Interpreting beef carcase traits

Breeding values for carcase traits

Estimated breeding values (EBVs) are now available to beef producers for traits derived from abattoir data.

These new EBVs are produced from a multi-breed analysis that brings together information derived from the British Cattle Movement Service (BCMS), abattoirs and third parties, including breed societies. The combined dataset contains over seven million carcase records, representing around 30 per cent of the national slaughter population.

Further information

The new EBVs can be found at egenes.co.uk/carcassdata

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

Which new traits are available?

The following EBVs are routinely produced:

- Days to slaughter
- Carcase weight
- Carcase conformation
- Carcase fat class
- Average daily carcase gain (ADCG)
Interpretation

**Carcase weight**
Definition: An EBV predicting carcase weight at a given slaughter age.
Unit of measurement: Kilogrammes (kg)
Interpretation: A bull with a carcase weight EBV of +10kg will produce progeny that have 5kg heavier carcases than a bull with a carcase weight EBV of 0.

**Carcase conformation**
Definition: An EBV predicting carcase conformation at a given slaughter age.
Calculated from: Records of carcase conformation based on the EUROP classification system.
Unit of measurement: Carcase conformation scores converted to a 45 point score. A conformation grade spans about 9 points.
Interpretation: A bull with a carcase conformation EBV of +9 will produce progeny that have conformation half a grade higher than a bull with a carcase conformation EBV of 0.

**Carcase fat class**
Definition: An EBV predicting carcase fat class at a given slaughter age.
Calculated from: Records of carcase fat class based on the EUROP classification system, where 1 = leanest and 5H = fattest.
Unit of measurement: Fat class scores (ie values 1 to 5H) are converted to a 45 point score. The difference between the main grades is about 6 points.
Interpretation: A bull with a fat class EBV of -6 will produce progeny that are half a grade lower (leaner) than a bull with a fat class EBV of 0.

**Days to slaughter**
Definition: An EBV predicting days to slaughter at a given weight and fat class.
Calculated from: Dates of birth and slaughter. These are primarily obtained from records within the BCMS database.
Unit of measurement: Days
Interpretation: A bull with a days to slaughter EBV of -20 will produce progeny that reach slaughter 10 days earlier than a bull with a days to slaughter EBV of 0.

**Average daily carcase gain (ADCG)**
Definition: An EBV predicting daily gain in the carcase.
Calculated from: Carcase weight, date of birth and date of slaughter.
Unit of measurement: Kilogrammes (kg)
Interpretation: A bull with an ADCG EBV of +0.2kg will produce progeny that have a daily carcase gain 0.1kg greater than a bull with an EBV of 0.

**Further information**
For more information on the beef carcase traits project, see the Beef carcase traits factsheet, available at beefandlamb.ahdb.org.uk/returns

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