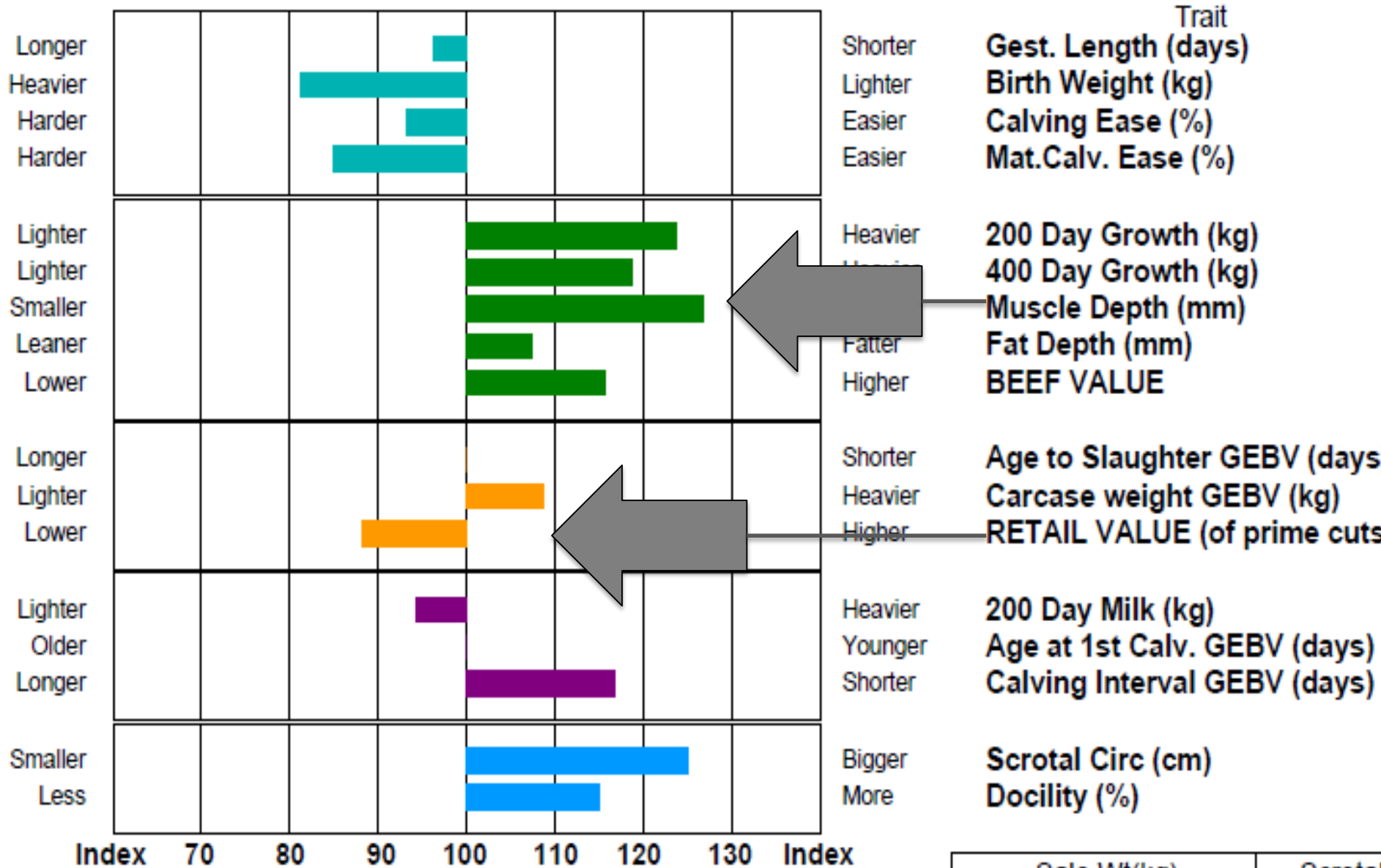


# LIMOUSIN: BUILDING THE FUTURE

## Variation in Striploin (kg) – Carcasses 350-360kg



Below Average Above Average (Superior)



Index 70 80 90 100 110 120 130 Index

Adjusted Weights (kg)	100	200	300	400	500	Scanned
	172	314	431	518	583	NO

Sale Wt(kg)	Scrotal

# LIMOUSIN: BUILDING THE FUTURE

## New Limousin GEBVs for...

Age at 1<sup>st</sup>  
Calving



Longevity

Calving  
Interval

Calf  
Survival



## Some Interim Findings...

- ✓ **Nationally 5% lower heifer replacement rate**
- ✓ **Nationally 2% higher Longevity at 8 years of age**
- ✓ **Nationally up to 1.5% lower Calf Mortality**

- The GEBVs are providing opportunity to extend these differences further still
- SRUC studies have previously valued re-breeding success at approx £42/cow pa

## Feed Efficiency

- £1.75m funded DEFRA & AHDB
- SRUC & AHDB as partners. Industry consortium.
- Limousin the primary breed.



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### Commercial Significance Finishing Cattle



£19/head lower feed cost to gain 100kg LW  
12% saving

Over a 180 day feeding period, saving ~£50/hd



## Feed Efficiency

- £1.75m funded DEFRA & AHDB
- SRUC & AHDB as partners. Industry consortium.
- Limousin the primary breed.

**Commercial Significance  
Breeding Herd**



**Feed saving £100 per cow/calf unit per  
year** (SRUC/Stabilisers)



## Feed Efficiency

- £1.75m funded DEFRA & AHDB
- SRUC & AHDB as partners. Industry consortium.
- Limousin the primary breed.
- GEBVs possible
- Establishing data collection beyond project



# LIMOUSIN: BUILDING THE FUTURE

## The plan taking shape...

**Carcase  
Quality**  
£150/calf

**Age to  
Slaughter**  
£88/calf

**Female  
Fertility**  
£42pa

**Feed  
Efficiency**  
£50/calf £100/cow



**International EBVs, GEBVs for Feed Efficiency, Fat  
Depth, Meat Quality, (G)EBVs Disease Resistance...**

# LIMOUSIN: BUILDING THE FUTURE

## Adding Value in the Supply Chain

### Commercial Value

Highest % in new  
and evolving  
market  
specifications

**Low Cost of  
Production**  
Efficient dams,  
efficient sires, best  
use of resource

**GENETICS FOR**  
  
**THE SUPPLY  
CHAIN**

**Ethical  
Production**  
Lower replacement  
rates, disease  
solutions, calf  
survival, lower  
carbon emissions