

# Recording Information for Milk EBVs



## TIP SHEET

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 (i.e. the sire's grand 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.

### WHY SHOULD INFORMATION FOR MILK EBVS BE RECORDED?

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.

### HOW DO I RECORD INFORMATION FOR MILK EBVS?

Milk EBVs are calculated by partitioning the difference in the 200 day weight of calves into growth and maternal (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, beef producers should also consider recording live weight at 400 days to enhance the accuracy of their Milk EBVs.

### WHAT CONSIDERATIONS SHOULD BE MADE WHEN RECORDING INFORMATION FOR MILK EBVS?

- 200 day weights should be recorded when calves are between 80 and 300 days of age, while 400 day weights should be collected when calves are between 301 and 500 days of age. BREEDPLAN can analyse up to two 200 day weights and two 400 day weights per animal.
- 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. Calves that have been sick should also be placed into a separate management group to their peers. Note that blank is a unique management group.
- To ensure the maximum number of calves are analysed in the same management group, you



should aim 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. Aim 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.

Breeders who are looking to optimise the quality of the Milk EBVs should also consider:

- Recording the 200 day weights of calves at or before physical weaning.
- Recording two 200 day weights for each calf. Recording an additional 200 day weight can help to increase the accuracy of your Milk EBVs. If you are taking two 200 day weights, it is recommended that these are taken at least one month apart.
- BREEDPLAN will also use the 400 day weight recorded for a calf as a repeat measure in the calculation of its Milk EBV. Therefore, recording 400 day weights may further enhance the accuracy of your Milk EBVs. Up to two 400 day weights can be recorded per calf.
- If 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” 200 day weight on all calves. For example, if you normally physically wean and collect a 200 day weight when calves are around 200 days of age, but some cows start to dry off at 150 days, then it may improve the accuracy of your Milk EBVs if you were to weigh all calves when they are around 150 days of age.

## HOW DO I SUBMIT INFORMATION FOR MILK EBVS?

Live weight information should be submitted directly to your BREEDPLAN processing centre using any of the following methods:

- The BREEDPLAN paper performance recording forms (forms can be requested by contacting staff at your BREEDPLAN processing centre).
- The BREEDPLAN compatible Microsoft Excel template (available to download in the [Help Centre](#) on the BREEDPLAN website).
- A BREEDPLAN compatible herd recording computer program.
- The web services area offered on some Breed Society/Association websites.

Please see the [Methods of Submitting Data to BREEDPLAN](#) tip sheet, available in the [Help Centre](#) on the BREEDPLAN website, for further information.

**For more information regarding how to record information for Milk EBVs or Milk EBVs in general, please contact staff at your BREEDPLAN processing centre.**

