

# Estimated breeding values (EBVs) for carcass traits



# What is the Carcase Traits project?

The AHDB and HCC-funded Beef Carcase Traits project uses data derived from the British Cattle Movement Service (BCMS) abattoirs and breed societies to produce EBVs for

traits of economic importance to commercial beef producers.

Since 2018, EBVs have been produced on a quarterly basis by SRUC/EGENES from a dataset of over seven million carcase records.

## Days to slaughter

**Definition:** EBV predicting days to slaughter at a given weight and fat class.

**Units:** Days

## Average daily carcase gain (ADCG)

**Definition:** EBV predicting lifetime daily carcase gain.

**Units:** Kilogrammes/day

## The Carcase Traits Project

Breeding values produced as part of the Carcase Traits Project, an AHDB Beef and Lamb, AHDB Dairy and HCC funded research project undertaken by SRUC. This analysis links data from BCMS, abattoirs and Breed Societies to produce Estimated Breeding Values (EBVs) for traits of economic importance.

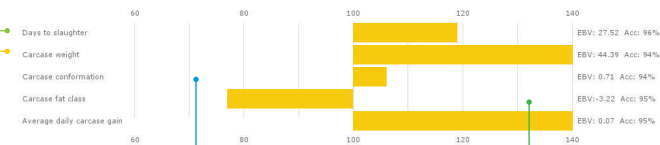
Search for an animal:

### Animal Details

Animal ID	UK544507300054	Date of birth	24/04/2012	Sire	UK521115502048
Prefix name	DUNESK HERO	Sex	M	Dam	UK544507600029
Herbbooknumber	MBM0054131				

### Analysis

Breed in analysis:	Charolais	BLUP Analysis Date:	22/12/2017
Breed group:	Continental	Number of progeny with carcase records:	51
		Number of herds with carcase records:	1



## Carcase weight

**Definition:** EBV predicting carcase weight at a given slaughter age.

**Units:** Kilogrammes (kg)

## Carcase conformation

**Definition:** EBV predicting carcase conformation at a given slaughter age, using records of carcase conformation based on the EUROP grid.

**Units:** Values derived from conformation scores

## Fat class

**Definition:** EBV predicting carcase fat class at a given slaughter age, using values based on the EUROP classification system, where 1 is leanest and 5H is fattest.

**Units:** Values derived from fat class scores

Figure 1. The Carcase Traits website shows EBVs as horizontal orange bars. Bars to the right of centre indicate less days to slaughter, heavier carcasses, superior conformation, fatter carcasses and greater carcase growth

# Your questions answered . . .

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I currently get EBVs for traits such as 400-day weight and eye muscle area from the breed society, which EBVs should I use?

Ideally, both sets if they have reasonable accuracy values. The existing EBVs are important tools for bull selection; the new traits provide an additional level of insight for those traits on which producers are paid.

How does this analysis take into account differences between farms?

In the same way as current pedigree breeding evaluations. Contemporary groups are created to identify individuals reared together on the same farm at the same time. Genetic linkage between these groups is then used to compare their relative genetic merit.

Will selecting bulls with high 400-day weight EBVs reduce days to slaughter or increase carcass weight?

This research shows it will tend to influence both. However, the relationship with days to slaughter isn't strong, as this is also influenced by fatness/finish. The new days to slaughter EBV will enhance selection for this trait.

What does "average" represent on the charts?

Native and continental breeds each get EBVs where a value of 0 is the average genetic merit of either native or continental-bred cattle that were born in 2010.

Can I compare EBVs between breeds?

The aim of this work is to advance within-breed selection. Cattle of the same breed type (continental or native) do have EBVs expressed relative to the same genetic base, so comparison within breed type is possible.

Can I get EBVs for commercial cattle?

Yes, if their progeny have slaughter records and a known sire.

How can I increase the accuracy of my EBVs?

1. Always put sire details (UK ministry number) on the passport
2. If you are selling bulls, get your clients to put sire details on the passport.

**Estimated breeding values are now available for days to slaughter, carcass weight, conformation and fat class**

# Further information

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The new EBVs can be found at [egenes.co.uk/carcassdata](http://egenes.co.uk/carcassdata) The website was established by SRUC and funded by AHDB, and enables producers to find EBVs for specific animals.

For breeds that record with ABRI Breedplan, a link will be created between the animal record on the Breedplan website and this new information.

A factsheet giving more detailed information on this new EBV service is available at [ahdb.blah.blah-final](http://ahdb.blah.blah-final) (web link to be confirmed).

**Why not check out the new EBVs for your cattle now at the website [egenes.co.uk/carcassdata](http://egenes.co.uk/carcassdata)**

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