

Australian South Devon Selection Indexes

There are currently three different selection indexes calculated for Australian South Devon animals. These are:

- ❑ Vealer Index (VLR)
- ❑ Supermarket Index (SUP)
- ❑ Export Maternal Index (EXP)

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

Vealer Index (VLR) - Estimates the genetic differences between animals in net profitability per cow joined for an example commercial herd targeting vealer production. Vealers are finished on grass and are marketed at 320 kg live weight (180 kg HSCW and 4 mm P8 fat depth) at 10 months of age. Daughters are retained for breeding. No marbling is required.

Supermarket Index (SUP) - Estimates the genetic differences between animals in net profitability per cow joined for an example commercial herd targeting the domestic supermarket trade. Steers are either finished on grass or grain (e.g. 70 days). Steers are marketed at 450 kg live weight (250 kg HSCW and 12 mm P8 fat depth) at 15 months of age. Daughters are retained for breeding. In response to industry feedback regarding eating quality and tenderness, a small premium has been placed on marbling.

Export Maternal Index (EXP) – Estimates the genetic differences between animals in net profitability per cow joined for an example commercial herd targeting the production of steers for the export market being finished off grass or through a mid-fed feeding program (e.g. 125 days). Steers are assumed marketed at 600 kg live weight (330 kg HSCW and 20 mm P8 fat depth) at 24 months of age. Daughters are retained for breeding. In response to industry feedback regarding eating quality and tenderness, a small premium has been placed on marbling.

All selection indexes are reported as an EBV, in units of net profit per cow mated (\$) 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.

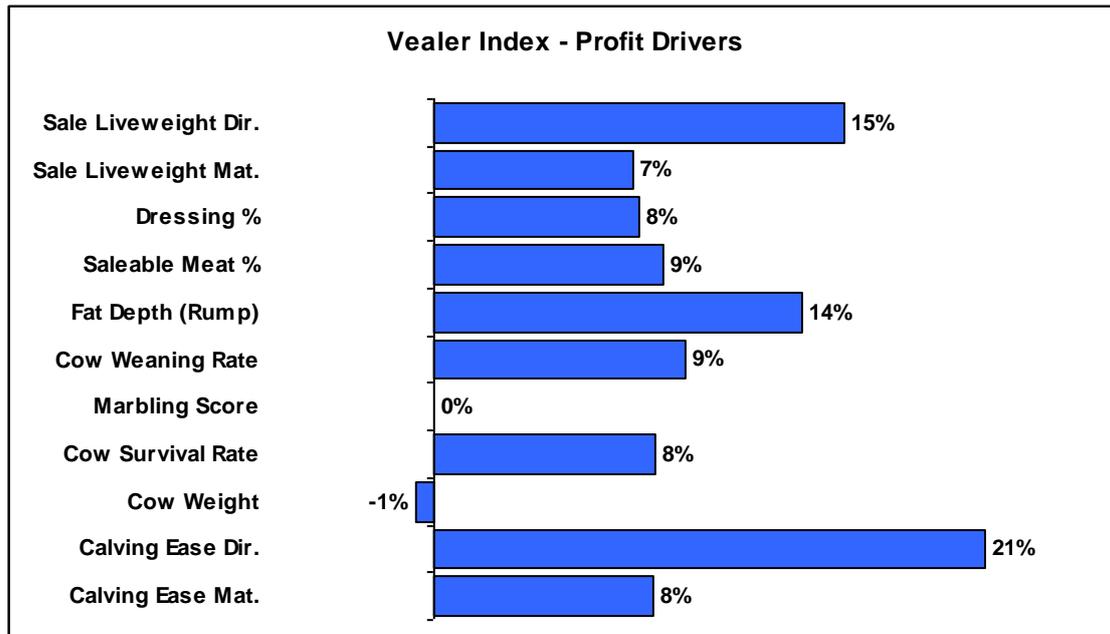
All selection index values have been derived using BreedObject technology. More detailed information regarding each selection index is provided on the following pages. Further information is also available in the Tip Sheet titled “Selection Indexes – A General Introduction”.

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

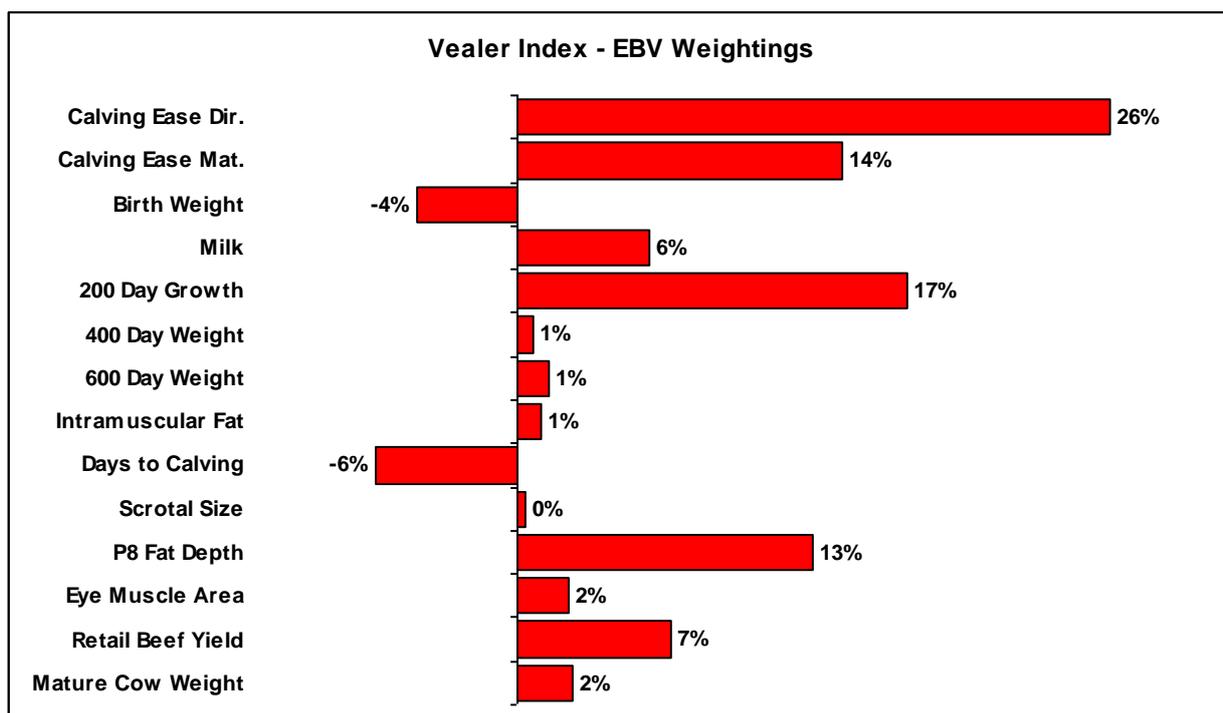
South Devon Vealer Index

The South Devon Vealer Index estimates the genetic differences between animals in net profitability per cow joined for an example commercial herd targeting vealer production. Vealers are finished on grass and are marketed at 320 kg live weight (180 kg HSCW and 4 mm P8 fat depth) at 10 months of age. Daughters are retained for breeding. No marbling is required.

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

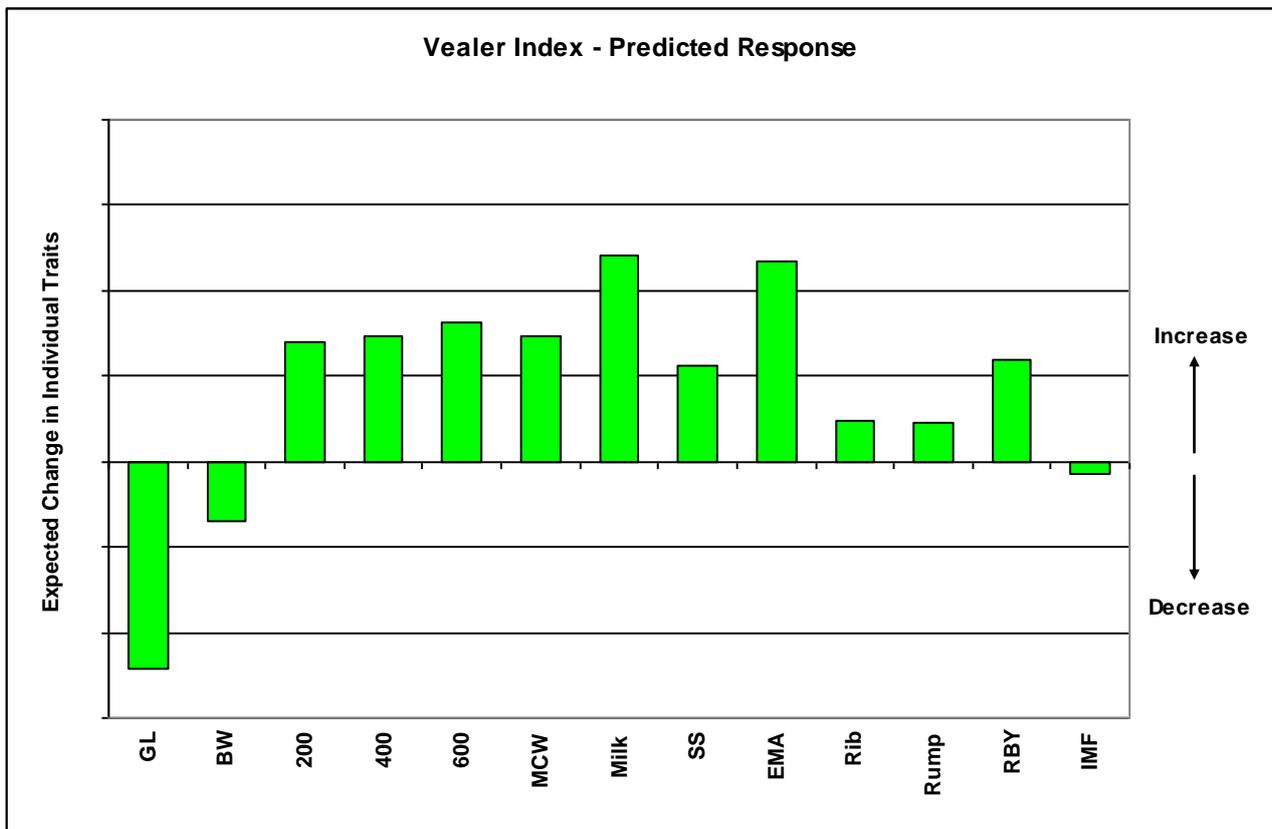


Considering the genetic relationship between the key profit drivers and the EBVs that are available, this transposes to the following EBV emphases. The sign indicates the direction of the emphasis. For example, greater 200 Day Growth EBVs and lower Birth Weight EBVs are favoured.



While the graphs on the previous page show the different profit drivers and emphases that have been placed on each EBV within the Vealer 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 only a slight 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 Growth.

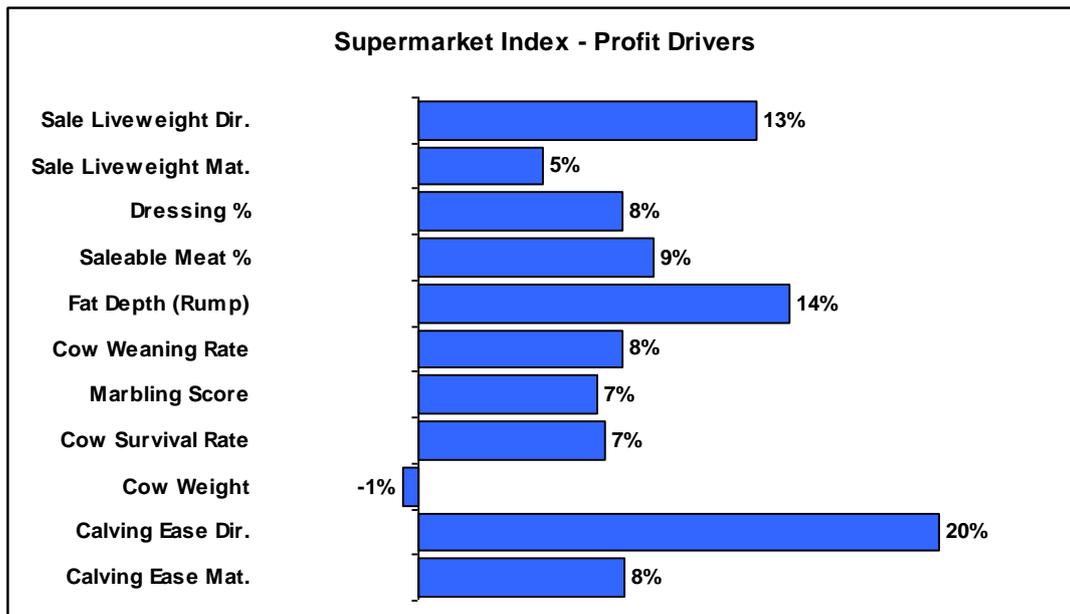
The following bar graph provides an indication of the relative change that would be expected in each individual trait if producers select animals using the Vealer Index. The graph reflects the relative change if the South Devon Sires with an EMA EBV (at the 2010 South Devon GROUP BREEDPLAN analysis) 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.



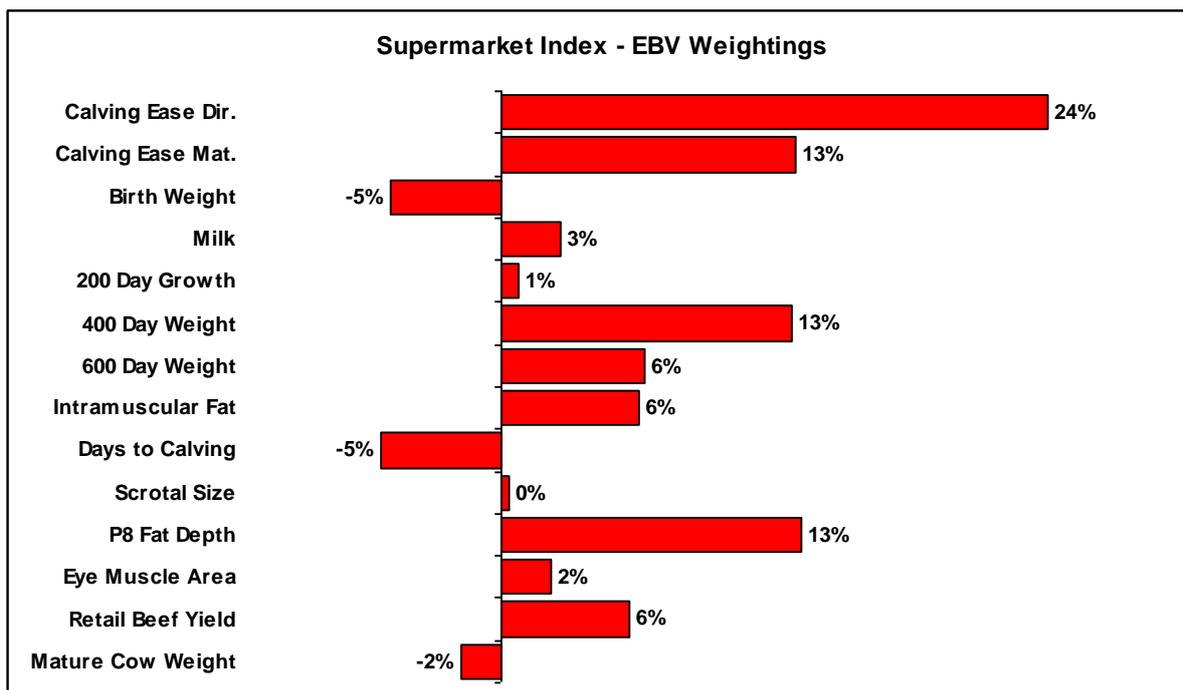
South Devon Supermarket Index

The South Devon Supermarket Index estimates the genetic differences between animals in net profitability per cow joined for an example commercial herd targeting the domestic supermarket trade. Steers are either finished on grass or grain (e.g. 70 days). Steers are marketed at 450 kg live weight (250 kg HSCW and 12 mm P8 fat depth) at 15 months of age. Daughters are retained for breeding. In response to industry feedback regarding eating quality and tenderness, a small premium has been placed on marbling.

The following bar graph shows the key economic traits that are important in this selection index. The different trait emphases reflect the relative importance underlying profit drivers in a commercial operation targeting the domestic supermarket trade.

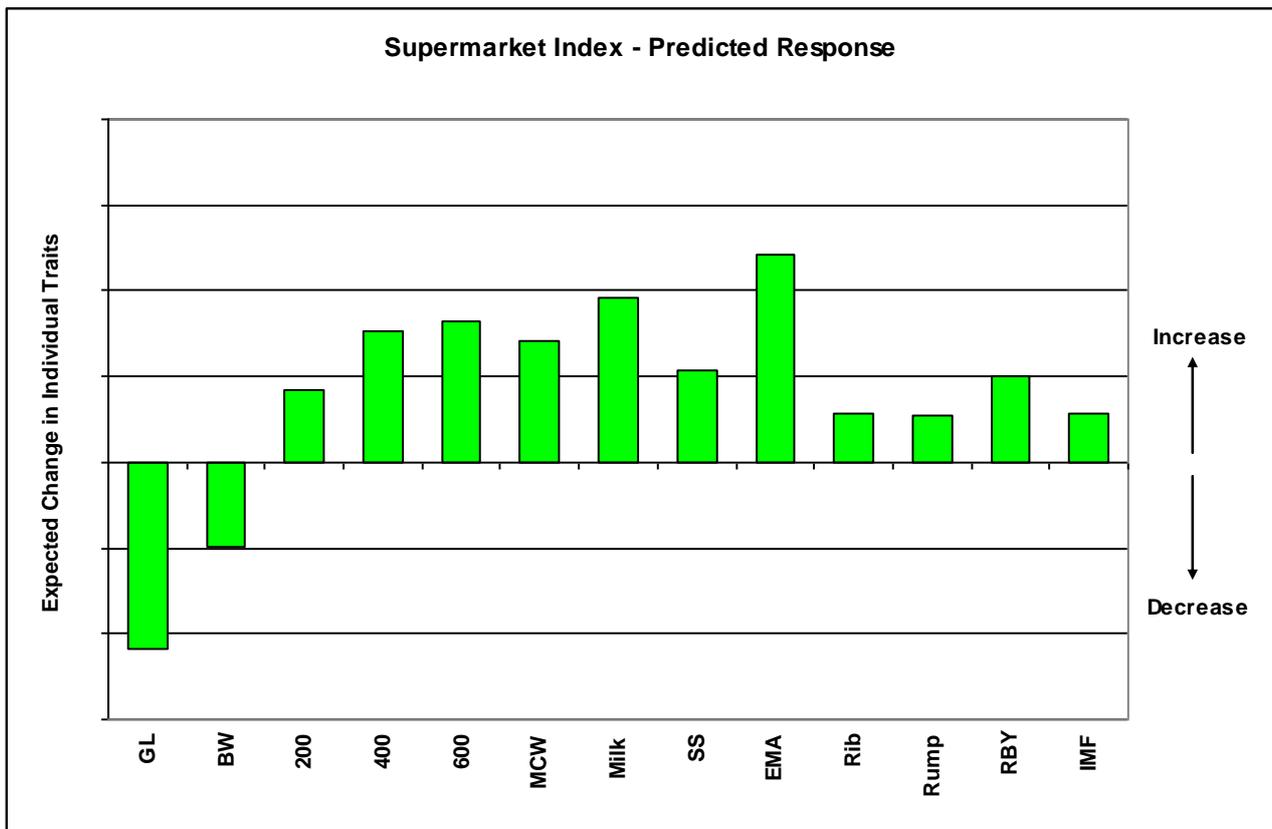


Considering the genetic relationship between the key profit drivers and the EBVs that are available, this transposes to the following EBV emphases. The sign indicates the direction of the emphasis. For example, greater 400 Day Weight EBVs and lower Birth Weight EBVs are favoured.



While the graphs on the previous page show the different profit drivers and emphases that have been placed on each EBV within the Supermarket 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 only a slight weighting on 200 Day Growth 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.

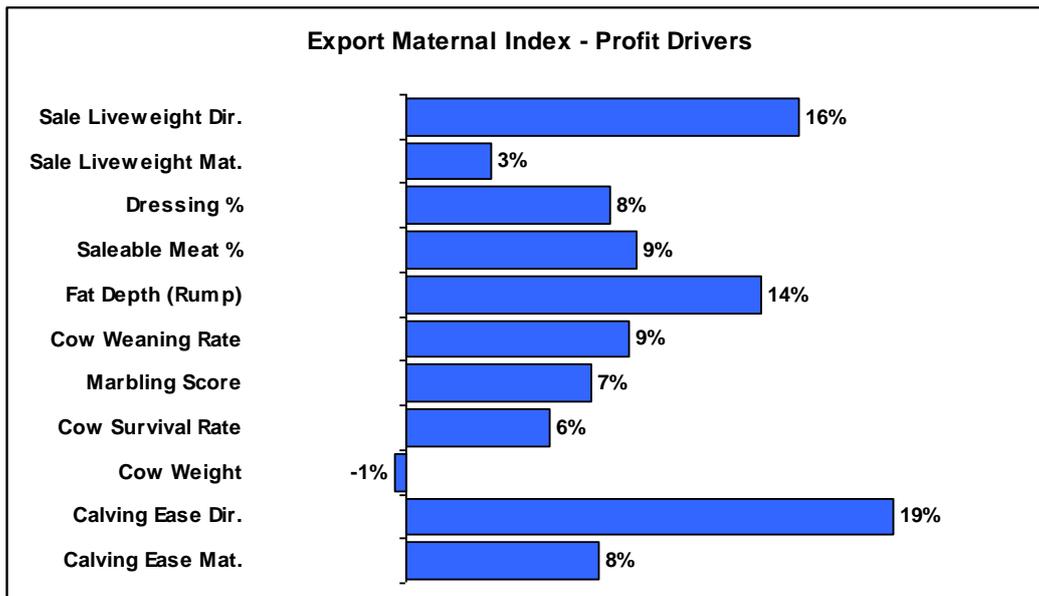
The following bar graph provides an indication of the relative change that would be expected in each individual trait if producers select animals using the Supermarket Index. The graph reflects the relative change if the South Devon Sires with an EMA EBV (at the 2010 South Devon GROUP BREEDPLAN analysis) 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.



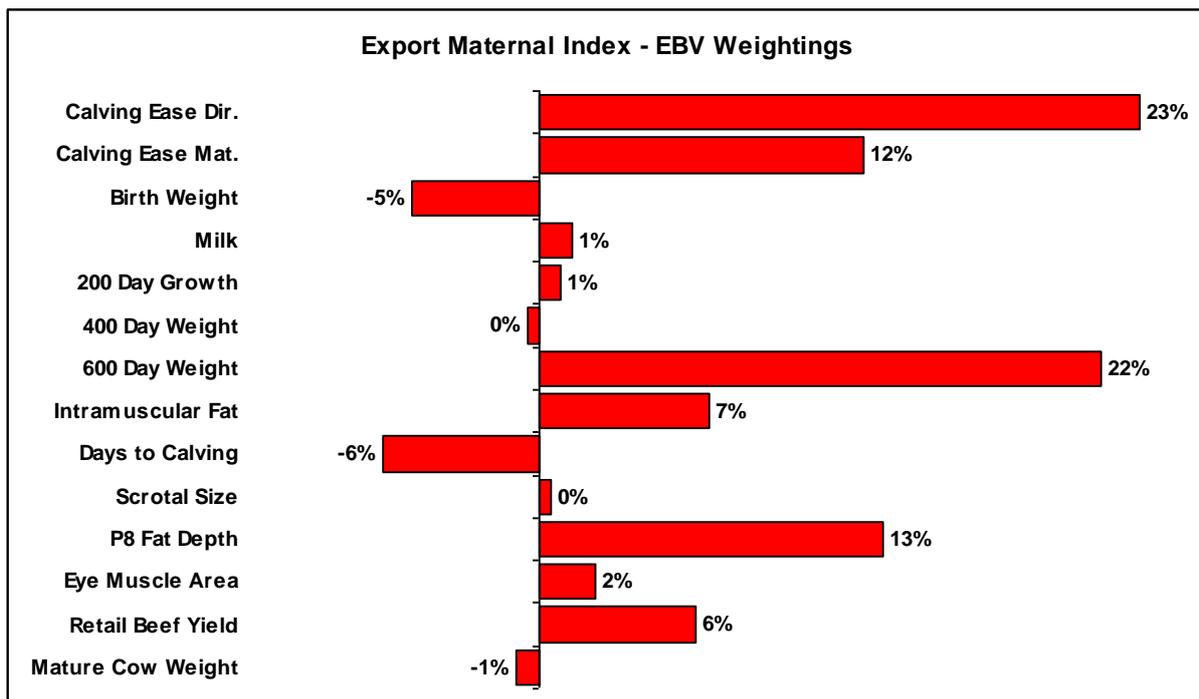
South Devon Export Maternal Index

The South Devon Export Maternal Index estimates the genetic differences between animals in net profitability per cow joined for an example commercial herd targeting the production of steers for the export market being finished off grass or through a mid-fed feeding program (e.g. 125 days). Steers are assumed marketed at 600 kg live weight (330 kg HSCW and 20 mm P8 fat depth) at 24 months of age. Daughters are retained for breeding. In response to industry feedback regarding eating quality and tenderness, a small premium has been placed on marbling.

The following bar graph shows the key economic traits that are important in this selection index. The different trait emphases reflect the relative importance underlying profit drivers in a commercial operation targeting the export 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 lower Birth Weight EBVs are favoured.



While the graphs on the previous page show the different profit drivers and emphases that have been placed on each EBV within the Export Maternal 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 only a slight weighting on 200 Day Growth 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 Export Maternal Index. The graph reflects the relative change if the South Devon Sires with an EMA EBV (at the 2010 South Devon 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.

