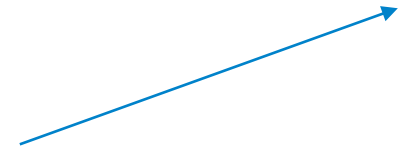




- Signet Update
- Combined Breed Analysis
 - / National Terminal Sire Evaluation
- RamCompare



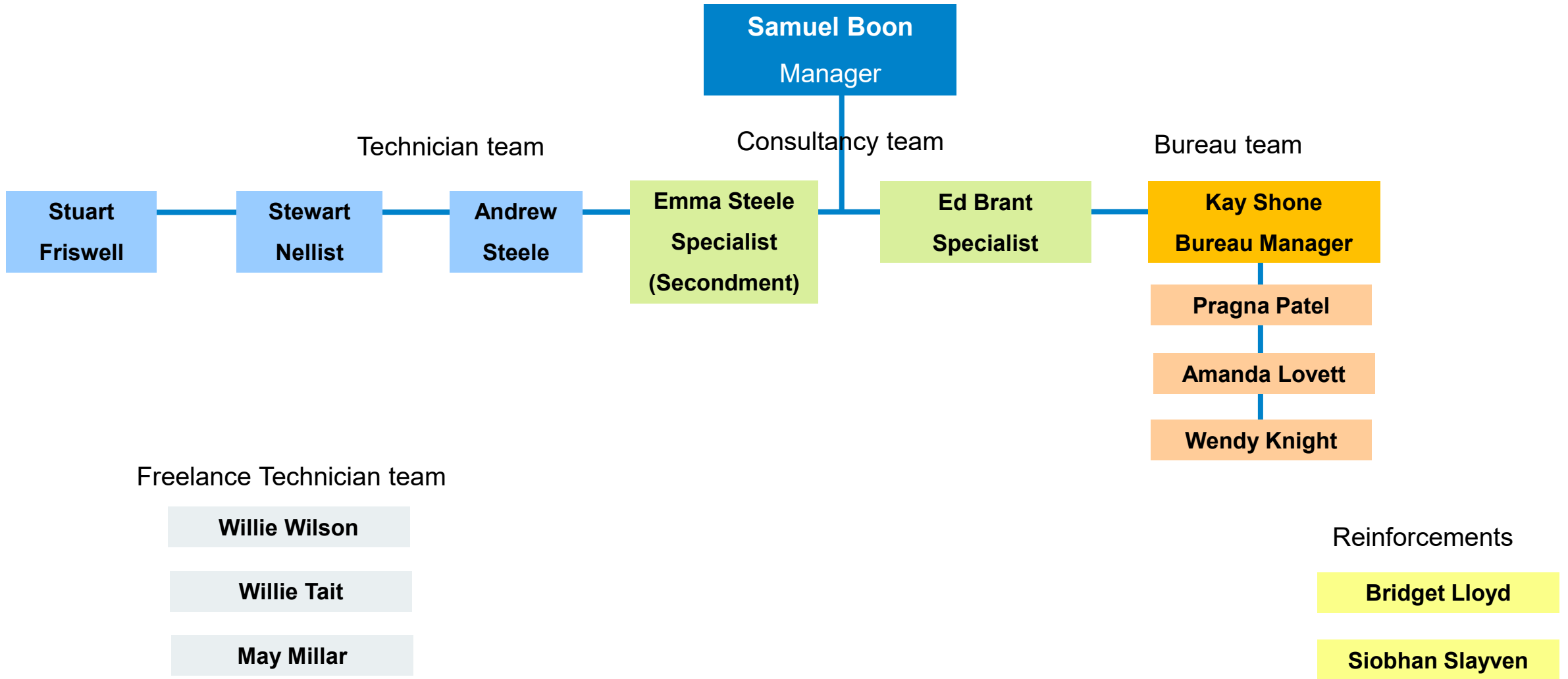
Genetic Evaluations

Collation of data
Provision of EBVs
Reporting
Measurement services
Consultancy

Technology Transfer (England)

Promotion of EBVs to
pedigree & commercial
produces

Signet Breeding Services Team 2019



Levy Support

- **EGENES Data Analysis**
 - ~£100,000 AHDB, HCC and QMS
- **EGENES Development Work**
 - £30,000 AHDB
- **Database**
 - ~£125,000 AHDB
- **CT Scanning – Investment 2018 / 2019**

	2018	2019
AHDB	£23,980	£22,000
QMS	£4,225	£6,370
HCC	£4,096	£3,928

- **U/sound scanning (running costs)**
 - >£80,000 AHDB Beef and Lamb

Benefit on investment
Over £10 million per annum to the sheep industry

Internal Review
Highest score in investment test for any AHDB activity

Total CT scan numbers 2019			
Breed	SRUC	Mobile	Total
Beltex	9	12	21
Charollais	66	83	149
Hampshire Down	61	43	104
Meatline	10	19	29
Suffolk	81	27	108
Texel	116	151	267
Blue Texel	0	1	1
Easycare	5	0	5
Suf Tex	2	0	2
Charmoise	0	3	3
R Hulme	28	0	28
P Baber	0	8	8
Aberfield	3	0	3
Ile de France	5	0	5
Shropshire	0	15	15
	386	362	748



Signet Recorded flocks



Breed	Number of flocks
SUFFOLK	61
CHAROLLAIS	58
HAMPSHIRE DOWN	55
LLEYN	49
DORSET	24
BLUEFACED LEICS	23
SHROPSHIRE	18
SOUTHDOWN	15
WELSH MOUNTAIN	13
COMPOSITE	12
NON-REGISTERED TEXEL	12
BELTEX	8
SCOTTISH BLACKFACE	8
25 OTHER BREEDS	79
Total	435

Combined Breed Analysis – Where are we now?



Requirement for a new approach

The requirement

- More regular BLUP runs
- Ability to analyse
 - New traits
 - Linked flocks reared together
 - Crossbreds
 - Commercial data from crossbreds
- Opportunity to rebase EBVs and Indexes

Combined Breed Analysis / National Terminal Sire Evaluation

SBRT 2013 – The Vote

SBRT 2015 – First phase completed

SBRT 2017 –still not completed!

2018 LAUNCHED!

SBRT 2019 – Still here to tell the tale.....

Requirement for a new approach

The delivery

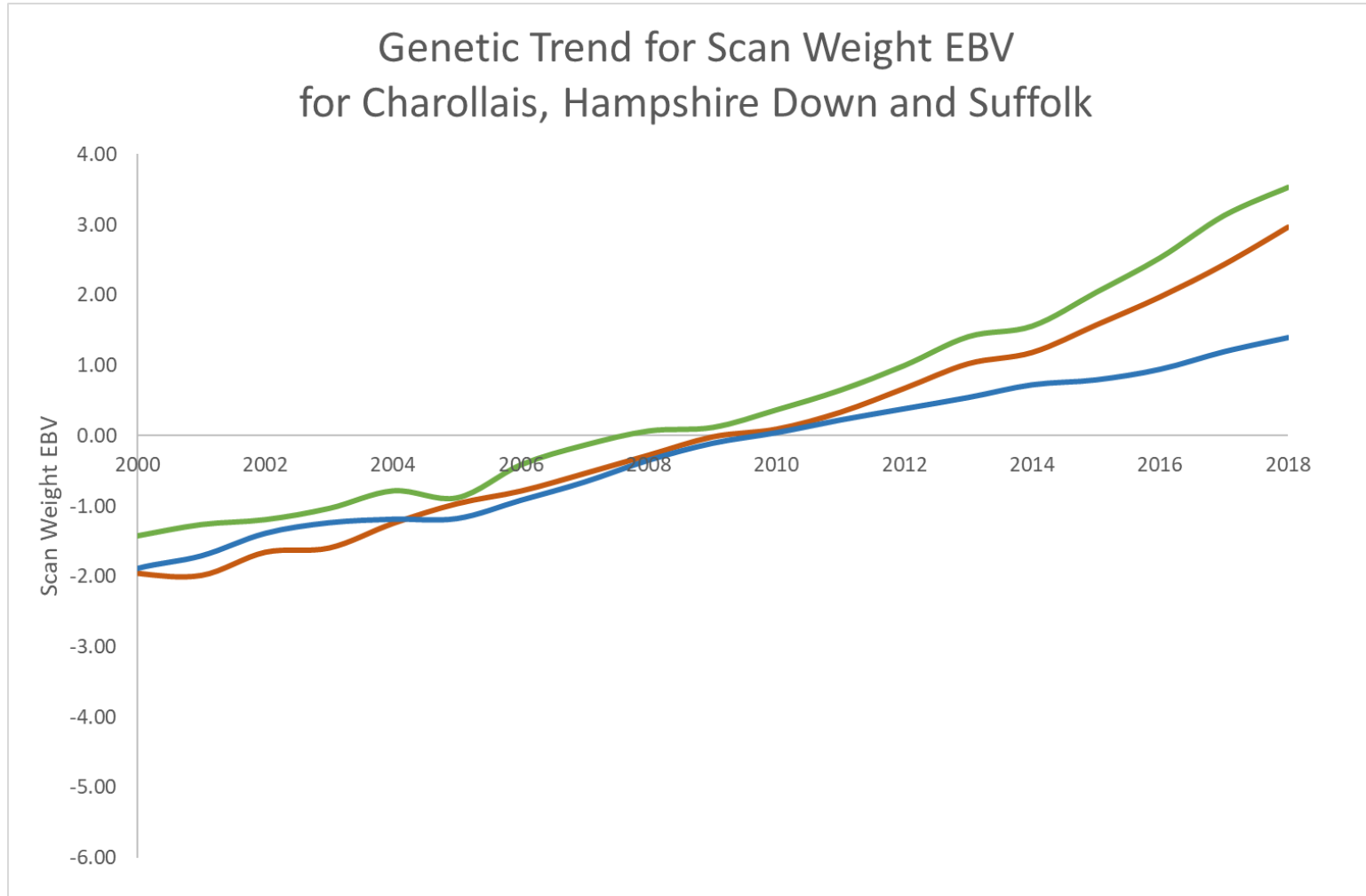
- Monthly, multi-breed evaluation with millions of records
- Updated 25 EBVs
 - Including a move to weight adjusted traits
- 6 new CT traits
- New (breed specific) bases for each breed
- Two New Breeding Indexes

Weight adjusted traits



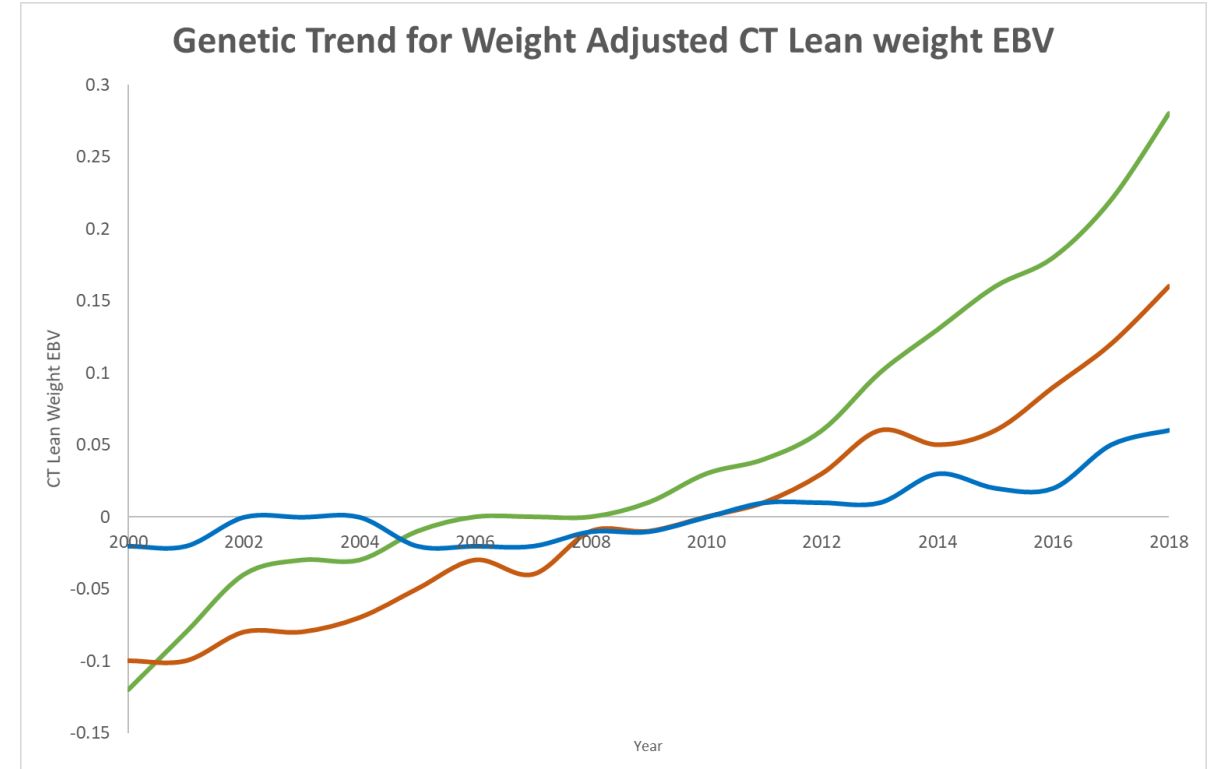
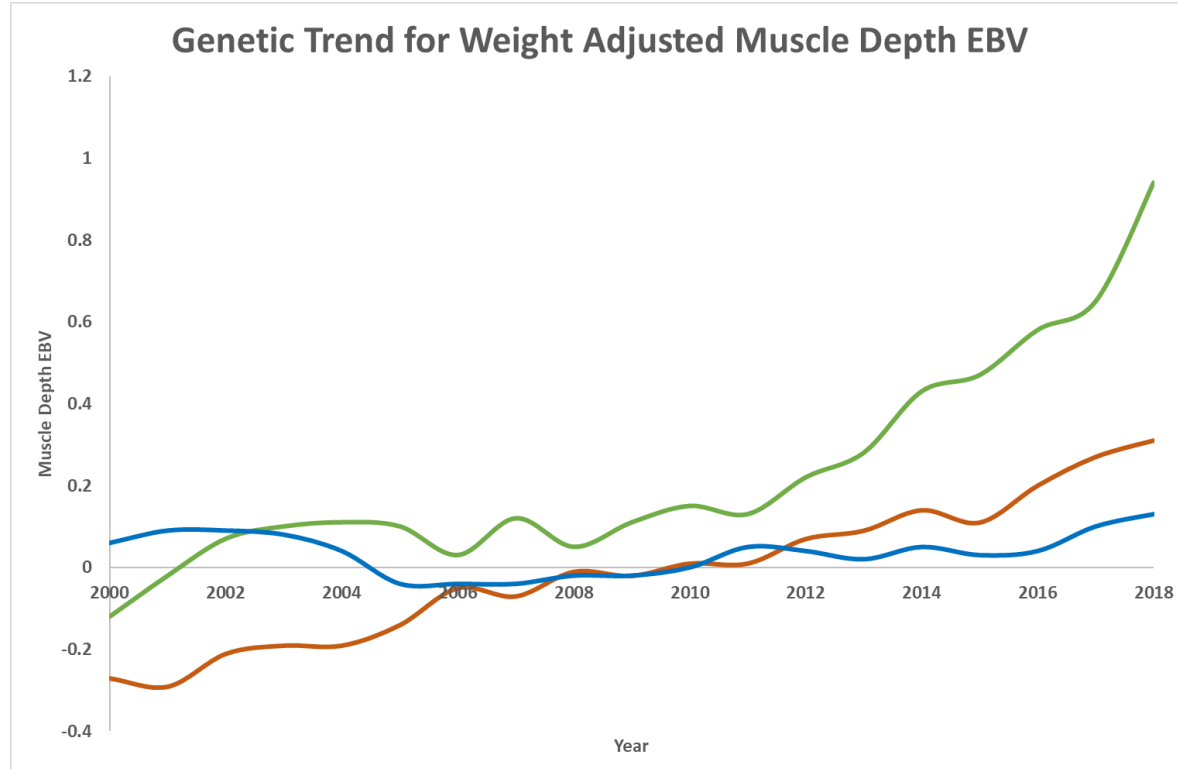
Fantastic progress in growth rate

- Charollais
- Hampshire Down (Whole Breed)
- Suffolk (Whole Breed)



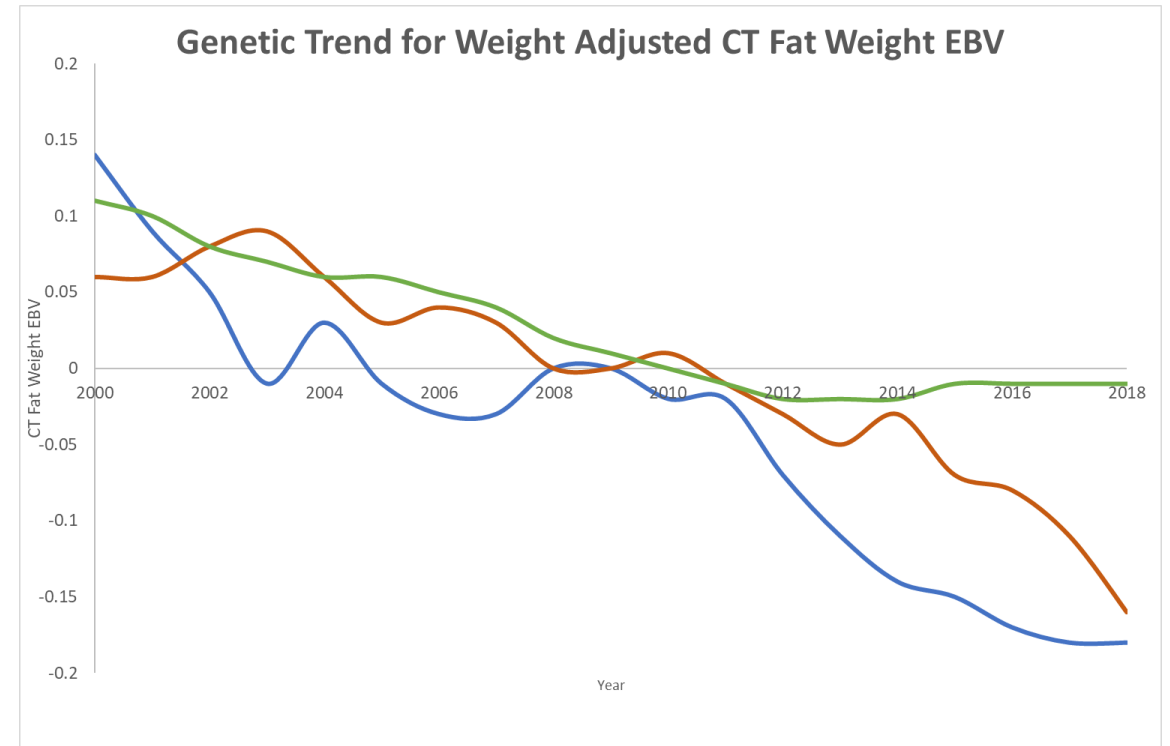
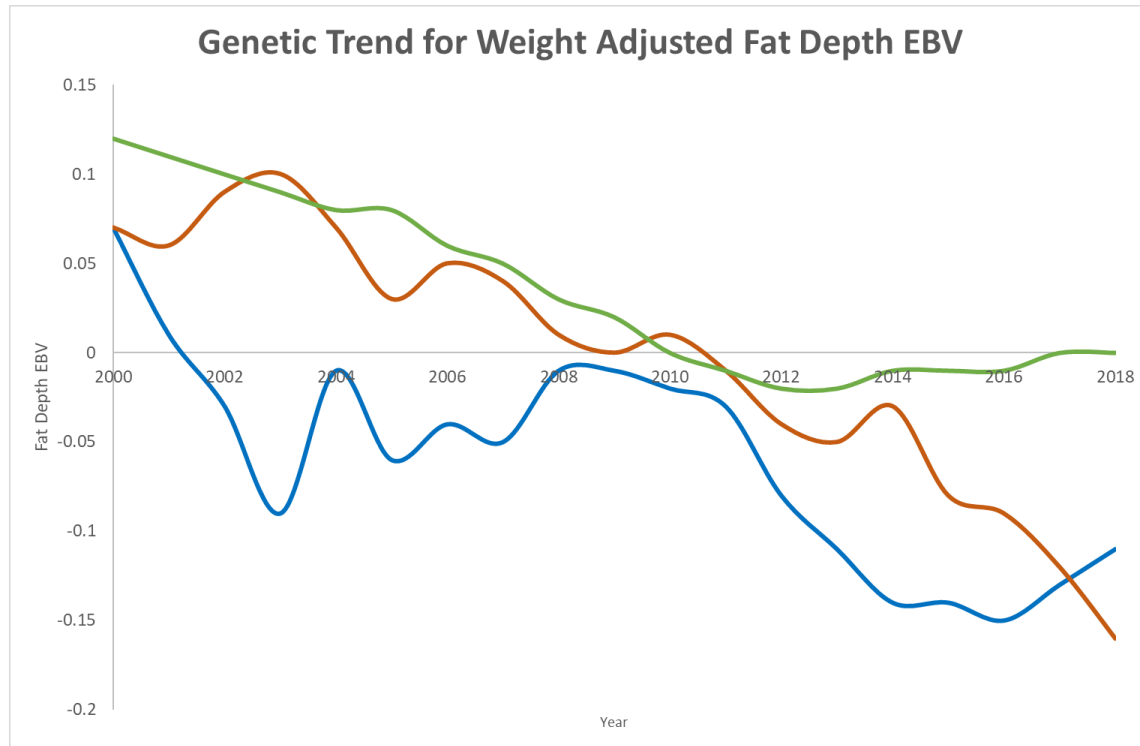
Change in muscling

- Charollais
- Hampshire Down (Whole Breed)
- Suffolk (Whole Breed)



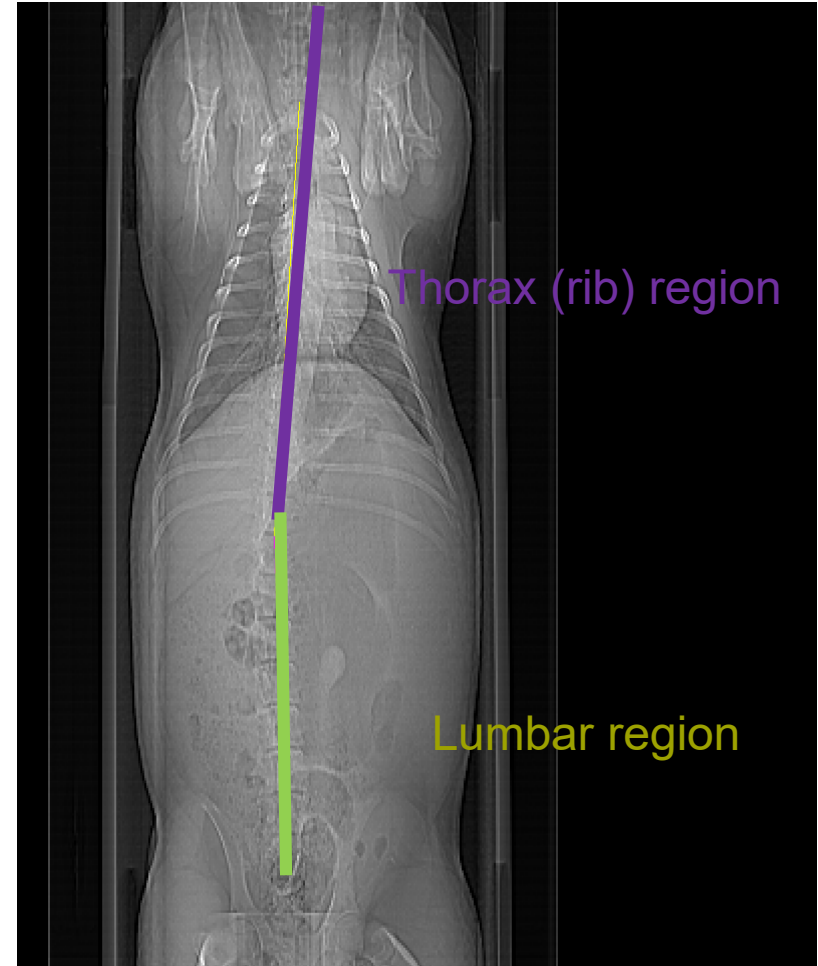
Change in leanness

- Charollais
- Hampshire Down (Whole Breed)
- Suffolk (Whole Breed)



What are the new EBVs?

- Spine length
 - Lumbar, Thoracic and Total
- Spine number
 - Lumbar, Thoracic and Total
- CT muscle area
- Intramuscular fat percentage



We told them and told them and told them...

- **Sixteen breeder winter meetings**
 - Whitland, Aberystwyth, Welshpool, Kendal, Market Rasen, York, Edinburgh, Alnwick, Wymondham, Tiverton, Inverurie, Ballymena, Stoneleigh
- Booklet & Leaflet
- AHDB/NSA mailing of Breed Benchmarks
- Webinar
 - General
 - Breed specific
- NSA focus events
- Society meetings
 - Charollais, Dorset, Hampshire Down, Meatlinc, Shropshire, Southdown
- Society specific editorial
- New area on Signet website to host results
- Kelso and Bulth presence

FACTSHEET
BETTER RETURNS
Buying a recorded Suffolk

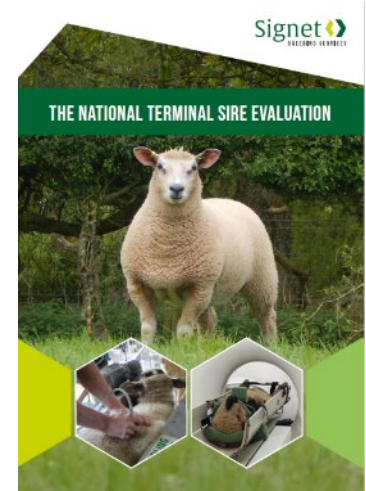
Why invest in Signet recorded rams?
Investing in rams with superior genetics can be worth an extra £200 over their lifetime. With potential gains of £4 per lamb, commercial producers should assume Signet recorded rams with high estimated breeding values (EBVs) for traits of importance to their flock.

Interpreting EBVs when buying a ram
EBVs can be presented on Order of merit statements that report the main traits, or on a breeding chart. Accuracy values indicate how much is known about an animal for a specific trait and the degree to which EBVs might change over time.

Estimated breeding value	Average	Top 20%	Top 10%
8-week weight	0.82	1.22	1.54
Litter size	0.62	0.95	0.98
Maternal ability	0.28	0.43	0.35
Scan weight	1.34	3.04	4.97
Muscle depth*	0.12	0.87	1.17
Fat depth*	0.81	0.18	0.33
Lean weight*	0.08	0.27	0.44
Fat weight*	0.81	0.15	0.27
Giper*	0.11	0.55	1.02

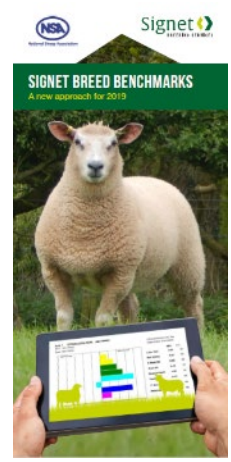
Table 1. Suffolk breed benchmark for 2019

5%
TOP 10%
TOP 25%
Signet



AHDB
Buying a Signet Recorded Charollais Ram
Samuel Boon – Signet Breeding Services

Webinar: How to buy a Signet recorded Charollais ram
89 views • 20 Jun 2019



Meatlinc

- Meatlinc Breed Benchmark 2019 – National Terminal Sire Evaluation
- Meatlinc Breed Benchmark for catalogues 2019
- New Breeding Indexes for Meatlinc Sheep
- How to buy a Signet recorded Meatlinc
- Meatlinc Top Ram Lambs – Latest information
- Meatlinc Top Shearlings Lambs – Latest information
- Meatlinc Top Stock Rams – Latest information
- Meatlinc Flock Finder

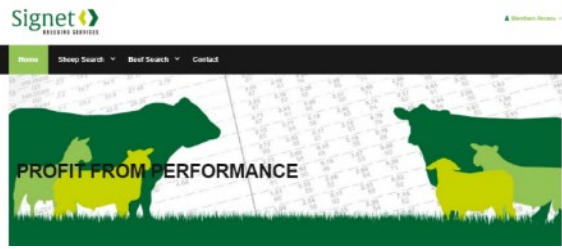




New Signet Database

Producing the new Signet database (Sam's baby)





Signet's Recording Services at www.signetdata.com
From data capture to reporting to data analysis – you can do much more online

Promoting EBVs to Industry

Advanced Reporting Services

Data Capture

Easier online data entry

More flexible and informative reporting

Greater marketing support

Flock .
Find the nearest flock

Flock Finder – Based on postcode and breed

Crogham Charollais Sheep

Flock Code: AB - Latest EBVs

Prefix: CROGHAM

Tel: 01953 607860

M: 07712 659262

carroll@charollais sheep.com

Crogham Farm
Youngmans Road
Wymondham
Norfolk
England
NR18 0RR

Distance: 35 miles



Mr M Britten

Flock Code: WVW - Latest EBVs

Prefix: CAVICK

Tel: 07769 803642

M:

cavickcharollais@gmail.com

Cavick House Farm
Cavick Road
Wymondham
Norfolk
England
NR18 9PJ

Distance: 35 miles

David Morphett

Flock Code: YPE - Latest EBVs

Prefix: WEEKSLAND

Tel: 01580 291761

M: 07775 844586

weekslancharollais@gmail.com

Oakside
Smarden Road
Biddenden
Kent
England
TN27 8JR

Distance: 63 miles



<https://signetdata.com/flock-finder/charollais>

Sheep for Sale – Based on breed

Sheep For Sale

Signet Breeding Services performance records over 30 different breeds and crosses, with recorded rams available from some of the leading breeders in England, Scotland, Wales and Northern Ireland.

The "Sheep for Sale" section enables breeders to list animals that are available:

- off farm
- by auction
- as semen in the tank

Signet clients wishing to post details of sheep that are for sale should follow these [instructions](#)



BREED	ON FARM SALE		AUCTION SALE		SEMEN SALE
	Rams	Ewes	Rams	Ewes	
BEULAH	0	0	11	0	0
CHAROLLAIS	0	0	0	0	1
HAMPSHIRE DOWN	6	0	0	0	2
SOUTHDOWN	11	0	0	0	1
SUFFOLK	15	0	0	0	11

Reports: Animal, location, notes, image, index & EBVs

Cataloguing – A service for all Signet clients

Lot: 3651 18YUX01866 - LEELAW - UK 0 560693 01866
B:R 2:2 DoB: 02-01-2018 ET: N Sex: M
8 Week Weight: Y Ultrasound Scan: Y CT Scan: N

Sire: KNOCKIN STUD MUFFIN - 17XXJ00452
Dam: LEELAW - 15YUX01204

Analysis Date: 20-10-2019

	8 Week Weight EBV	Litter Size EBV	Maternal Ability EBV	Scan Weight EBV	Muscle Depth EBV	Fat Depth EBV	Gigot EBV	Terminal Sire Index	Maternal Index
EBV	0.49	0.03	-0.20	1.30	0.38	-0.46	-0.07	125	121
ACC	74%	55%	64%	64%	52%	53%	21%	64%	55%

Vendor: Alexander Gray & Son, Tel: 01555 862813, Email: stavros78@hotmail.co.uk

Lot: 3652 18YUX01870 - LEELAW - UK 0 560693 01870
B:R 3:2 DoB: 03-01-2018 ET: N Sex: M
8 Week Weight: Y Ultrasound Scan: Y CT Scan: N

Sire: KNOCKIN STUD MUFFIN - 17XXJ00452
Dam: LEELAW - 15YUX01211

Analysis Date: 20-10-2019

	8 Week Weight EBV	Litter Size EBV	Maternal Ability EBV	Scan Weight EBV	Muscle Depth EBV	Fat Depth EBV	Gigot EBV	Terminal Sire Index	Maternal Index
EBV	1.42	0.05	-0.21	3.07	-0.30	-0.13	0.12	149	130
ACC	74%	54%	64%	64%	52%	53%	22%	64%	54%

Vendor: Alexander Gray & Son, Tel: 01555 862813, Email: stavros78@hotmail.co.uk

...and mass production of EBV charts

Little things to help.....




Breed: CHAROLLAIS


Flock/Herd: AB

 sboon 
 Crogham Charollais Sheep

Home


Sheep Search 


Beef Search 

Member Access 

Data 

Reports 

Services 

Administrator 

Contact

Weigh date calculator for 8 week weights

All Signet recorded flocks are asked to weigh their lambs early in life to get an 8 week adjusted weight.

This weight is used to assess both the genes for growth rate in the lamb and maternal performance in the ewe (i.e. milk production and maternal care).

To determine when to weigh your lambs, enter your lambing dates below

First Lamb Born

01-11-2019

Last Lamb Born

22-11-2019

Please weigh your lambs between 03-01-2020 and 24-01-2020

Little things to help.....

Trading Name: Crogham Charollais Sheep

Breed: CHAROLLAIS

Flock Code: AB

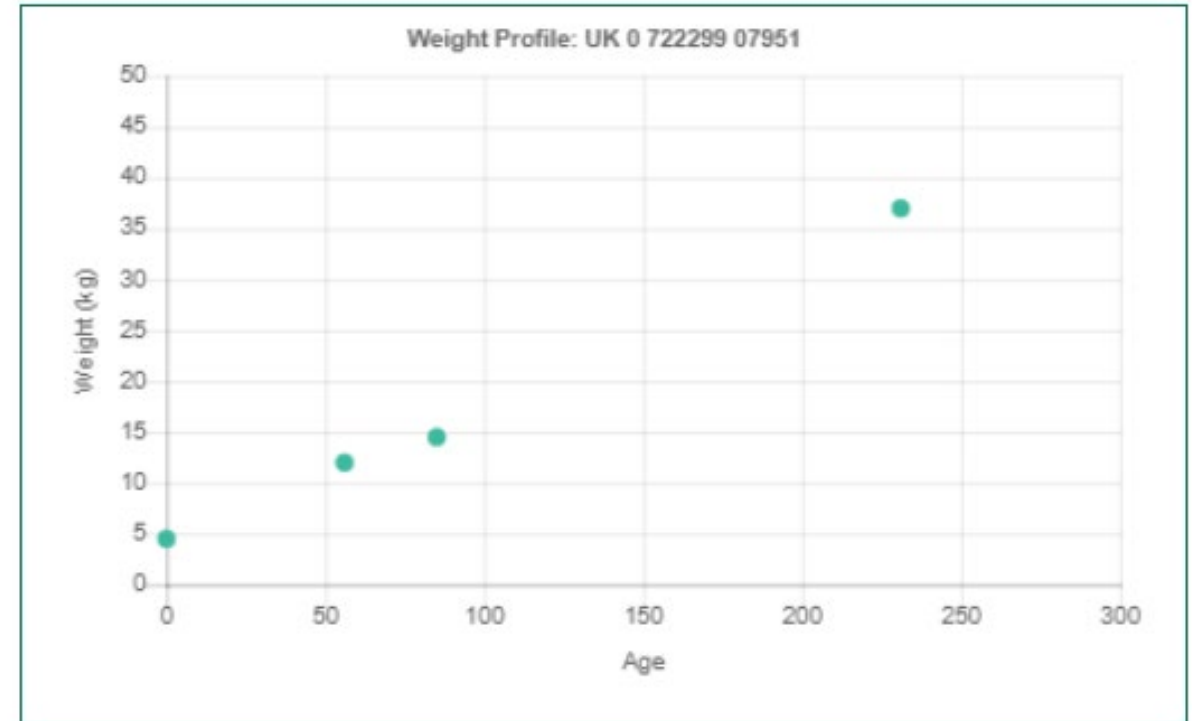
Signet Number: 7887

Flockbook Number	Sex	Birth Type	Date of Birth	Sire	Last Lambing Event	Dead	Sold	New Identity if retagged
11AB00085	F	1	29-12-2010	AB:09041	10-01-2019			
11AB00091	F	2	01-01-2011	AB:09041	10-01-2019			
11AB00101	F	1	03-01-2011	AB:09041	10-01-2019			
11AB00111	F	2	15-01-2011	TG:00001	06-01-2018			
11AB00114	F	3	17-01-2011	HH:06091	04-01-2018			
12AB00186	F	2	10-12-2011	ZRF:10059				
12AB00187	F	2	12-12-2011	TG:00001				

Weights, weights, weights

All Weights

Weight (Kg):	Age (days):	Date:
4.5	0	18-03-2019
12	56	13-05-2019
14.5	85	11-06-2019
37.0	231	04-11-2019



Weights, weights, weights

- New database enables frequent weight collection for youngstock and older sheep (with body condition score)
- 1). AHDB funded PhD looking at growth curves in livestock
- 2). AHDB, HCC & QMS funded Abacus report
 - “Optimising Mature Weight for Farm Efficiency and Profitability”
 - ~ optimum weight closer to 55kg (little difference 55-65kg)

Reports – Any sheep, any time

Quick Reference List: Index 1 Order - Analysis Date: 20-10-2019

Member: C M Brant & Son

Flock Code: 27Z

Signet No: 74130

Breed: HAMPSHIRE DOWN

Flockbook number	Date of Birth	Adj 8	8wk wt	Litter	Mat'al	Scn wt	Mus dp	Fat dp	Terminal	Terminal	Maternal	Maternal
		A	B	C	D	E	G	H	I			
Ram Lambs		1	Category	Flockbook Number	Sex	Date of Birth	Prefix	UK Ministry Number	Sire Flockbook Number	Sire Prefix		
27Z19001049	19-03-2019	2	Lambs	27Z190#DEAD1	M	15-03-2019	NORMANBY		27Z1700721	NORMANBY		
27Z19001096	27-03-2019	3	Lambs	27Z19001049	M	19-03-2019	NORMANBY	UK 0 141065 01049	26X1500816	RABURN		
27Z19001073	24-03-2019	4	Lambs	27Z19001053	M	21-03-2019	NORMANBY	UK 0 141065 01053	26X1500816	RABURN		
27Z19001076	25-03-2019	5	Lambs	27Z19001054	M	21-03-2019	NORMANBY	UK 0 141065 01054	27Z1801017	NORMANBY		
27Z19001350	01-05-2019	6	Lambs	27Z19001059	M	21-03-2019	NORMANBY	UK 0 141065 01059	27Z1801017	NORMANBY		
27Z19001053	21-03-2019	7	Lambs	27Z19001060	M	22-03-2019	NORMANBY	UK 0 141065 01060	27Z1801017	NORMANBY		
27Z19001382	16-05-2019	8	Lambs	27Z19001063	M	22-03-2019	NORMANBY	UK 0 141065 01063	27Z1800845	NORMANBY		
27Z19001139	31-03-2019	9	Lambs	27Z19001065	M	22-03-2019	NORMANBY	UK 0 141065 01065	27Z1801017	NORMANBY		
		10	Lambs	27Z19001066	M	22-03-2019	NORMANBY	UK 0 141065 01066	27Z1801017	NORMANBY		
		11	Lambs	27Z19001070	M	23-03-2019	NORMANBY	UK 0 141065 01070	27Z1700721	NORMANBY		
		12	Lambs	27Z19001071	M	23-03-2019	NORMANBY	UK 0 141065 01071	27Z1700721	NORMANBY		
		13	Lambs	27Z19001073	M	24-03-2019	NORMANBY	UK 0 141065 01073	27Z1801017	NORMANBY		

...and permanent URL
/weblinks for each breed

<https://signetdata.com/breed-summary/hampshiredown/ramlambs>

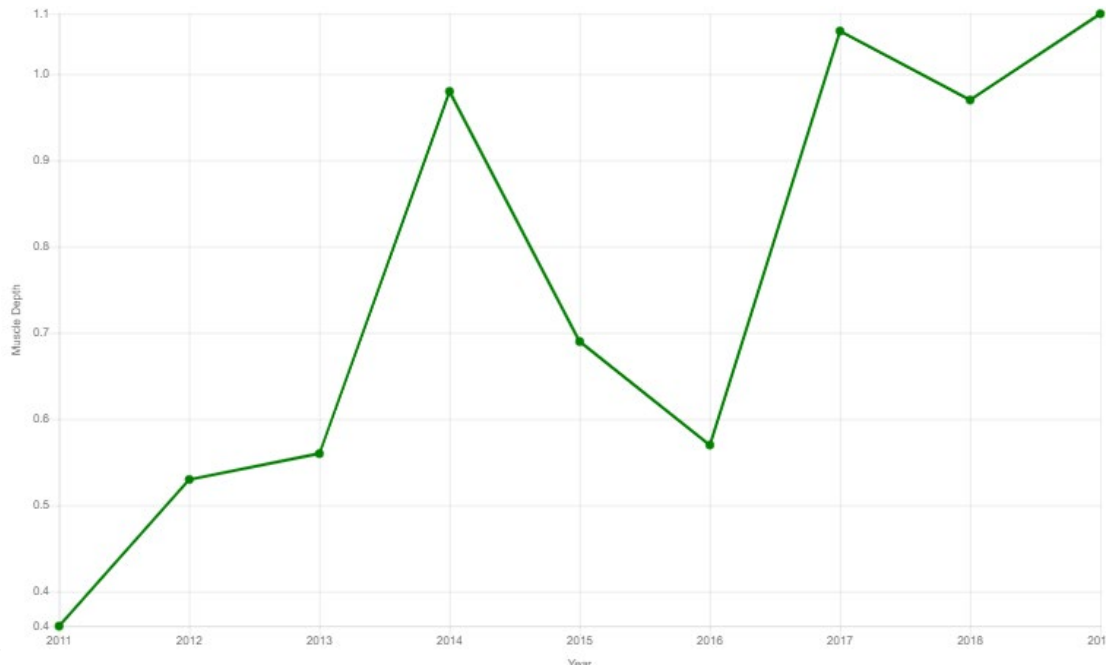
<https://signetdata.com/breed-summary/hampshiredown/shearlings>

<https://signetdata.com/breed-summary/hampshiredown/stockrams>

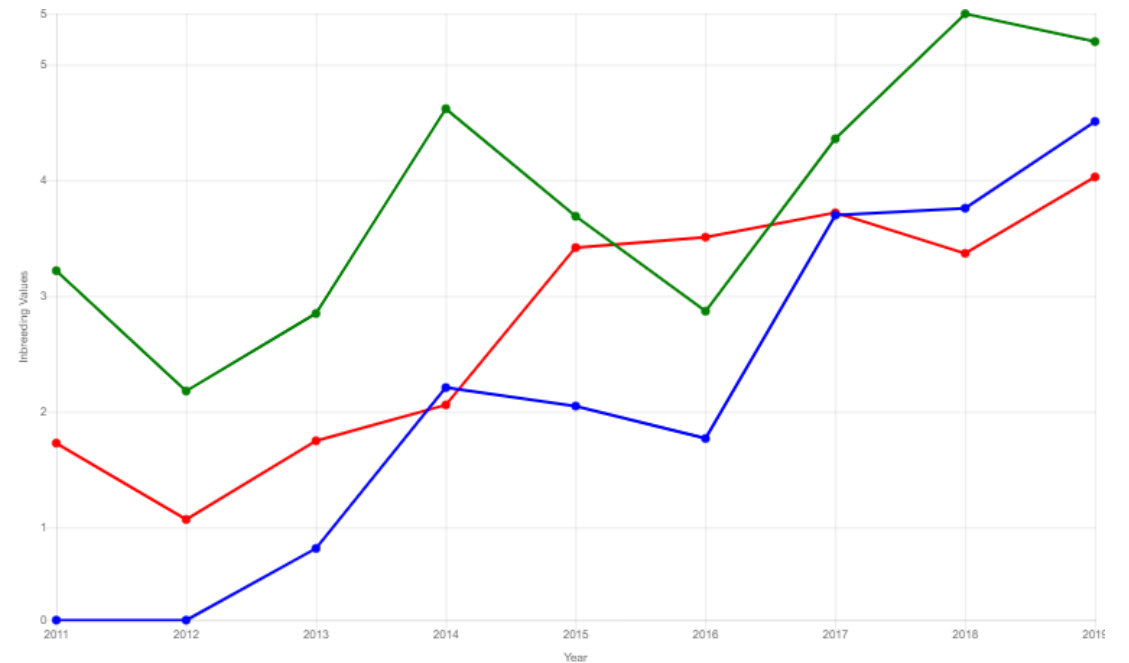
Trends – Any trait, any time

■ Lambs ■ Sires ■ Dams

Muscle Depth



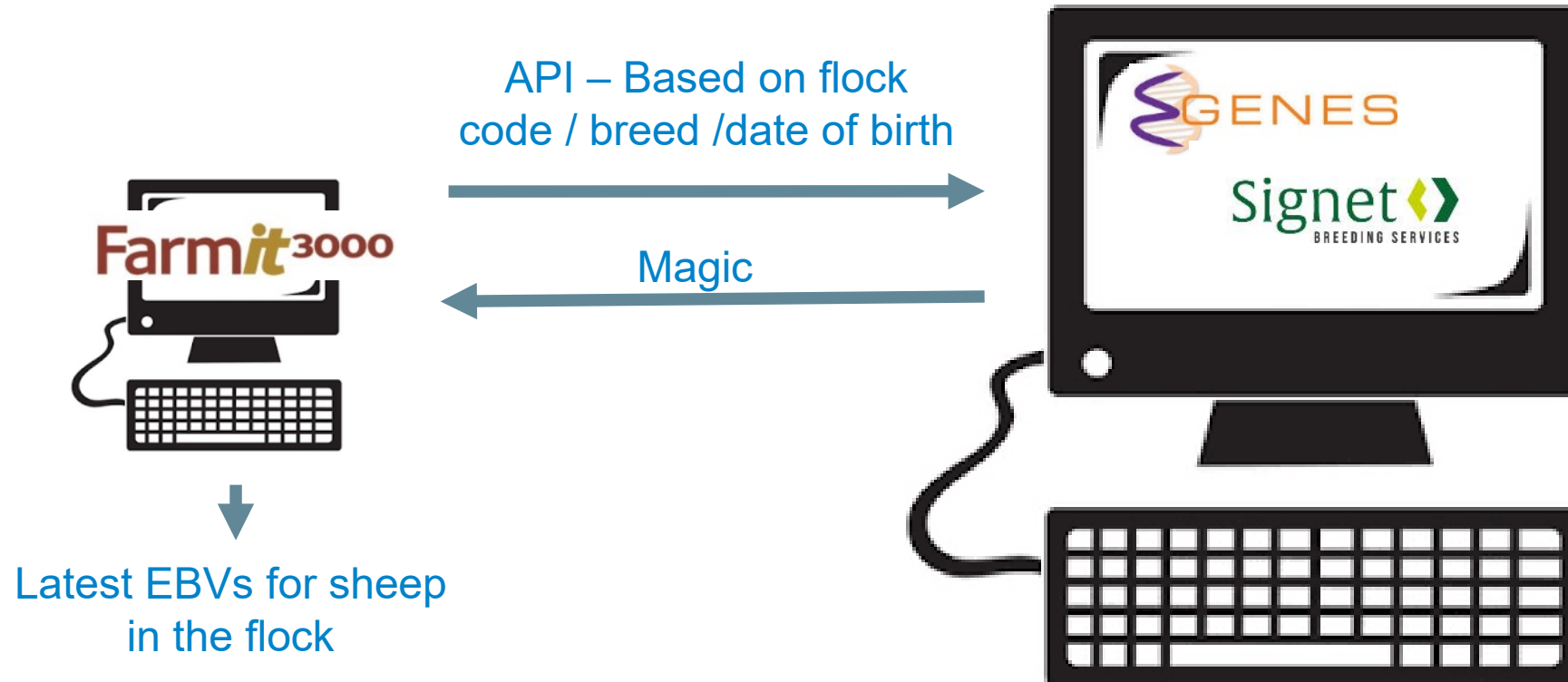
Inbreeding

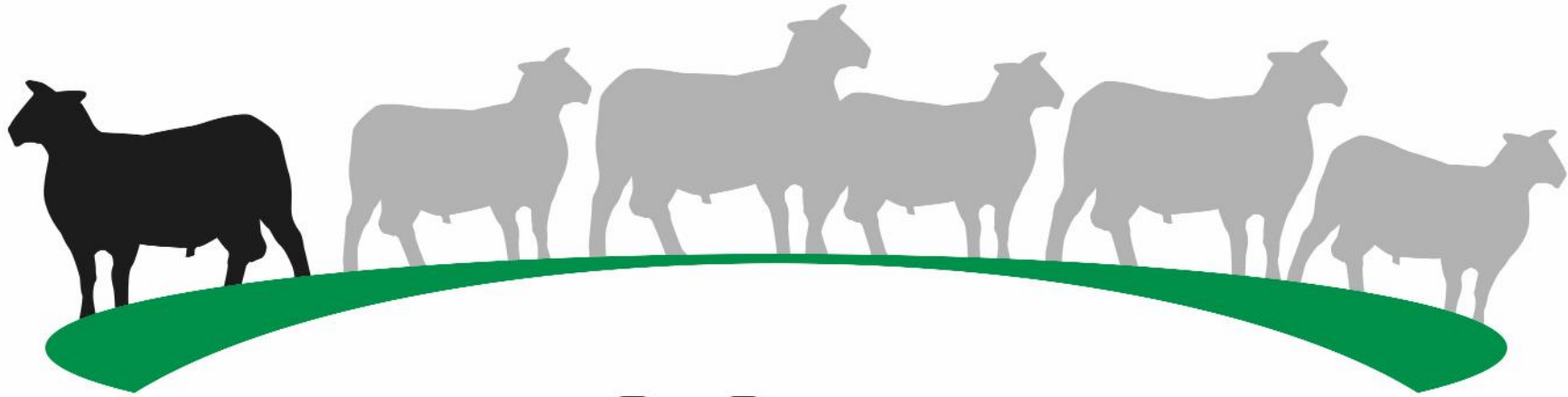


Inbreeding Software – Join exciting workshop tomorrow



API EBV data provision





Ram **COMPARE**

RamCompare

- National Progeny Test for Terminal Sires
- Five year project; ending in 2020
- 283 rams / 11 breeds (5 years)
- >18,500 lambs
- 9 farms
- First results released November 2017
 - Then May each year



RamCompare – What do we analyse?

- Eight week weight
- Scan weight
- Muscle depth
- Fat depth
- Carcase weight
- Conformation
- Fat class
- Days to slaughter
- Shear Force
- Front weight
- Middle weight
- Haunch weight
- **Carcase Merit Index**



YEAR THREE RESULTS



MAY 2019



RamCompare Press Coverage

How sire project could add £5 to lamb value

Now in its fourth year, Ram Compare is uncovering the superiority of high-index sires and their benefits to carcass value. **Michael Priestley** reports



Pedigree ram nominations open for fifth year of RamCompare



The search is on for the country's best rams as pedigree breeders are invited to put forward the rams they feel have been producing the best lamb growth, carcass weight and conformation.

Now in its fifth year, RamCompare uses data from throughout the supply chain to inform genetic evaluations.



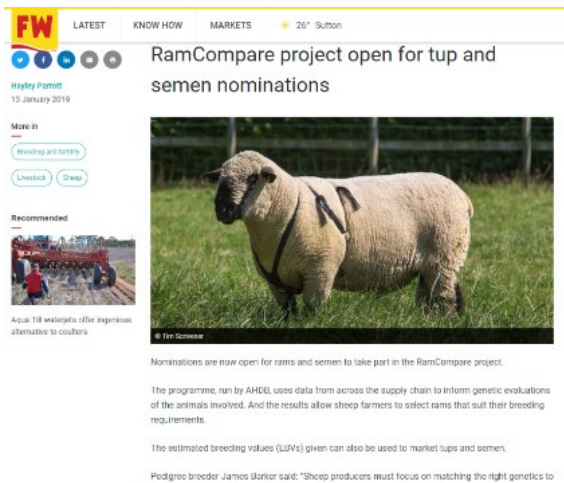
RamCompare project releases final results

The final results released by the RamCompare project have a re-ranking of some farms based on their carcass weight estimated breeding values (EBVs).

Hannah Park
After graduating from Harper Adams University in 2018, Hannah joined the communications team at the National Sheep Association before Lead More...

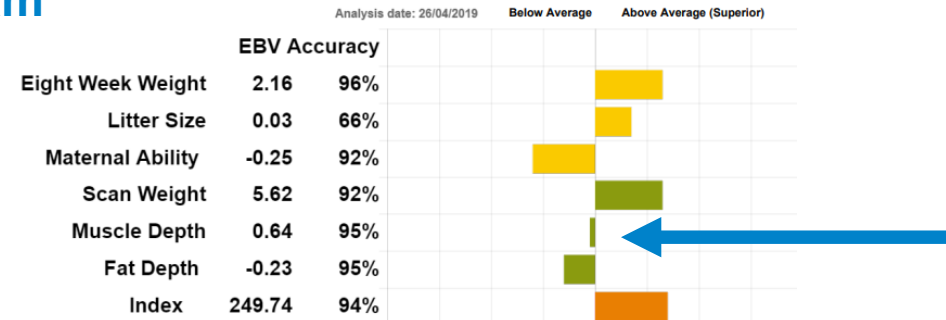


These come after preliminary results were released in November 2017 and have been updated to include records from later-lambing flocks not

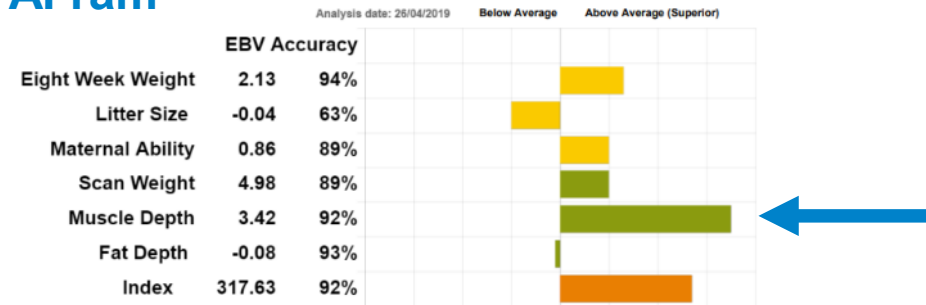


Review of 2018 data shows new EBVs are working!

Stock ram



High EBV AI ram

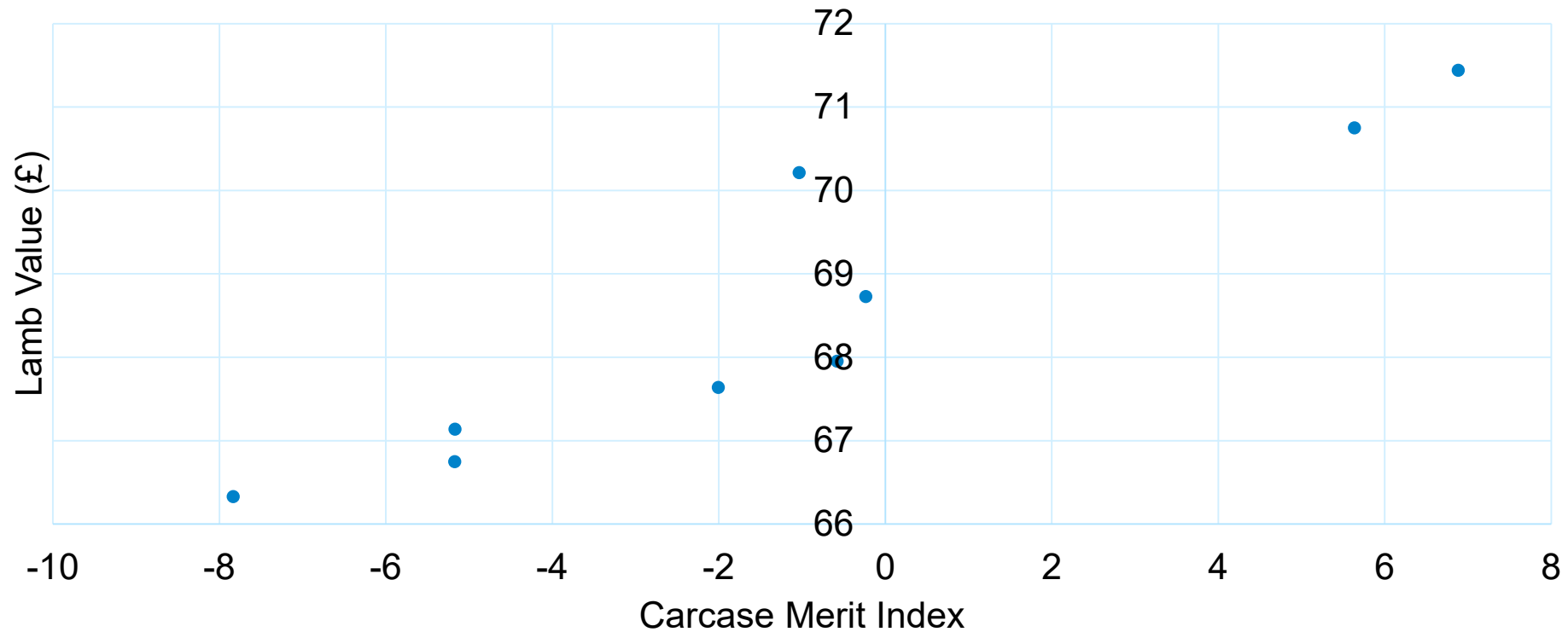


	U	R	O
Stock Ram A (*)	10%	79%	10%
AI Ram B (Lowerye)	62%	38%	

Commercial Value is relating to genetic merit

Example: Rhys and Russell Edwards

Lamb value vs Carcase Merit Index



Branching out: ChazCompare



472 carcass records submitted for mostly Charollais x Mule lambs

A really good dataset set up by two Charollais breeders

RamCompare provides linkage via AI and scans the lambs

Branching Out: Dorset Carcass Trait Project



- Nearly 3,000 sets of carcass data from four main flocks
- Analysed using RamCompare approach – with similar results

Ram nominations to date

- Five farms in phase I and nine farms in phase II

Year	Total rams nominated	AI sires	NS sires	Total rams used	Farms	AI sires	NS sires	Breeds on test
2015	200	72	128	39	5	8	31	Suffolk, Texel, Charollais, Meatlinc, Hampshire Down
2016	285	45	240	34	5	13	21	
2017	144	74	70	75	9	31	44	Plus Beltex, Bleu du Maine, Blue Texel, Poll Dorset, Southdown, SuffTex, Shropshire
2018	202	128	74	77	9	33	34	
2019	204	65	139	68	7	28	40	

- Nominations will open in the new year for phase III (if successful)

Veterinary considerations

- Rams must be fit for purpose
- Rams isolated in quarantine - general examination, fertility test
- Disease risks are minimised - diagnostic tests confirm status for CLA, Border Disease, Johnes Disease, Sheep Scab ELISA, MV for accredited farms
- Quarantine drugs
- Knowledge of host farm ewe status (MV, Johnes, CLA)



What we know....

- Data collection exceeded expectations
- Good industry buyer in and integration into national evaluations

Technical

- Genetics influencing each trait, including days to slaughter
- Ranking of rams for standard traits, primals and shear force
- Economic value of sires with different genetics

What we need to think about in Phase III

1. How do we have more industry impact?
2. The genetic relationships between all traits
 - Which of the on-farm traits are useful

RamCompare events next year

- Sion Williams, Selkirk – June 2020
- Richard Parry, Suffolk – July 2020
- Adrian Coombe, Cornwall – July 2020
- Ian Robertson, Hampshire – August 2020 (TBC)
- NSA Events with AHDB, HCC and QMS stands



...with thanks to Bridget, Stuart, Siobhan and team



