

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

Days to slaughter

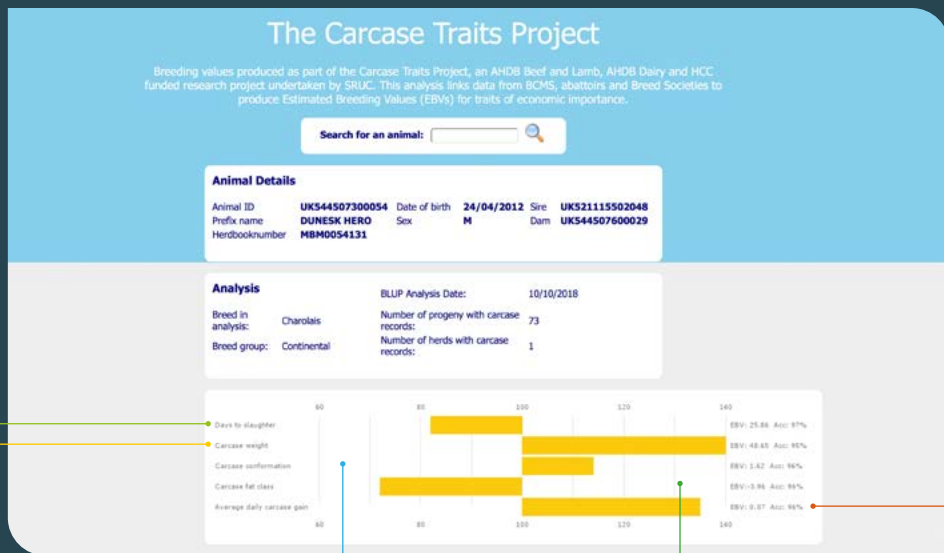
Definition: EBV predicting days to slaughter at a given weight and fat class.

Units: Days

Average daily carcase gain (ADCG)

Definition: EBV predicting lifetime daily carcase gain.

Units: Kilogrammes/day



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 fewer days to slaughter, heavier carcasses, superior conformation, fatter carcasses and greater carcase growth

Your questions answered . . .

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. Individuals reared together on the same farm at the same time are grouped into what we call contemporary groups. 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, ask your clients to put sire details on the progeny's passport.

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

Further information

The new EBVs can be found at **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 weblink will be provided as part of the animal record on the Breedplan website, to allow easy access to this new resource.

For more information on this Estimated Breeding Value service, visit **ahdb.org.uk/knowledge-library/national-beef-evaluations**

Why not check out the new EBVs for your cattle now at the website egenes.co.uk/carcassdata

Produced for you by:

AHDB Beef & Lamb

Stoneleigh Park
Kenilworth
Warwickshire
CV8 2TL

T 024 7647 8834

E brp@ahdb.org.uk

W beefandlamb.ahdb.org.uk

 [@AHDB_BeefLamb](https://twitter.com/AHDB_BeefLamb)

If you no longer wish to receive this information, please email us on **comms@ahdb.org.uk**

While the Agriculture and Horticulture Development Board seeks to ensure that the information contained within this document is accurate at the time of printing, no warranty is given in respect thereof and, to the maximum extent permitted by law, the Agriculture and Horticulture Development Board accepts no liability for loss, damage or injury howsoever caused (including that caused by negligence) or suffered directly or indirectly in relation to information and opinions contained in or omitted from this document.

© Agriculture and Horticulture Development Board 2018.
All rights reserved.

AHDB
