Understanding Milk EBVs

BREEDPLAN

TIP SHEET

The weight of a calf at 200 days is influenced by many factors. Research has shown that around 70% of the variation in the weight of calves at 200 days can be attributed to non-genetic factors (e.g. nutrition, disease), 20% to differences in the calf's genetics for growth and the remaining 10% to differences in the maternal contribution made by the mother.

The maternal contribution of the mother is consequently an important consideration for beef enterprises. Differences in the contribution of the dam to the 200 day weight of the calf are influenced by such things as the amount of milk the calf receives, the quality of the milk received and the mothering ability of the dam. Some of this is due to maternal genetics and some to non-genetic maternal effects.

INTERPRETING MILK EBVS

Milk EBVs provide an estimate of the maternal genetic contribution of a dam to the 200 day weight of her calf. In the case of sires, this estimates the maternal genetic effect that his daughters will contribute to the 200 day weight of their progeny. The Milk EBV is expressed in kilograms (kg).

Larger, more positive, Milk EBVs indicate a greater maternal genetic contribution to 200 day weight. For example, a bull with a Milk EBV of +15 kg would be expected to sire daughters that have a greater maternal genetic contribution to the 200 day weight of their calves than a bull with a Milk EBV of +5 kg. With all other factors (e.g. the 200 Day Growth EBVs of calves) being equal, this greater maternal genetic contribution should be reflected through higher weaning weights among the daughter's calves.

It is important to note that the optimum level of Milk EBV will depend on the production system and environment in which the cows are run. Selection for increased Milk EBVs may be warranted when cows are run under good nutritional conditions and/or calves are sold as weaners. However, some environments may not support high Milk EBVs. For example, under suboptimal conditions, high Milk EBV cows may not get back in calf as easily as lower Milk EBV cows in the following year.

For more information regarding Milk EBVs, please contact staff at your BREEDPLAN processing centre.

BREEDPLAN results are calculated by the Agricultural Business Research Institute using beef genetic evaluation analytical software developed by AGBU and Meat & Livestock Australia Limited.