BREEDPLAN Tips

Australian Murray Grey Selection Indexes

There are three different selection indexes calculated for Australian Murray Grey animals. These are:

- Vealer Terminal Index
- Supermarket Index
- Heavy Grass Fed Steer Index

Each selection index describes a different production/market scenario and relates to a typical commercial herd using Murray Grey bulls in temperate Australia targeting the following specifications.

Vealer Terminal Index - Estimates the genetic differences between animals in net profitability per cow joined for an example crossbred commercial herd (i.e. using Murray Grey bulls over British bred females) targeting vealer production. Vealers are finished on grass and marketed at 365 kg live weight (average 200 kg HSCW and 9 mm P8 fat depth) at 10 months of age. Daughters are NOT retained for breeding and so no consideration is given to maternal traits (i.e. calving ease daughters, female fertility, mature cow weight).

Supermarket Index - Estimates the genetic differences between animals in net profitability per cow joined for an example Murray Grey commercial herd targeting production of steers for the domestic supermarket trade. Steers are either finished on grass, or grain fed for 70 days, and marketed at 470 kg live weight (average 260kg HSCW and 12mm fat) at 15 months of age. Daughters are retained for breeding.

Heavy Grass Fed Steer Index - Estimates the genetic differences between animals in net profitability per cow joined for an example Murray Grey commercial herd targeting pasture finished steers for heavier grass fed markets. Steers are assumed marketed at 620 kg live weight (340 kg HSCW and 14 mm P8 fat depth) at 24 months of age. Daughters are retained for breeding.

All selection indexes are reported as an EBV, in units of net profit per cow joined ($) for a given production/market scenario. They reflect both the short term profit generated by a sire through the sale of his progeny, and the longer term profit generated by his daughters in a self replacing cow herd (where applicable).

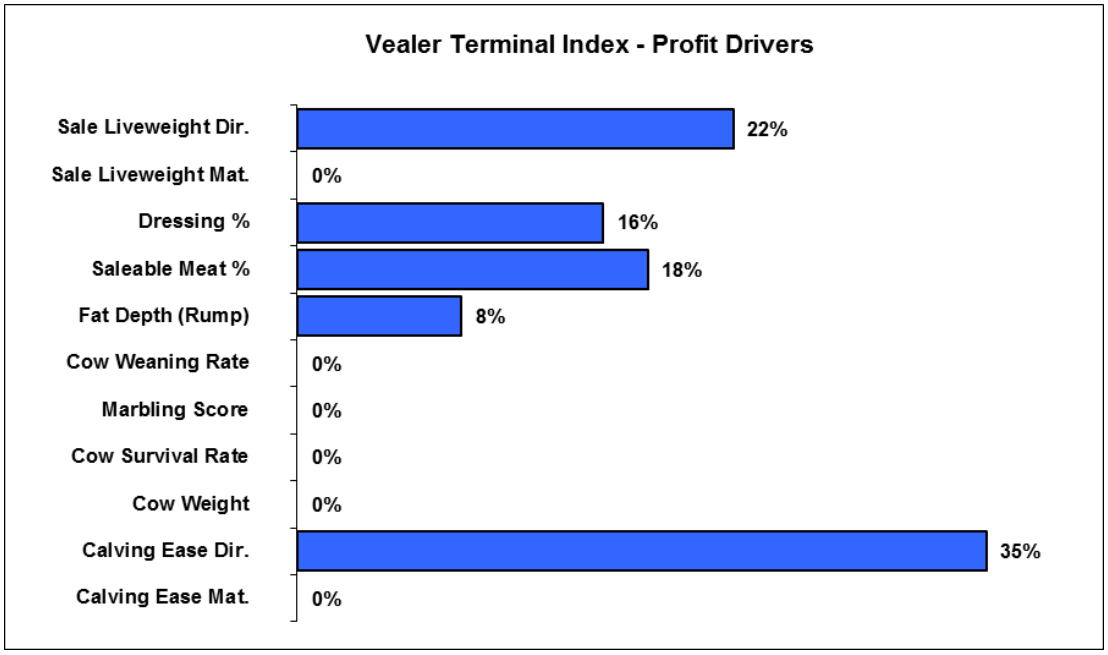
All selection index values have been derived using BreedObject technology. More detailed information regarding each selection index is provided on the following pages.

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

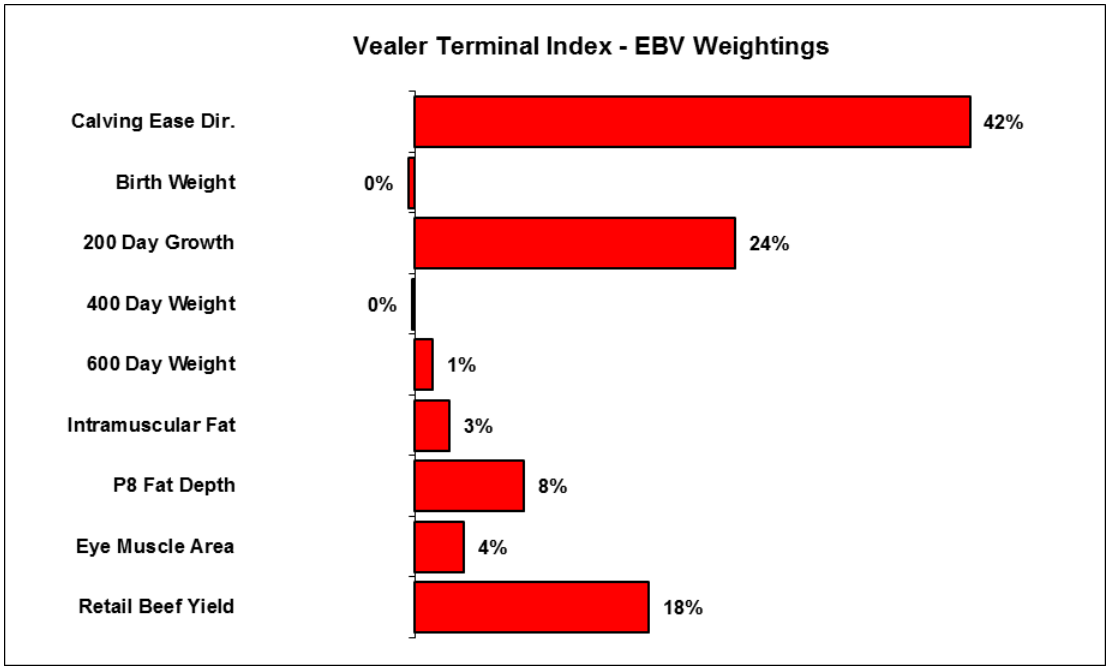
Murray Grey Vealer Terminal Index

The Murray Grey Vealer Terminal index estimates the genetic differences between animals in net profitability per cow joined for an example crossbred commercial herd targeting vealer production. Vealers are finished on grass and marketed at 365 kg live weight (average 200 kg HSCW and 9 mm P8 fat depth) at 10 months of age. Daughters are NOT retained for breeding and so no consideration is given to maternal traits (i.e. calving ease daughters, female fertility, mature cow weight).

The following bar graph shows the key economic traits that are important in this selection index. The different trait emphases reflect the underlying profit drivers in a commercial operation targeting this production system and market.



Considering the genetic relationship between the key profit drivers and the EBVs that are available, this transposes to the following EBV emphasis. The sign indicates the direction of the emphasis. For example, greater 200 Day Weight EBVs and lower Birth Weight EBVs are favoured.



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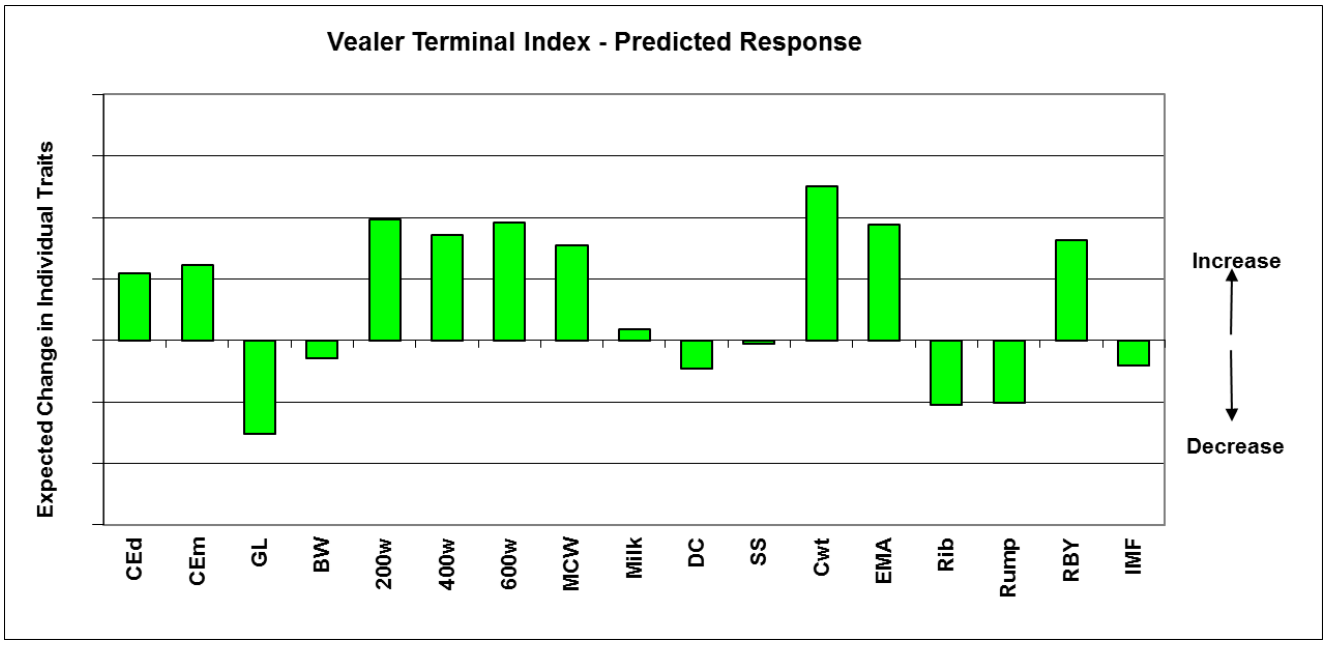
While the graphs on the previous page show the different profit drivers and emphasis that have been placed on each EBV within the Vealer Terminal Selection Index, they do not illustrate the likely change that will occur to each individual trait if producers select animals using this selection index. The response to selection will also be influenced by such factors as the genetic relationship between traits and the animals that are available for selection. For example, while there is a no weighting on 400 Day Weight in this selection index, it would be expected that growth to 400 days would increase as there is a large weighting on 200 Day Weight.

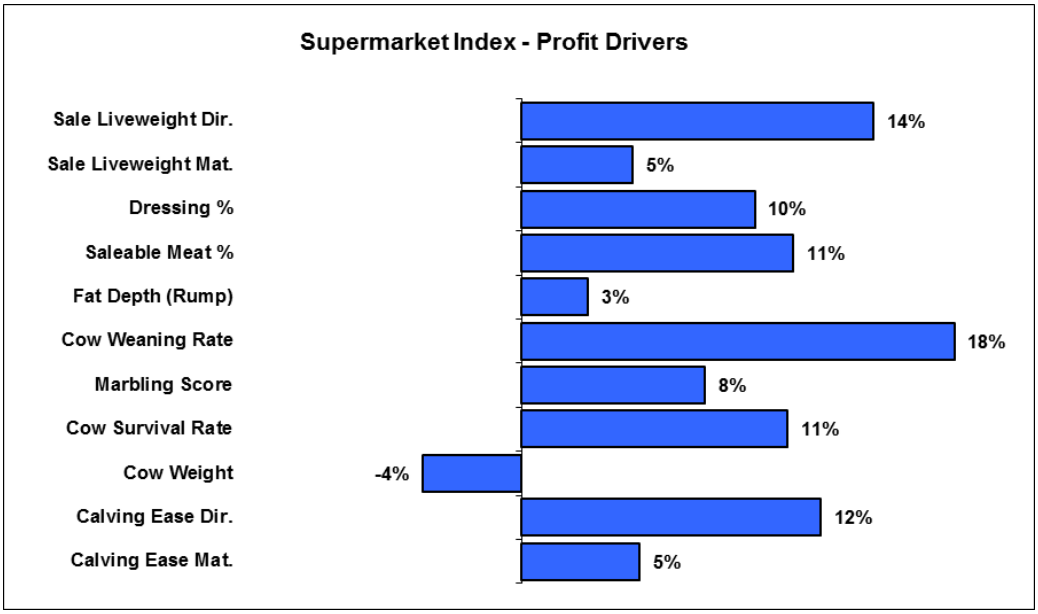
The following bar graph provides an indication of the relative change that would be expected in each individual trait if producers select animals using the Vealer Terminal Selection Index. The graph reflects the relative change if the Murray Grey Published Sires (at the July 2013 Murray Grey GROUP BREEDPLAN analysis) were ranked on this selection index and the Top 10% selected for use within a breeding program. The response to selection may differ if a different group of animals were available for selection.



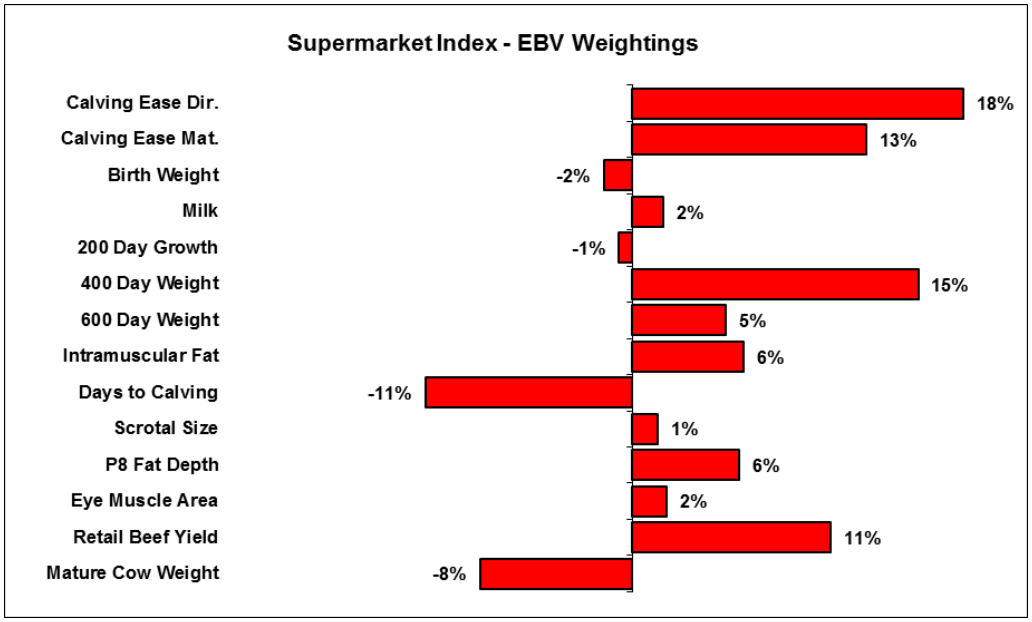
Murray Grey Supermarket Index

The Murray Grey Supermarket Index estimates the genetic differences between animals in net profitability per cow joined for an example Murray Grey commercial herd targeting production of steers for the domestic supermarket trade. Steers are either finished on grass, or grain fed for 70 days, and marketed at 470 kg live weight (average 260kg HSCW and 12mm fat) at 15 months of age. Daughters are retained for breeding.

The following bar graph shows the key economic traits that are important in this selection index. The different trait emphases reflect the underlying profit drivers in a commercial operation targeting this production system and market.



Considering the genetic relationship between the key profit drivers and the EBVs that are available, this transposes to the following EBV emphases. The sign indicates the direction of the emphasis. For example, greater 400 Day Weight EBVs and shorter Days to Calving EBVs are favoured.



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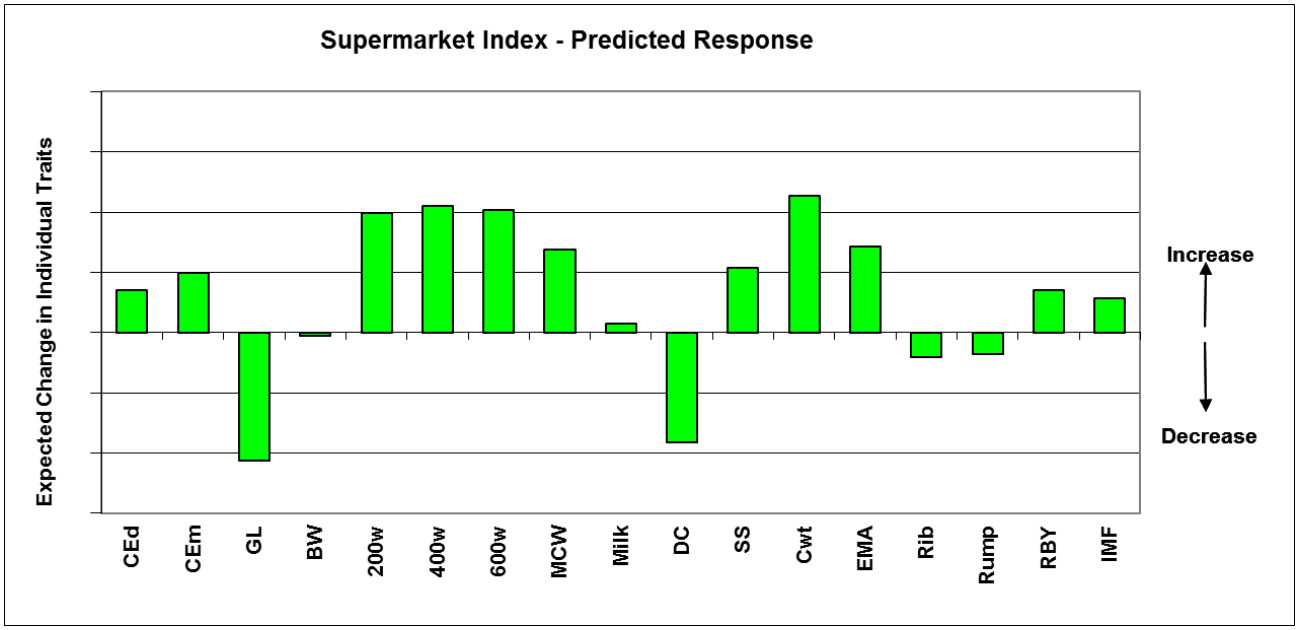
While the graphs on the previous page show the different profit drivers and emphases that have been placed on each EBV within the Supermarket Selection Index, they do not illustrate the likely change that will occur to each individual trait if producers select animals using this selection index. The response to selection will also be influenced by such factors as the genetic relationship between traits and the animals that are available for selection. For example, while there is a slight negative weighting on 200 Day Weight in this selection index, it would be expected that growth to 200 days would increase as there is a large weighting on 400 Day Weight.

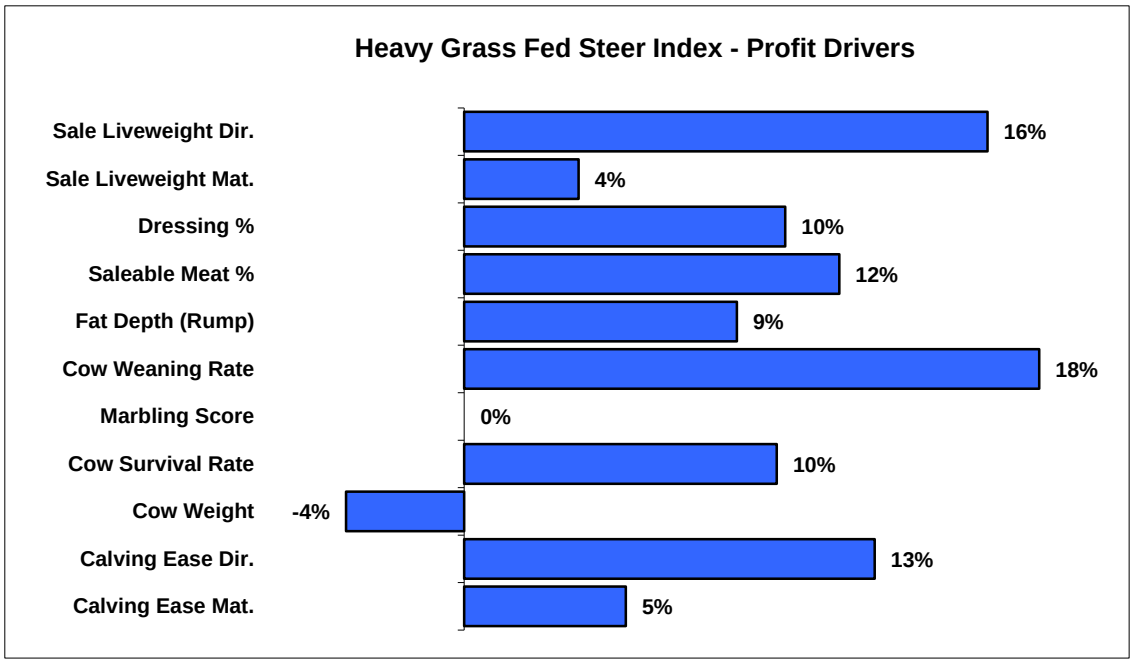
The following bar graph provides an indication of the relative change that would be expected in each individual trait if producers select animals using the Supermarket Selection Index. The graph reflects the relative change if the Murray Grey Published Sires (at the July 2013 Murray Grey GROUP BREEDPLAN analysis) were ranked on this selection index and the Top 10% selected for use within a breeding program. The response to selection may differ if a different group of animals were available for selection.



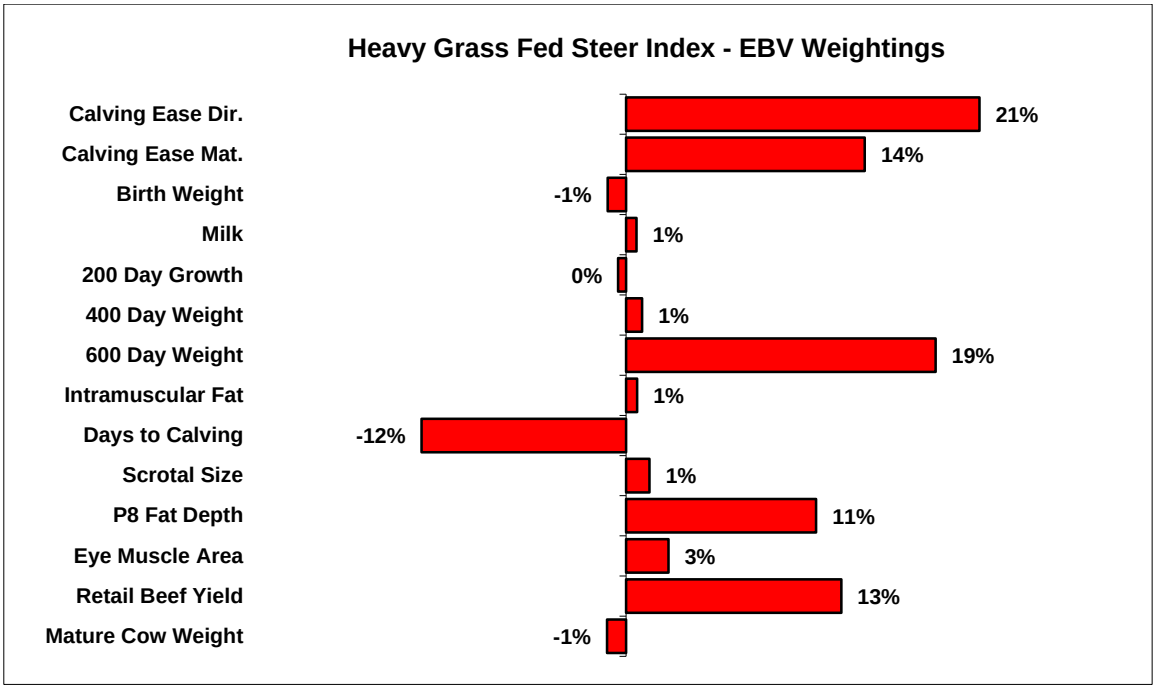
Murray Grey Heavy Grass Fed Steer Index

The Murray Grey Heavy Grass Fed Steer Index estimates the genetic differences between animals in net profitability per cow joined for an example commercial herd targeting pasture finished steers for heavier grass fed markets. Steers are assumed marketed at 620 kg live weight (340 kg HSCW and 14 mm P8 fat depth) at 24 months of age. Daughters are retained for breeding.

The following bar graph shows the key economic traits that are important in this selection index. The different trait emphases reflect the underlying profit drivers in a commercial operation targeting this production system and market.



Considering the genetic relationship between the key profit drivers and the EBVs that are available, this transposes to the following EBV emphases. The sign indicates the direction of the emphasis. For example, greater 600 Day Weight EBVs and shorter Days to Calving EBVs are favoured.



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While the graphs on the previous page show the different profit drivers and emphases that have been placed on each EBV within the Heavy Grass Fed Steer Selection Index, they do not illustrate the likely change that will occur to each individual trait if producers select animals using this selection index. The response to selection will also be influenced by such factors as the genetic relationship between traits and the animals that are available for selection. For example, while there is a no direct weighting on 200 Day Weight in this selection index, it would be expected that growth to 200 days would increase as there is a large weighting on 600 Day Weight.

The following bar graph provides an indication of the relative change that would be expected in each individual trait if producers select animals using the Heavy Grass Fed Steer Selection Index. The graph reflects the relative change if the Murray Grey Published Sires (at the July 2013 Murray Grey GROUP BREEDPLAN analysis) were ranked on this selection index and the Top 10% selected for use within a breeding program. The response to selection may differ if a different group of animals were available for selection.