

Using Australian Murray Grey Selection Indexes



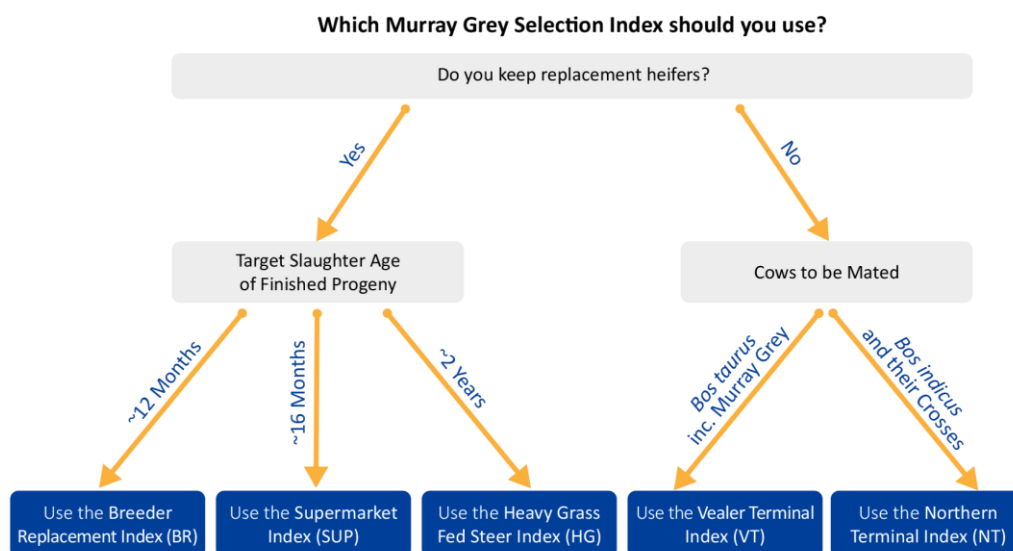
Selection indexes assist beef producers to make selection decisions that take into account the relevant growth, carcass, fertility and efficiency attributes of each animal to identify candidates whose progeny will be the most profitable for a particular commercial enterprise. Selection indexes provide an overall indication of an animal's genetic value for profit in a specific production system/target market and are calculated based on weightings placed on individual traits that are deemed to be important for that production system.

The weightings are calculated using [BreedObject](#) software that analyses all sources of costs and income for the production system represented by each selection index. As such, selection indexes account for both sides of the profit equation and reflect the short and long term profit possible through selection of superior genetics. For example, short term profit can be generated by a bull through the sale of his progeny, and the longer term profit generated by his daughters in a self-replacing cow herd.

Best Practice Guide to Animal Selection Using Australian Murray Grey Selection Indexes

Incorporating selection index information into breeding decisions takes the hard work out of trying to decide how much emphasis you need to put on individual EBVs when determining which animals you want to retain in your herd or purchase. The recommended strategy for selecting animals is to complete the following steps:

1. Identify the selection index of most relevance to your or your client's breeding objectives. This decision should be aided by the index descriptions at the end of this document and the following flowchart.



- Rank animals on the chosen selection index. This can be done via the web search facility available for the breed.
- Consider the individual BREEDPLAN EBVs of importance. All breed level selection indexes are designed for the average of the production system specified in their description. This means that individual farm environments and management choices may require that their own thresholds are applied. For example, if looking for a bull to use over heifers, particular attention should be paid to Calving Ease and Birth Weight EBVs.
- Consider other traits of importance. Structure, fertility (e.g. BULLCHECK™), temperament, genetic conditions and pedigree are all important additional considerations.

Further information is available in the [A BREEDPLAN Guide to Animal Selection](#) tip sheet that can be found in the [Help Centre](#) on the BREEDPLAN website.

Available Australian Murray Grey Selection Indexes

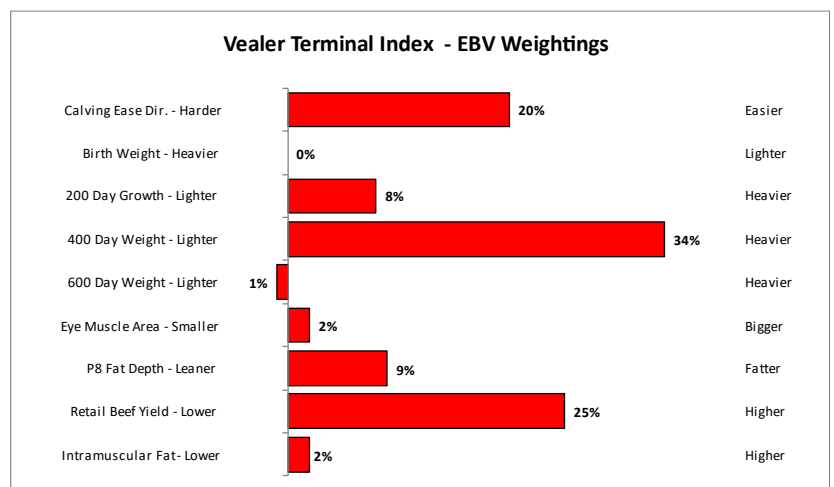
The Murray Grey Beef Cattle Society currently reports five different selection indexes. These are the:

- Vealer Terminal Index (VT)
- Supermarket Index (SUP)
- Heavy Grass Fed Steer Index (GF)
- Northern Terminal Index (NT)
- Breeder Replacement Index (BR)

Each selection index is reported in units of net profitability per cow mated (\$), and targets the following specifications:

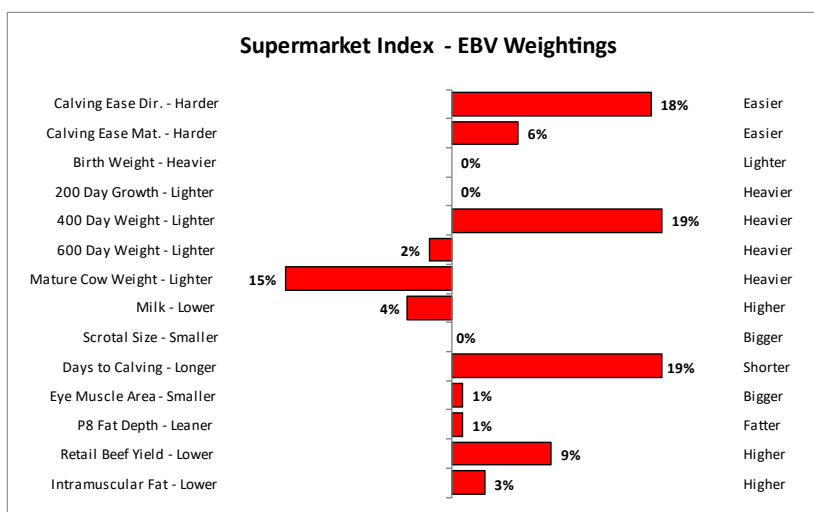
Vealer Terminal Index (VT)

- Crossbred commercial herd using Murray Grey bulls to target vealer production.
- Vealers finished on grass.
- All progeny (including heifers) target slaughter at 12 months of age.
- Progeny target 430 kg live weight (225 kg HSCW & 9 mm P8 fat depth).



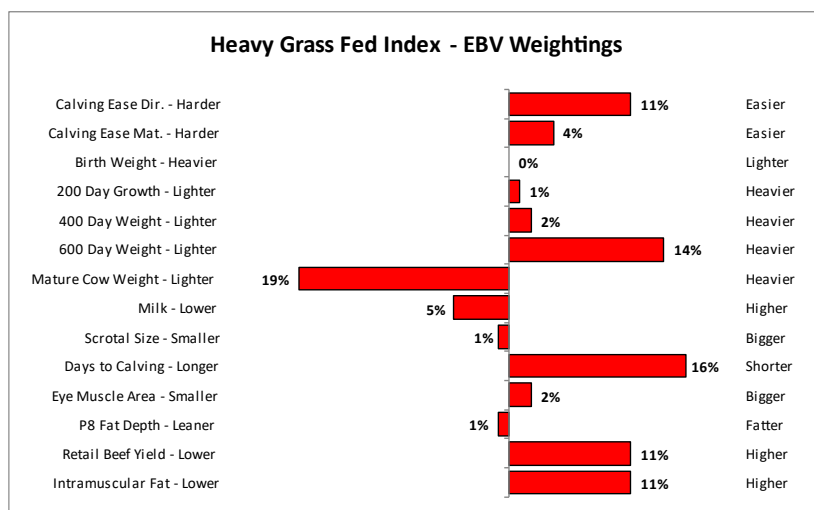
Supermarket Index (SUP)

- Self-replacing commercial herd targeting the domestic supermarket trade.
- Selected heifers are retained for breeding so maternal traits are important.
- Steers target 470 kg live weight (260 kg HSCW & 12 mm P8 fat) at 15 months of age.
- Positive emphasis on carcase quality.



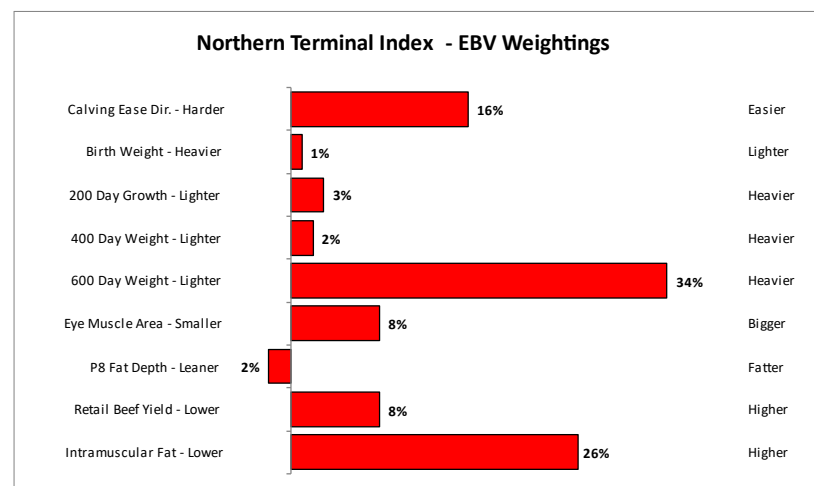
Heavy Grass Fed Steer Index (GF)

- Self-replacing commercial herd targeting heavier grass fed markets.
- Selected heifers are retained for breeding so maternal traits are important.
- Steers target 620 kg live weight (330 kg HSCW & 14 mm P8 fat depth) at 24 months of age.
- Positive emphasis on carcase quality.



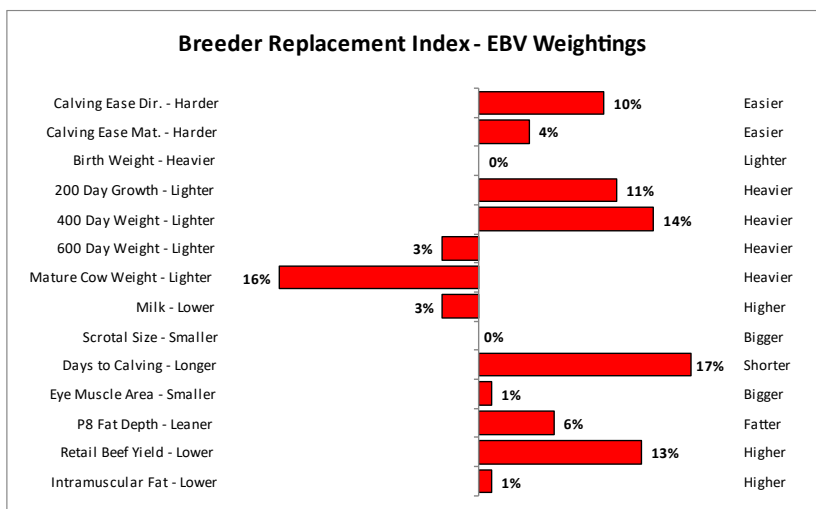
Northern Terminal Index (NT)

- Commercial herd using Murray Grey bulls over cows containing some *Bos indicus* content.
- All progeny (including heifers) target slaughter at 27 months of age.
- Progeny target 550 kg live weight (300 kg HSCW & 10 mm P8 fat depth).
- Positive emphasis on carcase quality.



Breeder Replacement Index (BR)

- Self-replacing commercial herd using Murray Grey bulls.
- Animals finished on grass.
- Selected heifers are retained for breeding so maternal traits are important.
- Steers target 440 kg live weight (230 kg HSCW & 9 mm P8 fat depth) at 12 months of age.



More detail on the trait and EBV emphasis for each of the selection indexes described above is available in the [Australian Murray Grey Selection Indexes: Technical Specifications](#) tip sheet that can be found in the [Help Centre](#) on the BREEDPLAN website.

If you have any further queries regarding the Australian Murray Grey Selection Indexes, please do not hesitate to contact staff at your BREEDPLAN processing centre.