

Recording Information for Milk EBVs

Milk EBVs provide an estimate of the maternal contribution of a dam to the 200 day weight of her calf. In the case of sires, this estimates the maternal influence that his daughters will have on the 200 day weight of their progeny. Milk EBVs are expressed in kilograms and indicate the expected difference in the weight of the calf at 200 days due to the maternal effect of the cow.

1. Why are Milk EBVs important?

The weight of a calf at 200 days is influenced by many factors. Research has shown that 70% of the variation between the weight of calves at 200 days can be attributed to non-genetic factors (eg. nutrition, disease), 20% to differences between 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.

2. What information do I record?

Milk EBVs are calculated by partitioning the difference in the 200 day weight of calves into growth and milk components. Consequently, the live weight of calves at 200 days need to be recorded for the calculation of Milk EBVs.

To a lesser extent, BREEDPLAN will also use the 400 day weights recorded for calves in the calculation of Milk EBVs (as a repeat measure). Therefore, breeders should also consider recording live weight at 400 days to enhance the accuracy of their Milk EBVs.

3. What considerations should be made when recording this information?

- ❑ Weights should be recorded when animals are between 80 and 300 days of age.
- ❑ Weights should be recorded to the nearest kilogram.
- ❑ Weights should be recorded using appropriate (and accurate) scales. Do not guess/estimate weight or use measuring tapes to calculate weight. Either weigh the calves using appropriate scales or don't record weights.
- ❑ A management group should be entered for any calf or group of calves that have either been treated differently or exposed to significant non-genetic influences since the previous weighing. For example, calves given a supplement should be recorded in a different group to those without a supplement. Consideration should also be given to variations in pasture quality, stocking rates, water quality, etc. Note that blank is a unique management group.

- ❑ To ensure the maximum number of calves are analysed in the same management group, you should try to weigh all the animals from one management group on the same day. BREEDPLAN will automatically split your management groups if you weigh on different days.
- ❑ Ideally, calves should be weighed when they are in as large a group as possible. Consequently, try to weigh calves before any of the calves in the management group are treated differently. For example, weigh before you castrate some of your bull calves or before the show team is separated out from the rest of the group.
- ❑ BREEDPLAN can analyse up to two 200 day weights on each animal. Generally speaking, it is only necessary to record one weight, however in some circumstances, recording more than one 200 day weight may improve the accuracy of the EBVs.

In addition, breeders particularly looking to optimise the quality of the Milk EBVs that are generated for their calves should also consider:

- ❑ The weights of calves should be recorded at or before weaning.
- ❑ If you are concerned that a significant number of cows are weaning calves naturally before the calves are “physically” weaned, then it may be beneficial to consider taking an early weight on all calves. That is, if you aren’t weaning calves until they are 200 days of age but some cows start to “dry off” at 150 days of age, it may improve the accuracy of your Milk EBVs if you weigh all calves when they are around 150 days of age.

4. How do I submit weight information?

Live weight information should be submitted directly to the BREEDPLAN office at ABRI.

The main method of submitting live weight information is by completing the BREEDPLAN “performance recording forms”. Performance recording forms will be sent to you shortly after you record your calves with your Breed Society/Association or can be requested by contacting staff at BREEDPLAN.

Alternatively, live weight information can be submitted electronically via either:

- ❑ a BREEDPLAN compatible herd recording computer program
- ❑ the performance submission facility offered on some Breed Society/Association websites
- ❑ the BREEDPLAN compatible Microsoft Excel template.

For more information regarding how to record information for the Milk EBVs, please contact staff at BREEDPLAN.