



TechTalk

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Performance Recording Mature Cow Weight

Beef producers need to balance the gains of running heavy cows with the cost of maintaining those cows. Depending on the type of country and market prices it may be more profitable to run moderate sized breeding cows rather than large cows.

Beef producers can improve their profits and cut costs by tailoring the weight of their breeding cows to suit their country and market trends.



WHY SHOULD MATURE COW WEIGHT BE RECORDED?

The weight of mature cow has a considerable influence on herd profitability. In general, lighter cows tend to have lower feed requirements and be more efficient to maintain compared to heavier cows.

The returns from cull cows can make up a significant proportion of the total income of a beef breeding business. In most situations heavier weight cows will return more per head than lighter weight cows. However beef producers need to consider the cost of maintaining heavy cows over their lifetime. In

addition, while higher mature weight cows generally produce heavier weight weaners, the number of calves produced per cow joined tends to decrease with increasing mature cow weight.

Using EBVs in bull selection has the added benefit of allowing producers to identify bulls that are “curve benders” for post-birth growth such as 600 day growth and mature cow weight. That is, they produce calves that have genetics for above average post-birth growth but moderate mature cow weight genetics in the retained daughters. This breeding technique can be used to breed moderate, fertile cows but not to the detriment of the growth rates of slaughter progeny such as steers.

INTERPRETING MATURE COW WEIGHT EBVS

Mature cow weight EBVs are estimates of the genetic differences between cows in live weight at five years of age and are expressed in kilograms.

A bull with higher, more positive Mature Cow Weight EBVs is expected to produce daughters with, on average, heavier mature cow weights than bulls with lower Mature Cow Weight EBVs.

The optimal mature cow weight will depend on the individual herd and its breeding objective. For example:

- Breeders looking to decrease the mature weight of their cows may look for lower Mature Cow Weight EBVs.

- Breeders looking to increase their returns from the sale of cull cows may look for higher Mature Cow Weight EBVs.
- Breeders looking to maintain the mature size of their breeding cows while maximising the growth of their progeny to say 600 days may look for moderate Mature Cow Weight EBVs.



RECORDING INFORMATION ON MATURE COW WEIGHT

Mature cow weight EBVs are generated from the live weights of mature cows that are recorded within two weeks of the weaning weight (200 day weight) of their calves, with up to four weights analysed per cow. For temperate breeds, BREEDPLAN will only analyse a mature cow weight if the cow is older than 2.4 years of age (870 days) at weighing. For tropical breeds, this age is 3.0 years (1090 days). Weights are not analysed from cows that do not have a calf weighed at weaning.

As with all weights, mature cow weight should be recorded using appropriate (and accurate) scales. Do not guess or estimate mature cow weight or use measuring tapes to calculate mature cow weight. Either weigh the cows using appropriate scales or don't record mature cow weights.

Mature Cow Weight EBVs for bulls are generated from the mature cow weight performance of all known female relatives such as dam, grand dams, half sisters and daughters. In addition, relationships with other traits, such as 600 day growth, are also used in the calculation of Mature Cow Weight EBVs.

All cows with a calf at 200 days should be weighed each year. Do not try to “guess” whether a cow has had 4 weights taken previously – the BREEDPLAN analysis will sort it out for you.

BREEDPLAN will only analyse the mature cow weight performance of a cow if her first valid mature cow weight has been taken before she is 6 years of age (2200 days). If not, then none of her mature weights will be analysed.

It is essential that correct management group information is recorded with mature cow weight performance. Management groups work slightly differently for mature cow weights. If no management group information is defined for a set of mature cow weights, the BREEDPLAN analysis will use the management groups submitted with the 200 day weights of their calves to sub-group the weights of the cows. Therefore, if you have correctly recorded the management group information with the 200 day weight performance for your calves, then you only need to assign a different management group to a cow that has experienced an effect on her weight that is different to that experienced by her calf. For example, if the cow was injured/sick or has been supplementary fed.

If both the mature cow weights and the 200 day weights for their calves are submitted without management group information, the BREEDPLAN analysis will assume all cows and calves have been run under similar management conditions.





Optionally, cow condition score can also be submitted with mature cow weight information. Condition scores are not currently included in the BREEDPLAN analysis however they may be used in the future when determining Mature Cow Weight EBVs. If breeders wish to record condition scores, it is important that the standard fat scoring system of 1-6 be used (only whole scores) and the same person scores all cows in the herd at a particular weighing.



Do:

- ✓ Record mature cow weights on all cows. BREEDPLAN will work out which weights will be analysed.
- ✓ Measure mature cow weight at weaning or within two weeks of recording a 200 day weight on the calves.
- ✓ Record management group information with mature cow weight performance.

SUBMITTING MATURE COW WEIGHT INFORMATION TO BREEDPLAN

Mature cow weights can be submitted directly to BREEDPLAN. The process to submit mature cow weight data is the same as submitting any other performance data. Mature cow weights can be submitted using:

- Paper performance recording forms.
- The Microsoft Excel Weights & Scanning Information template available on the BREEDPLAN website.
- A data extract from a BREEDPLAN compatible herd recording program.
- Via the Internet Solutions facility on the BREEDPLAN website (for participate Breed Societies).

For further information regarding recording mature cow weight or submitting mature cow weight data to BREEDPLAN, please contact staff at Southern Beef Technology Services (SBTS) or Tropical Beef Technology Services (TBTS).