



# INTRODUCTION TO PERFORMANCE RECORDING DUTCH SPOTTED SHEEP

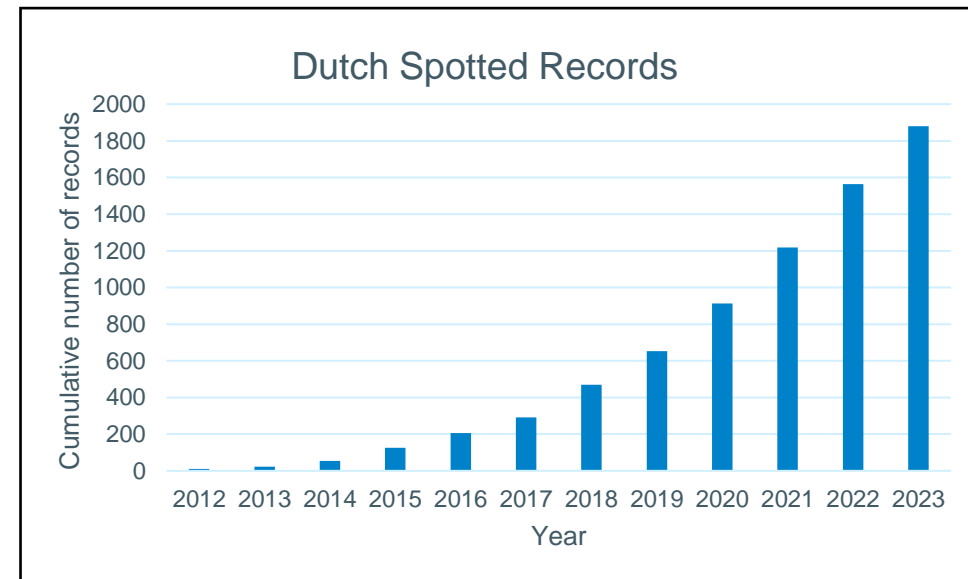
Laura Eyles, Signet Breeding Specialist



BEEF & LAMB

# DUTCH SPOTTED MEETING FOR NEW BREEDERS

- How to find and use breeding values and breeding indexes
- How breeders use ultrasound and CT scanning to assess carcass attributes.
- What is the RamCompare project and how does this relate to performance recording
- How to get started



# WHAT DO YOU WANT FROM THE DATA?

## TO MARKET BREEDING STOCK



Highlight genetic merit of animal & flock



To create EBV charts, Catalogues for marketing



Share data onto other platforms, social media/web pages



Breed summary reports – leading ram lambs etc

## BREED BETTER SHEEP FOR USE ON THE FARM



Assess animal performance



Review ram performance  
Identify ewe / ram lambs to retain  
Cull ewes (in the future and with care)



To create breeding plans and manage inbreeding

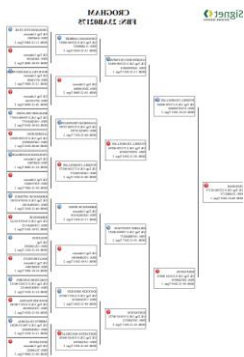


Review strengths/weaknesses in the flock



To assess progress over time (genetic trends)

# WHAT IS PERFORMANCE RECORDING?



**Lot: 0 23DG12693 - FOULRICE - UK 0 122123 12693**  
 B:R 2:2 DoB: 04-12-2022 ET: N Sex: M  
 8 Week Weight: Y Ultrasound Scan: Y CT Scan: N  
**Sire: FOULRICE VALIANT - 20DG10063**  
 G.Sire: 19WVW00677 G.Dam: 18DG08166  
**Dam: FOULRICE - 19DG08943**  
 G.Sire: 17PE05855 G.Dam: 16DG06252

Analysis Date: 21-07-2023

	8 Week Weight EBV	Litter Size EBV	Maternal Ability EBV	Scan Weight EBV	Muscle Depth EBV	Fat Depth EBV	Gilgot EBV	Terminal Sire Index	Maternal Index
EBV	4.34	0.10	0.66	11.34	4.14	-0.27	1.76	446	366
ACC	76%	47%	59%	78%	76%	77%	28%	73%	67%

Vendor: C W Marwood & Son, Tel: 01347 878529, Email: charles.marwood@charollais-sheep.com

Pedigree

Performance – on farm data

Estimated Breeding Values

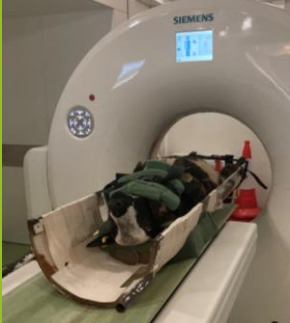

- We combine **pedigree** and **performance data** to create **estimated breeding values (EBVs)** for individual animals
- This can:
  - Improve growth and carcass traits
  - Increase maternal efficiency
  - Enhance animal health and welfare
  - Reduce the carbon footprint of ruminant production

...for both pedigree and commercial breeders

# What are EBVs and Index's

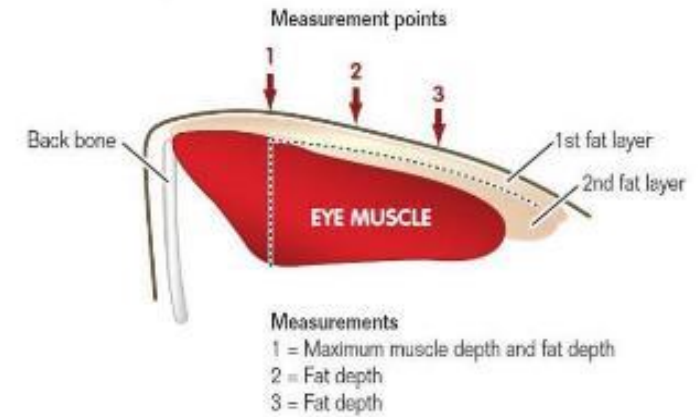
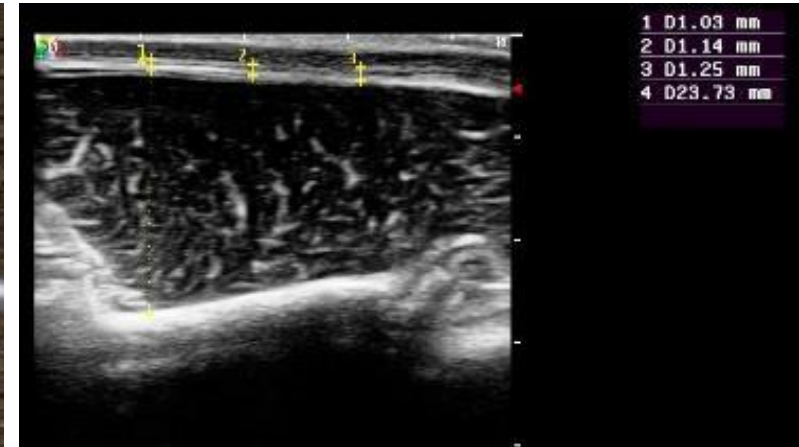
- **Estimated Breeding Values or EBV** – genetic merit for an individual trait e.g. growth rate to 8 weeks
  - **Index** – combine commercially important EBVs to measure overall performance of rams progeny
    - Fast growing
    - Well muscled
    - Optimum finish
- 
- A diagram consisting of a right-facing curly bracket that groups the three sub-bullets under the 'Index' bullet point. To the right of the bracket is a rounded rectangular box containing the text 'Terminal index'.

# WHAT TOOLS DO WE HAVE TO ASSESS CARCASS ATTRIBUTES

	ULTRASOUND SCANNING	COMPUTED TOMOGRAPHY	ABATTOIR DATA (RAMCOMPARE)
			
Amount of data	~1,000,000	~15,000	~45,000
Traits	2 published	7 published (plus others)	4 published
Cost to breeders	Low (~£2.50/lamb)	High (~£50-100/lamb)	Medium



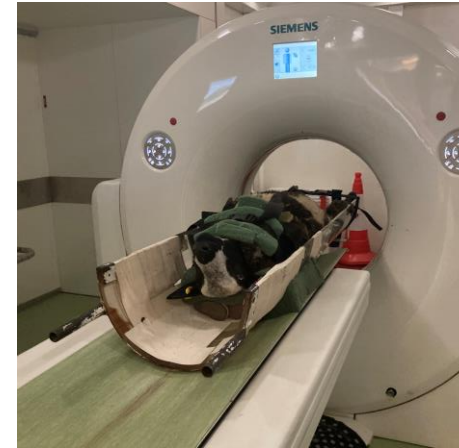
# ULTRASOUND SCANNING



Contact details for technicians can be found on the [Signet website](#)

# CT SCANNING SERVICE

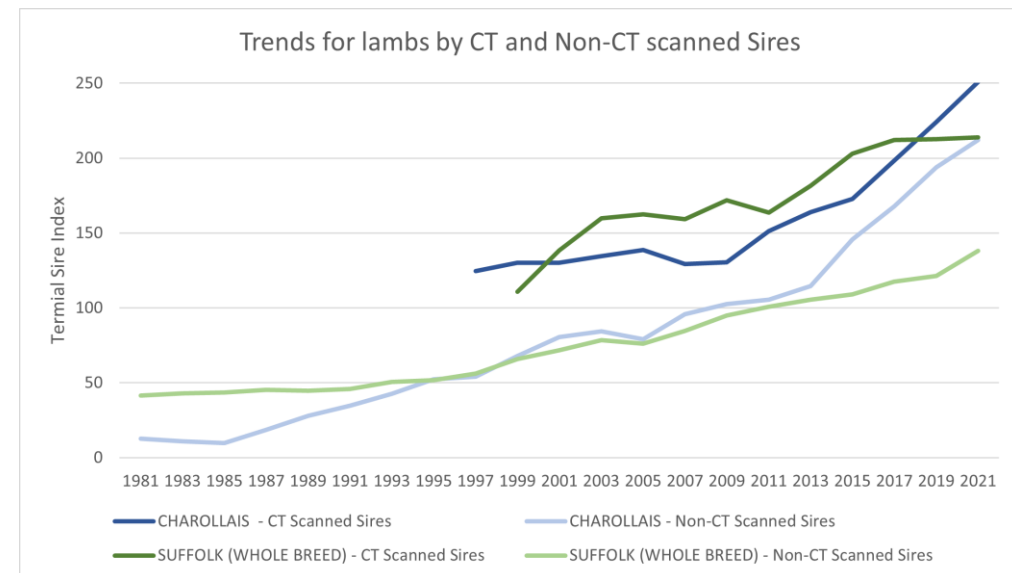
(COMPUTED TECHNOLOGY)



## WHOLE BODY CARCASS ANALYSIS FOR ELITE RAM LAMBS

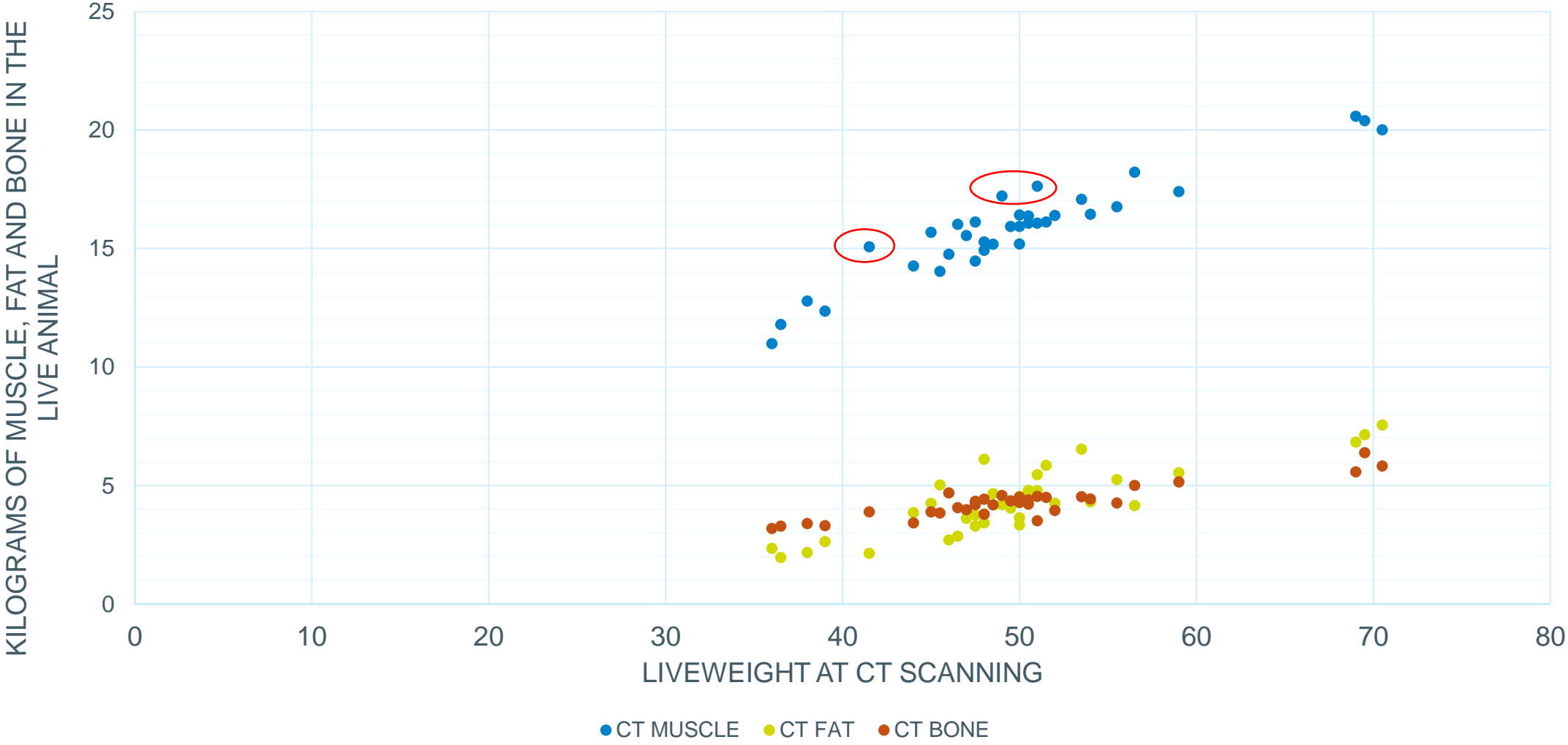
- CT Lean Weight
- CT Fat Weight
- Gigot Muscularity
- Muscle Area
- Spine Length
- Vertebrae Number
- IMF % (Intramuscular fat)

## HOW HAS THIS TECHNOLOGY BENEFITED BREEDERS?





# RAW DUTCH SPOTTED CT DATA FROM 2022/2023

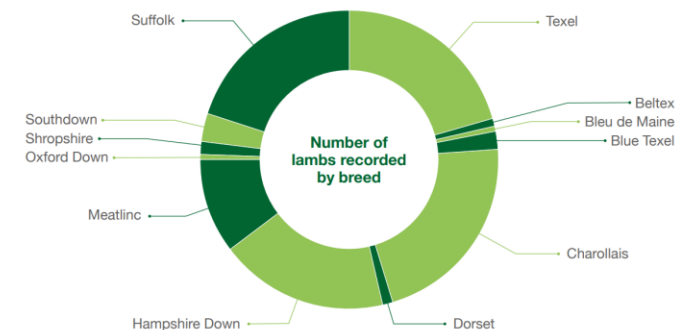




- The UK's first commercial progeny test, in collaboration with industry stakeholders – we are in year 8 of the project with 6 commercial farms, **468 sires** and **>44,500** lambs tested
- Test high performance rams in commercial environments
- Terminal breed comparison irrespective of breed
- New EBVs from commercial data
- **1<sup>st</sup> Dutch Spotted ram on test this year in Cornwall - 47/F07111 - Kilroot Flashman**



BREAKDOWN OF LAMBS RECORDED AS PART OF RAMCOMPARE



# STILL CHANCE TO GET INVOLVED AND PROMOTE YOUR FLOCK AND THE BREED IN 2025

– RAM OR SEMEN NOMINATIONS –

## Ram nominations now open!

RamCompare is seeking performance recorded rams and semen from terminal sire breeds for the 2024 breeding season

**Closing date is Friday 17 May 2024**



Nominate online at [ramcompare.com](https://ramcompare.com)

Signet   
BREEDING SERVICES

AHDB

  
RamCOMPARE

# OUR RAMCOMPARE FARMS AND FARMERS



Duncan Nelles  
Thistleyhaugh Farm, Northumberland



Mark and Lynne Exelby  
Hutts Farm, Yorkshire



Charles and Helen Sercombe  
Sandlands Farm, Leicestershire



Alwyn Nutting,  
Glascoed Farm, Newtown



Andrew Walton and Jamie Wild  
AKA ChazCompare at Redhill Farm,  
Rutland



Adrian and Lyn Coombe  
Dupath Farm, Cornwall



Ian, Helen and Bella Robertson  
Chawton Park, Hampshire



....and in each case the phrase “and family” should be added, with our gratitude





Ram  
Nomination  
& Ram  
Quarantine



Mating –  
NS and AI



Lambing



8 weeks  
weights



Ultrasound  
scanning



Slaughter



Data analysed to produce Estimated Breeding Values and Breeding Indexe

Birth weight  
Lambing ease

Eight Week Weight

Scan Weight  
Muscle Depth  
Fat Depth

Days to slaughter  
Carcase weight  
Carcase conformation  
Fat class

## RAMCOMPARE PROJECT IS DEVELOPING EBVS FOR ABATTOIR DATA



Photo by Robert Smith

### Estimated Breeding Values

- Days to slaughter
- Carcase weight
- Conformation
- Fat class

### Breeding Index

- Lamb Value (£)



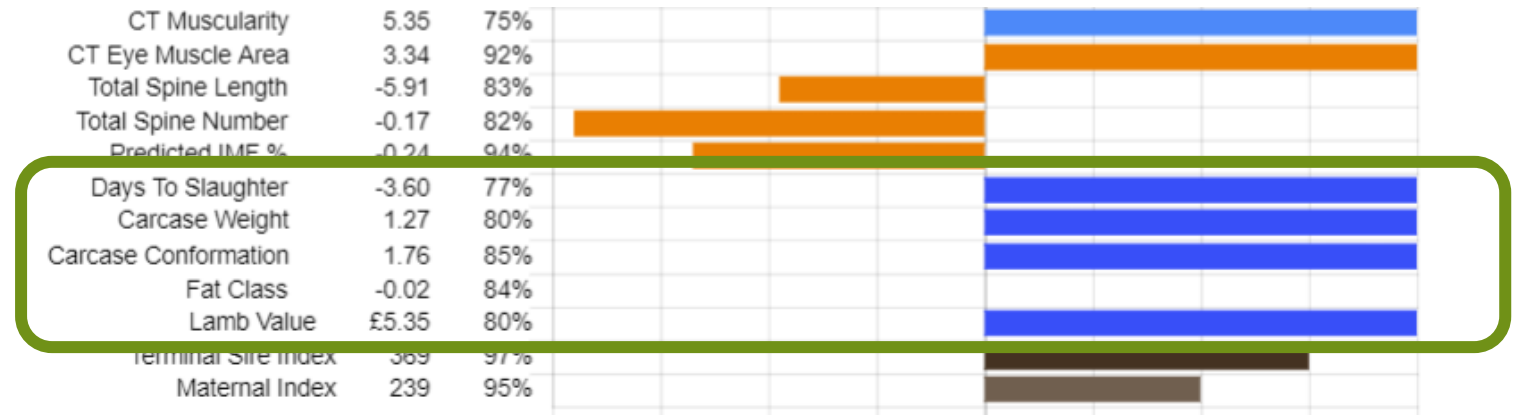
# RAMCOMPARE PROJECT IS DEVELOPING EBVS FOR ABATTOIR DATA

## Estimated Breeding Values

1. Days to slaughter
2. Carcase weight
3. Conformation
4. Fat class

## Breeding Index

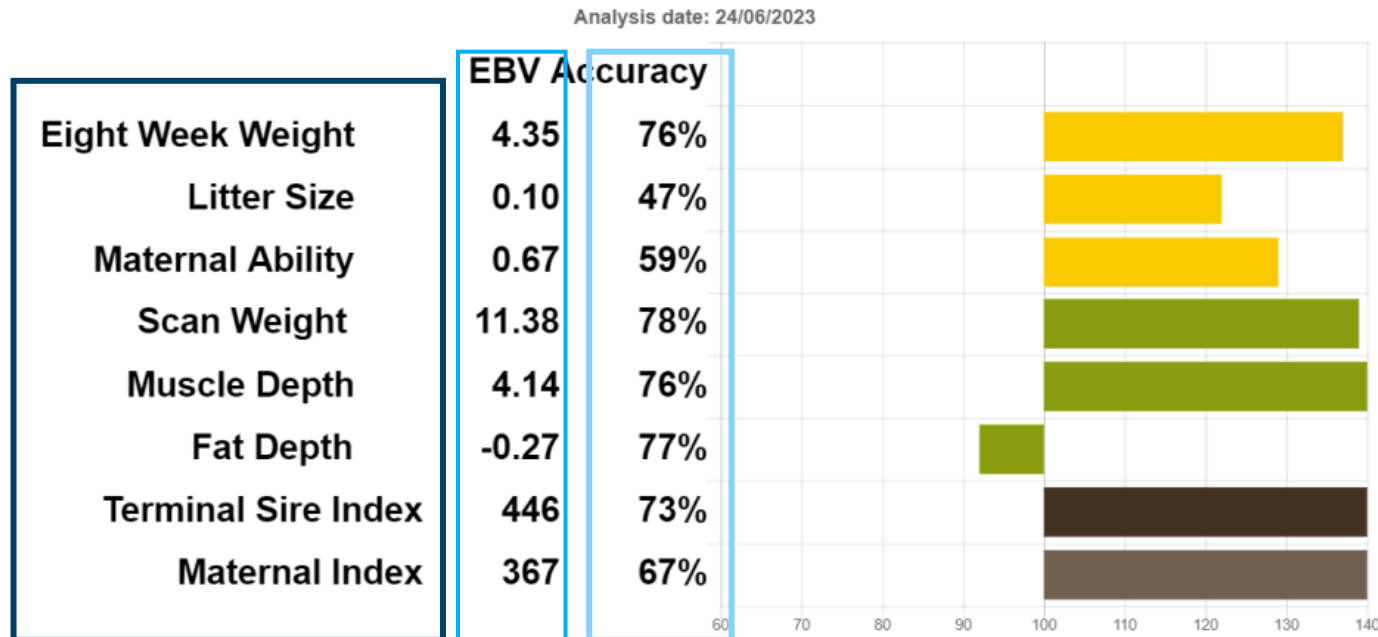
Lamb Value (£)



# Breeding Charts

LOT:	<b>FOULRICE</b>	DOB: 04/12/2022	
	FBN: 23DG12693	Scanned: Y	
	Sire: FOULRICE VALIANT 20DG10063	Dam: FOULRICE 19DG08943	

Estimated Breeding Value	Attribute
Eight Week Weight	Growth
Litter Size	Prolificacy
Maternal Ability	Milk/Care
Scan Weight	Growth
Muscle Depth	Muscling
Fat Depth	Finish
Terminal Sire Index	Profitable slaughter lambs
Maternal Index	Profitable ewes



EBVs are not reported if accuracy values are below the publication criteria

# Sale Catalogues

**Lot: 0      23DG12693 - FOULRICE - UK 0 122123 12693**

B:R 2:2

DoB: 04-12-2022

ET: N

Sex: M

8 Week Weight: Y

Ultrasound Scan: Y

CT Scan: N

**Sire:** FOULRICE VALIANT - 20DG10063

**G.Sire:** 19WVW00677

**G.Dam:** 18DG08166

**Dam:** FOULRICE - 19DG08943

**G.Sire:** 17PE05855

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*Analysis Date: 21-07-2023*

	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	4.34	0.10	0.66	11.34	4.14	-0.27	1.76	446	366
ACC	76%	47%	59%	78%	76%	77%	28%	73%	67%

Vendor: C W Marwood & Son, Tel: 01347 878529, Email: charles.marwood@charollais-sheep.com

Estimated Breeding Value	Attribute
Eight Week Weight	Growth
Litter Size	Prolificacy
Maternal Ability	Milk/Care
Scan Weight	Growth
Muscle Depth	Muscling
Gigot EBV (CT Muscularity)	Muscling
Terminal Sire Index	Profitable slaughter lambs
Maternal Index	Profitable ewes

# WHEN DO I SUBMIT DATA?

## Data deadlines – Monthly Evaluations

- Hill Sheep = 1<sup>st</sup> Tuesday of the month
- Maternal Evaluation = 3<sup>rd</sup> Tuesday of the month
- **Terminal Sire Evaluation = 4<sup>th</sup> Tuesday of the month**



# ENTERING LAMBING (1)



Breed:

Flock/Herd:

samuel.boon@ahdb.org.uk  
Stanford Sheep

- Home
- News
- Sheep Search
- Beef Search
- Member Access
- Data**
- Reports
- Services
- Administrator
- Contact

## Lambing information

Individual lambing events can be entered using this screen.

The flock code/year letter that you wish to enter can be changed [here](#) and you will need to set up your [breeding sires](#) before entering lambing.

When recording dead lambs, they will require a numeric ID - but this can be any value, providing it doesn't repeat within the year.

For more information, check out our [instruction page](#) - or more specifically our instructions for entering [lambing records](#).

### Checking records and notifying Breed Societies

For Hampshire Down and Suffolk breeders wanting to submit this information to their Breed Society - check out the [Grassroots export file](#), which enables you to check your data and then forward your details to the relevant Society. In fact this export file is a good way for any client to check the data submitted to Signet.



Sire	18604:B0280
<a href="#">Edit Breeding Sires list.</a>	
Genetic Dam	UK 0 230922 00036
Date of Birth	14-11-2023
Total Lambs Born	2
Live Lambs Born	2
Service Type	Natural Service

DOB: 21/04/2000 Breed: BEULAH

Name: DOB: 22/03/2016 Breed: BEULAH Last lambed: 244 ago

# ENTERING LAMBING (2)



Breed:

Flock/Herd:

samuel.boon@ahdb.org.uk  
Stanford Sheep

- Home ▾
- News
- Sheep Search ▾
- Beef Search ▾
- Member Access ▾
- Data ▾
- Reports ▾
- Services ▾
- Administrator ▾
- Contact ▾

## Lambing information

### Lambing data for 2 lambs

Genetic Dam ID:	UK 0 230922 00036	<a href="#">Add Notes</a>	Dam Name:
Sire ID	18604:B0280	<a href="#">Add Notes</a>	
Service Type	Natural Service		
Date of Birth	14-11-2023		

### Lamb 1 - Live

Identity	3461
Flock Book Number	UK 0 230922 03461
UK Ministry Tag	UK 0 230922 03461
Sex	M
Birth Weight	3.4
Lambing Ease	Unobserved
Fostered?	No
Notes	



# SUBMITTING WEIGHTS

The screenshot shows a web browser window with the URL <https://signetdata.com/member-data/sheep-weights/>. The page header features the Signet Breeding Services logo and navigation links: Home, News, Sheep Search, Beef Search, Member Access, Data (highlighted), Reports, Services, Administrator, and Contact. The main content area is titled "Sheep Weights" and contains the instruction: "Please select weight type and press 'Load list' button to load animals for the active flock." Below this is a form with a dropdown menu for "Please select weight type" and a blue "Load list" button. The dropdown menu is open, showing the following options: "Please select weight type", "Early Age Wt 1", "Early Age Wt 2", "Shearling Wt", "Scan Weight", "Ewe Mature Weight", and "Liveweight At Slaughter". The "Early Age Wt 1" option is currently selected. The page footer includes the copyright notice: "© Agriculture and Horticulture Development Board 2023 | Use of this site is subject to our terms of use and our privacy policy." and the text: "Signet is a division of the Agriculture and Horticulture Development Board (AHDB)." The footer also contains three sections: "Head Office address" (with the text "Signet Breeding Services,"), "Quick links" (with the link "- AHDB"), and "Social pages" (with icons for Facebook and Twitter).

# SUBMITTING WEIGHTS



Breed:

Flock/Herd:

samuel.boon@ahdb.org.uk  
Stanford Sheep

- Home ▾
- News
- Sheep Search ▾
- Beef Search ▾
- Member Access ▾
- Data ▾
- Reports ▾
- Services ▾
- Administrator ▾
- Contact ▾

## Sheep Weights

Please select weight type and press "Load list" button to load animals for the active flock.

The "Weight Date" field is required for any animals with "Weight" value entered! You can use the global tools to set "Weight Date" and "Management Group" for all animals in the list. If the "Weight" field is left empty, the "Weight Date" and "Management Group" will be ignored and no weight record will be saved for the animal.

129 animals

Set global measurement date.

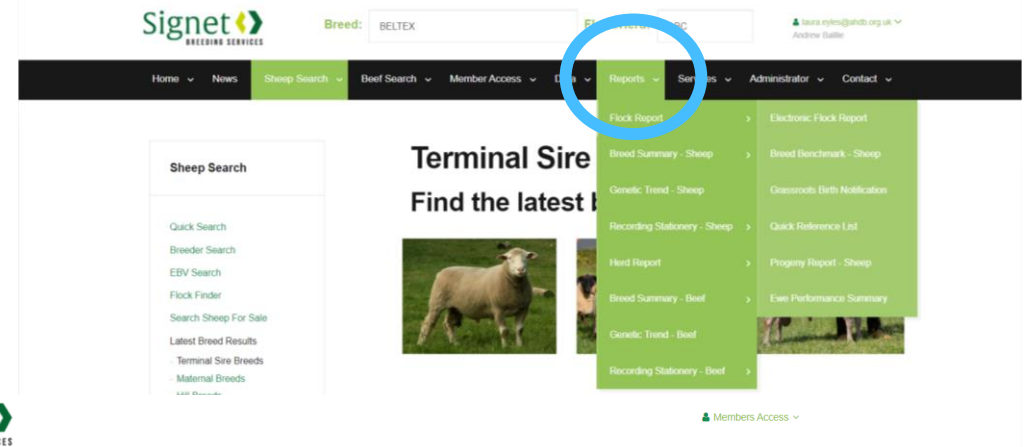
Set global management code.

FBN	DOB	Sex	Weight	Weight Date	Management Group	Status
UK 0 230922 00717	15-03-2023	M	<input style="width: 40px;" type="text"/>	<input style="width: 100px;" type="text" value="dd-mm-yyyy"/>	<input style="width: 80px;" type="text" value="- Select group -"/>	<input style="width: 40px;" type="text" value="Live"/>
UK 0 230922 00718	15-03-2023	M	<input style="width: 40px;" type="text"/>	<input style="width: 100px;" type="text" value="dd-mm-yyyy"/>	<input style="width: 80px;" type="text" value="- Select group -"/>	<input style="width: 40px;" type="text" value="Live"/>
UK 0 230922 00719	15-03-2023	M	<input style="width: 40px;" type="text"/>	<input style="width: 100px;" type="text" value="dd-mm-yyyy"/>	<input style="width: 80px;" type="text" value="- Select group -"/>	<input style="width: 40px;" type="text" value="Live"/>
UK 0 230922 00720	15-03-2023	F	<input style="width: 40px;" type="text"/>	<input style="width: 100px;" type="text" value="dd-mm-yyyy"/>	<input style="width: 80px;" type="text" value="- Select group -"/>	<input style="width: 40px;" type="text" value="Live"/>

# HOW DO I GET MY DATA BACK?

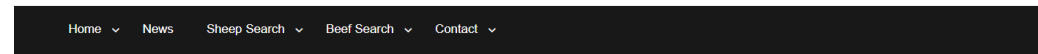
1. Access it directly (online)

There are a list of data deadlines and publication dates online



2. Signet send out reports each month upon submission of data

- In pdf
- In excel
- Both



**Breed Summary for DUTCH SPOTTED - Leading Shearling rams**

Showing 1 to 10 of 65 entries

Produce Report		Showing 1 to 10 of 65 entries													
Identity	Sire	Dam	Type	8 wk	Scan	Musc	Fat	Mgt	Gigot	8wk wt	Mature	Litter	Mat'al	Scn	
Birth Date	Prefix	Name	B:R	adj (kg)	Wt (kg)	Act (mm)	Act (mm)	Group / Age	Score (mm)	EBV (kg)	EBV (kg)	EBV (%)	EBV (kg)	E (kg)	
278/G00635 21-02-2023	520/E00477 SPRING FARM	NL 100187 905208 GRAEME	1: 1	32.7	46.6	30.3	1.70	1 87		1.02 67	1.94 43	-0.01 24	0.20 32	2	
278/G00634 11-02-2023	520/E00477 SPRING FARM	278/E00553 GARETH	1: 1	30.6	47.4	29.3	2.37	1 97		0.74 68	1.37 44	-0.01 22	0.18 34	2	
278/G00593 01-02-2023	528100144338252 SPRING FARM	NL 100194 983862 GONZALOS	2: 2	26.7	46.2	28.2	4.47	1 107		0.47 69	0.87 46	0.02 17	0.49 28	1	
278/G00598 01-02-2023	528100144338252 SPRING FARM	NL 100194 983862 GAVYN	2: 2	26.5	46.4	27.6	2.27	1 107		0.72 69	1.34 46	0.02 17	0.49 28	2	
278/G00594 01-02-2023	528100144338252 SPRING FARM	NL 100194 983862 GUSTO	2: 2	26.7	45.9	27.7	2.77	1 107		0.43 69	0.79 46	0.02 17	0.49 28	1	
278/G00601 02-02-2023	8/E01125 SPRING FARM	NL 100086 415668 GORDON	1: 1	30.3	52.0	25.5	5.87	1 106		1.26 68	2.37 43	0.02 21	0.24 35	3	
135/G03696 11-01-2023	163/E00852 WEDDERBURN	135/E03271	1:	29.5	61.8	26.3	3.20	1 161		0.54 73	0.95 55	0.03 20	0.50 33	1	

# FURTHER INFORMATION ON THE WEBSITE

- **Animal Record**
  - Charts, inbreeding values, family trees
- **Reporting**
  - Flock reports
  - Genetic Trends – tracking progress
- **Breed Summaries**
  - Leading sires, ram lambs
- **Flock Finder**
  - Locate flocks based on distance
- **EBV Search Tool**
  - Find leading genetics
- **Sales Charts and Catalogues**
- **Inbreeding Software**

The screenshot displays the AHDB Signet website interface. At the top, there are navigation menus for 'Home', 'News', 'Sheep Search', 'Beef Search', 'Member Access', 'Data', 'Reports', 'Services', 'Administrator', and 'Contact'. The main content area is divided into several sections:

- Flock Finder:** A section for finding recorded flocks, with a search form for 'Breed' (CHAROLLAIS) and 'Postcode' (CV3 4pe). It includes a 'Search' button and a list of results.
- EBV Search:** A section for searching for specific genetic traits, with a search form for 'Breed' (CHAROLLAIS) and 'Flock/Herd'. It includes a 'Search' button and a list of results.
- Terminal Sire Index Genetic Trend for CHAROLLAIS Breed:** A section showing a table of genetic trends and a line graph. The table has columns for Year, Number of Animals, Lamb Average EBV, Number of Sires, Sire Average EBV, Number of Rams, and Sire Average EBV. The graph shows the trend of these values over time.
- Inbreeding Calculator:** A section for predicting the level of inbreeding between two animals, with a form for 'Please select an active flock/ward from the form above'.

## Terminal Sire Breeds Find the latest breed information

### Dutch Spotted

- Dutch Spotted Breed Benchmark 2024 - National Terminal Sire Evaluation
- Dutch Spotted Top Ram Lambs - Latest information
- Dutch Spotted Top Shearing Rams - Latest information
- Dutch Spotted Top Stock Rams - Latest information
- Dutch Spotted Flock Finder

# WHAT'S NEXT?

- New measurements
  - Methane
  - Rumen Volume
  - Feed Intake
  - Parasite Resistance - FEC/IgA
- Lamb survival
- Lambing ease
- Ewe longevity
- Ewe mature size
- Genomic Breeding Values - DNA sampling/Genotyping

The screenshot shows the Farmers Weekly website interface. At the top, there is a navigation bar with links for 'FW Today', 'Learning', 'Classified', 'Property', 'Jobs', 'Awards', 'Farmo', and 'Advertise'. Below this is a secondary navigation bar with 'LATEST', 'KNOW HOW', 'MARKETS', 'DISCOVER', and 'WEATHER'. The main content area features an article titled 'Sheep get genomic EBVs in major step for hill breeds' by Michael Priestley, dated 11 July 2023. The article includes social media sharing icons, a 'Save' button, and a 'Recommended' section with a thumbnail image of sheep. The main image shows a flock of sheep in a field. The article text states: 'A landmark project has yielded genomic values for the maternal, growth and carcass traits for six British hill sheep breeds. Dubbed the most exciting breakthrough in decades, the genomic estimated breeding values (gEBVs)'.

# The value of genomics

Breeding values are more **informative** and more **reliable**

Capable of generating **faster rates of genetic gain**

Parentage verified

Major genes reported

Higher accuracy values

Better predictions for young animals

Better way to compare between flocks



# HOW DO I GET STARTED?



**LAURA EYLES**

**Senior Signet Breeding Specialist**

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Signet Breeding Services | AHDB | Middlemarch Business  
Park | Siskin Parkway East | Coventry | CV3 4PE

[www.signetdata.com](http://www.signetdata.com)