

Understanding Days to Calving EBVs

Calving Ease Dir (%)	Calving Ease Dtrs (%)	Gestation Length	Birth Wt.	200 Day Wt.	400 Day Wt.	600 Day Wt.	Mat. Cow Wt.	Milk (kg)	Scrotal Size (cm)	Days to Calving (days)	Carcass Wt. (kg)	Eye Muscle Area (sq. cm)	Rib Fat (mm)	Angus Breeding Index	Domestic Index	Heavy Grain Index	Heavy Grass Index
+4.6 99%	+6.1 97%								+4.0 98%	-3.1 98%	+42 98%	+4.1 98%	+1.0 98%	+\$ 77	+\$ 88	+\$ 65	+\$ 83
+3.2 98%	+2.0 96%								+1.7 98%	-6.7 96%	+21 98%	+1.0 97%	+1.0 98%	+\$ 127	+\$ 113	+\$ 139	+\$ 119
+0.7 98%	-2.9 96%								+2.8 99%	-5.1 97%	+26 98%	+3.5 98%	+1.3 98%	+\$ 105	+\$ 96	+\$ 120	+\$ 97
+1.0 98%	+1.3 94%								+3.4 99%	-5.4 92%	+31 98%	+9.4 97%	+0.1 97%	+\$ 139	+\$ 120	+\$ 165	+\$ 126
+5.9 98%	+6.2 93%	-9.9 99%	+3.2 99%	+51 99%	+93 99%	+123 99%	+142 99%	+10 98%	+2.4 99%	-12.0 92%	+74 98%	+5.0 97%	-0.2 97%	+\$ 164	+\$ 132	+\$ 194	+\$ 144
+3.3 98%	+4.7 95%								+2.4 99%	-7.0 92%	+6 98%	+4 97%	+1.0 98%	+\$ 105	+\$ 96	+\$ 120	+\$ 97

Days to Calving EBVs are estimates of genetic differences between animals in the time from the start of the joining period until subsequent calving.

Lower Days to Calving EBVs indicate an animal is expected to produce progeny that conceive earlier in the joining period.

Days to Calving EBVs are estimates of genetic differences between animals in the time from the start of the joining period (i.e. when the female is introduced to a bull) until subsequent calving.

Days to Calving EBVs are calculated from the joining records submitted for both heifers and cows who have been mated naturally in a paddock situation, and are expressed in day units.

Lower Days to Calving EBVs indicate an animal is expected to produce progeny that conceive earlier in the joining period. Females with lower Days to Calving EBVs also tend to show earlier puberty as heifers and earlier return to oestrous after calving.

Using Days to Calving EBVs to Compare the Genetics of Two Animals

Days to Calving EBVs can be used to estimate the expected difference in time between the start of the joining period and the subsequent calving of progeny from two animals, with the expected difference equating to half the difference in the Days to Calving EBV of the animals, all other things being equal (e.g. they are joined to the same animal/s).

For example, a bull with a Days to Calving EBV of -6 would be expected to produce daughters that on average, conceive 8 days earlier in the joining period than daughters of a bull with a Days to Calving EBV of +10 (i.e. 16 days difference in the sire's EBVs, then halved as the sire only contributes half the genetics).

Using Days to Calving EBVs to Benchmark an Animal's Genetics with the Breed

Similarly, Days to Calving EBVs can be used to benchmark an animal's genetics for fertility relative to other Angus animals in Australia and New Zealand.

To benchmark an animal's genetics relative to other Angus animals, an animal's Days to Calving EBV can be compared to:

- the breed average EBV
- the percentile table

The current breed average and percentile table for Days to Calving can be found on the Angus Australia website, or they are normally listed in most BREEDPLAN reports, sale and semen catalogues.

Considering Accuracy

An accuracy value is published in association with each Days to Calving EBV, which is usually displayed as a percentage value immediately below the EBV.

The accuracy value provides an indication of the reliability of the EBV in estimating the animal's genetics for Days to Calving (or true breeding value), and is an indication of the amount of information that has been used in the calculation of the EBV.

Days to Calving EBVs with accuracy values below 50% should be considered as preliminary or of low accuracy, 50-74% as of medium accuracy, 75-90% of medium to high accuracy, and 90% or greater as high accuracy.

For further information, please contact staff at:

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