

Australian Hereford Selection Indexes

There are currently four different selection indexes calculated for Australian Hereford animals. These are:

- ❑ Supermarket Index
- ❑ Grass Fed Steer Index
- ❑ Grain Fed Steer Index
- ❑ EU Index

Each selection index describes a different production/market scenario and relates to a typical, self replacing Hereford herd in temperate Australia targeting the following specifications.

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 (eg. 50 – 70 days). Steers are assumed marketed at 450 kg live weight (250 kg HSCW and 12 mm P8 fat depth) at 17 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.

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. Steers are assumed marketed at 600 kg live weight (330 kg HSCW and 8 mm P8 fat depth) at 23 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.

Grain Fed Steer Index – Estimates the genetic differences between animals in net profitability per cow joined for an example commercial herd targeting pasture grown steers with a 125 day feedlot finishing period for the grain fed markets. Steers are assumed marketed at 600 kg live weight (330 kg HSCW and 20 mm P8 fat depth) at 20 months of age. Daughters are retained for breeding. There is a significant premium if steers reach a marble score of 2 or greater.

EU Index – Estimates the genetic differences between animals in net profitability per cow joined for an example commercial herd targeting pasture finished steers for the EU market. 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. There is no marbling requirement.

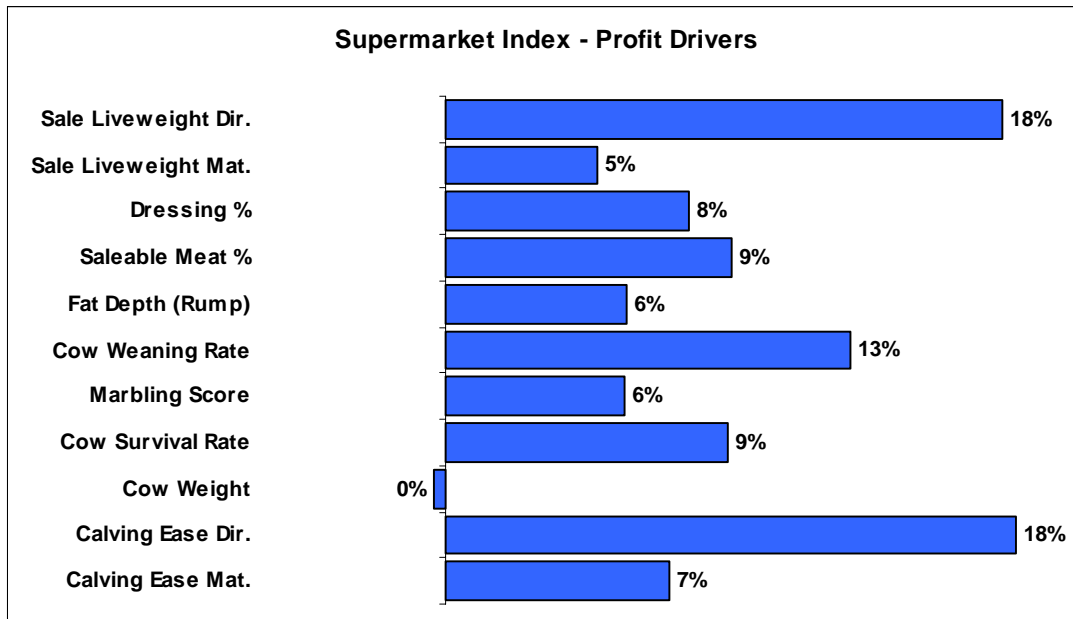
All selection index values have been derived using BreedObject technology. More detailed information regarding each selection index is provided on the following pages.

If you have any further queries regarding Hereford Selection Indexes, please do not hesitate to contact staff at BREEDPLAN.

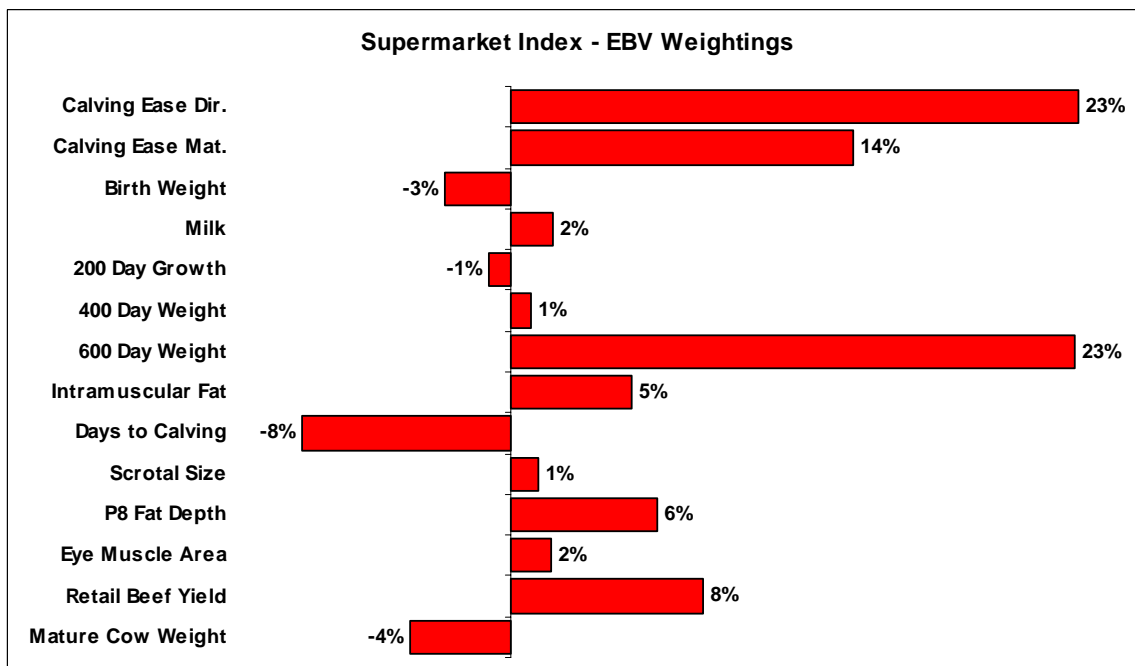
Hereford Supermarket Index

The Hereford 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 (eg. 50 – 70 days). Steers are assumed marketed at 450 kg live weight (250 kg HSCW and 12 mm P8 fat depth) at 17 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 underlying profit drivers in a commercial operation targeting the domestic supermarket trade.

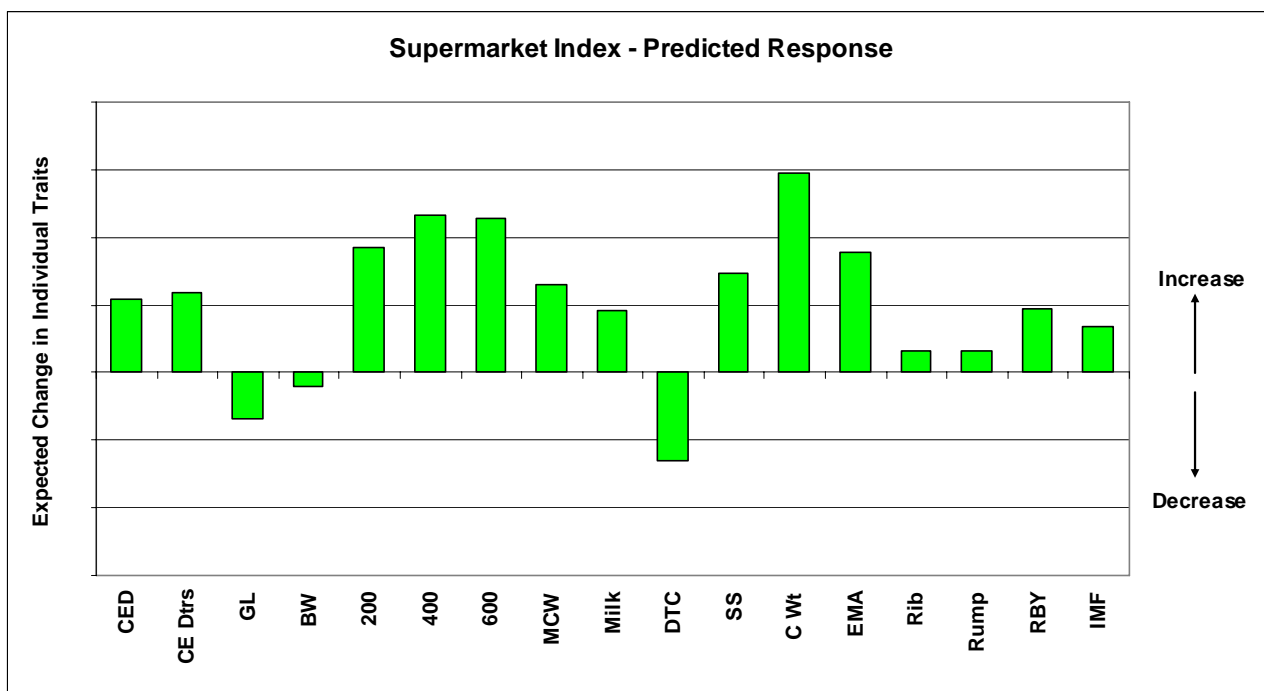


Considering the genetic relationship between the key profit drivers and the EBVs that are available, the bar graph below illustrates the different emphasis that has been placed on each EBV within this selection index. The sign indicates the direction of the emphasis. For example, greater 600 Day Weight EBVs and shorter Days to Calving 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 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 only a very small direct weighting on 400 Day Weight in this selection index, it would be expected that growth to 400 days would increase considerably as there is a large weighting on 600 Day Weight.

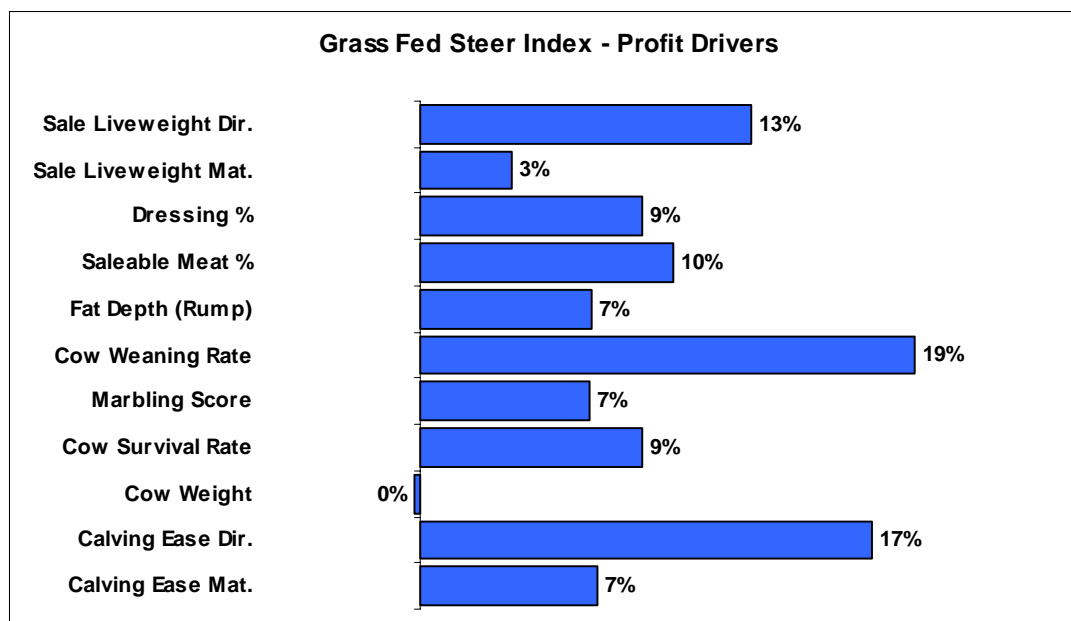
The following bar graph provides an indication of the relative change that would be expected in each individual trait if producers select animals using the Supermarket Selection Index. The graph reflects the relative change if the Hereford Published Sires (at the Autumn 2010 Hereford GROUP BREEDPLAN 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.



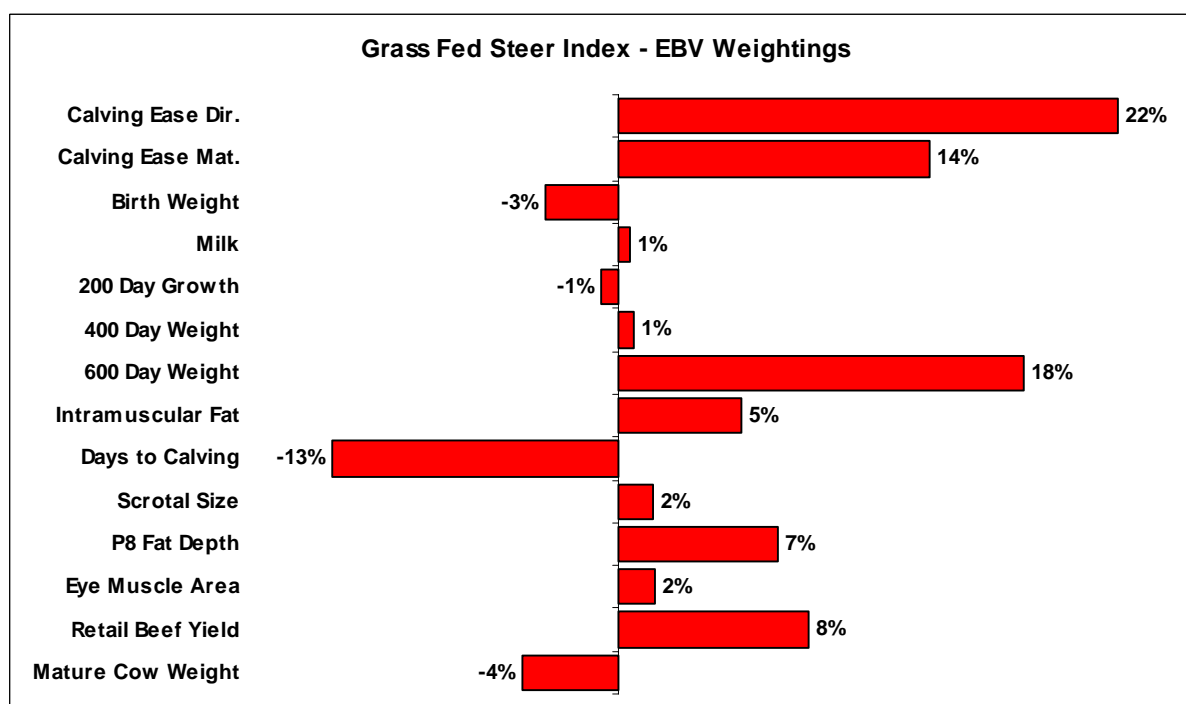
Hereford Grass Fed Steer Index

The Hereford 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. Steers are assumed marketed at 600 kg live weight (330 kg HSCW and 8 mm P8 fat depth) at 23 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 underlying profit drivers in a commercial operation targeting the production of grass finished steers

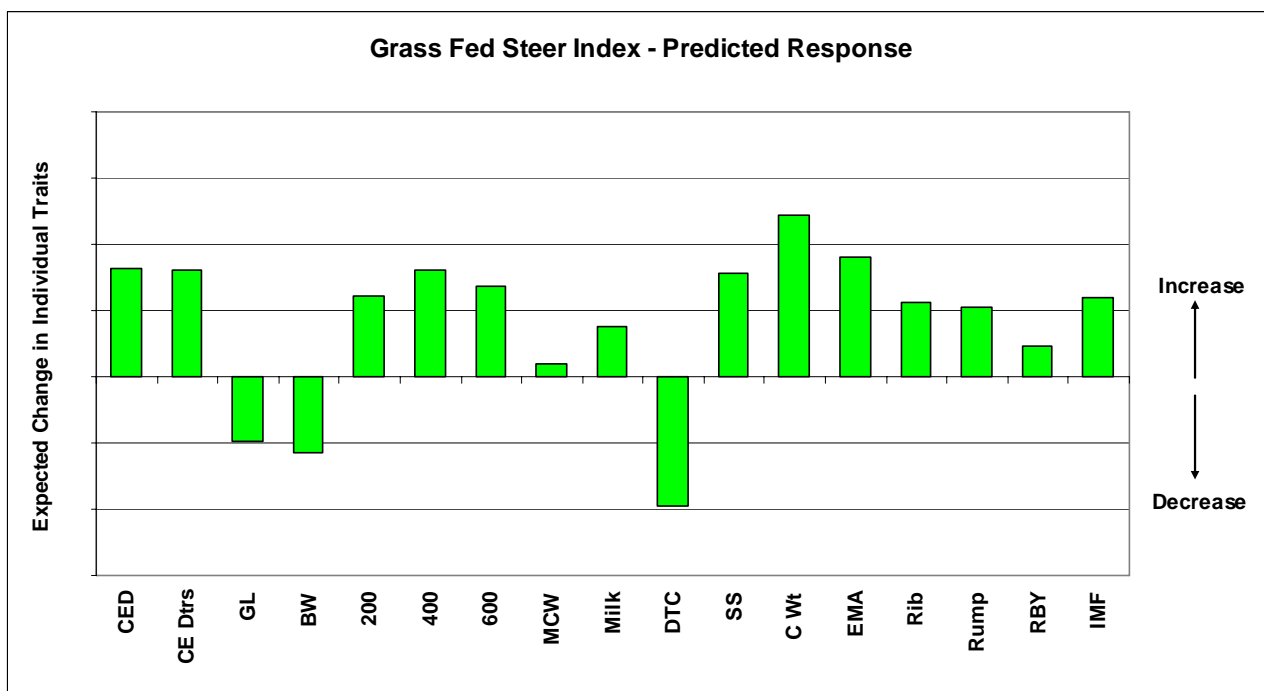


Considering the genetic relationship between the key profit drivers and the EBVs that are available, the bar graph below illustrates the different emphasis that has been placed on each EBV within this selection index. The sign indicates the direction of the emphasis. For example, greater 600 Day Weight EBVs and shorter Days to Calving 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 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 only a very small direct weighting on 400 Day Weight in this selection index, it would be expected that growth to 400 days would increase considerably as there is a large weighting on 600 Day Weight.

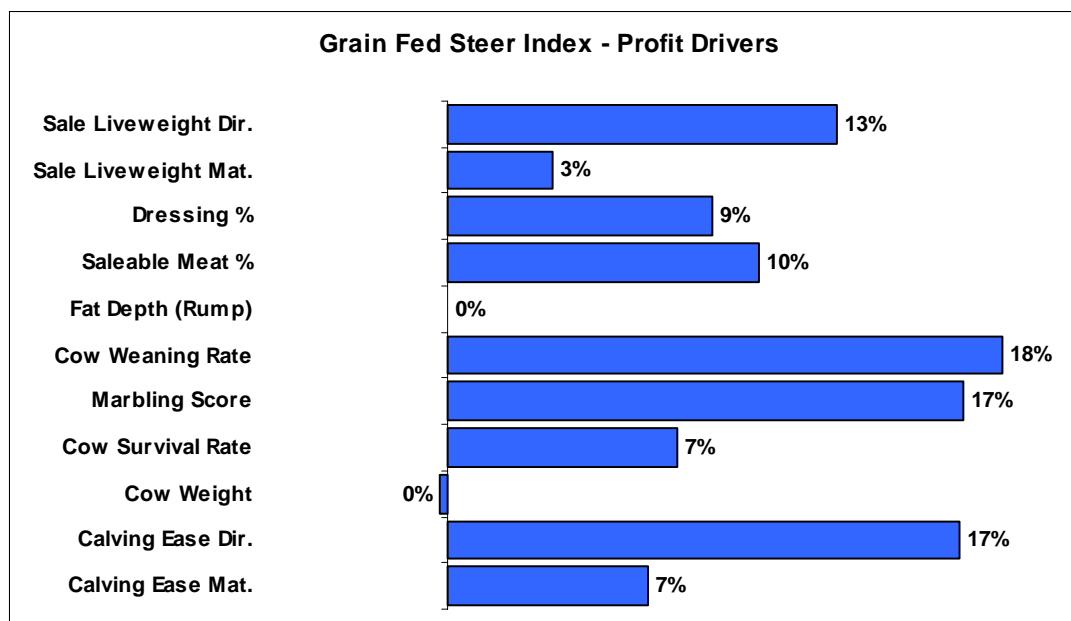
The following bar graph provides an indication of the relative change that would be expected in each individual trait if producers select animals using the Grass Fed Steer Selection Index. The graph reflects the relative change if the Hereford Published Sires (at the Autumn 2010 Hereford GROUP BREEDPLAN 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.



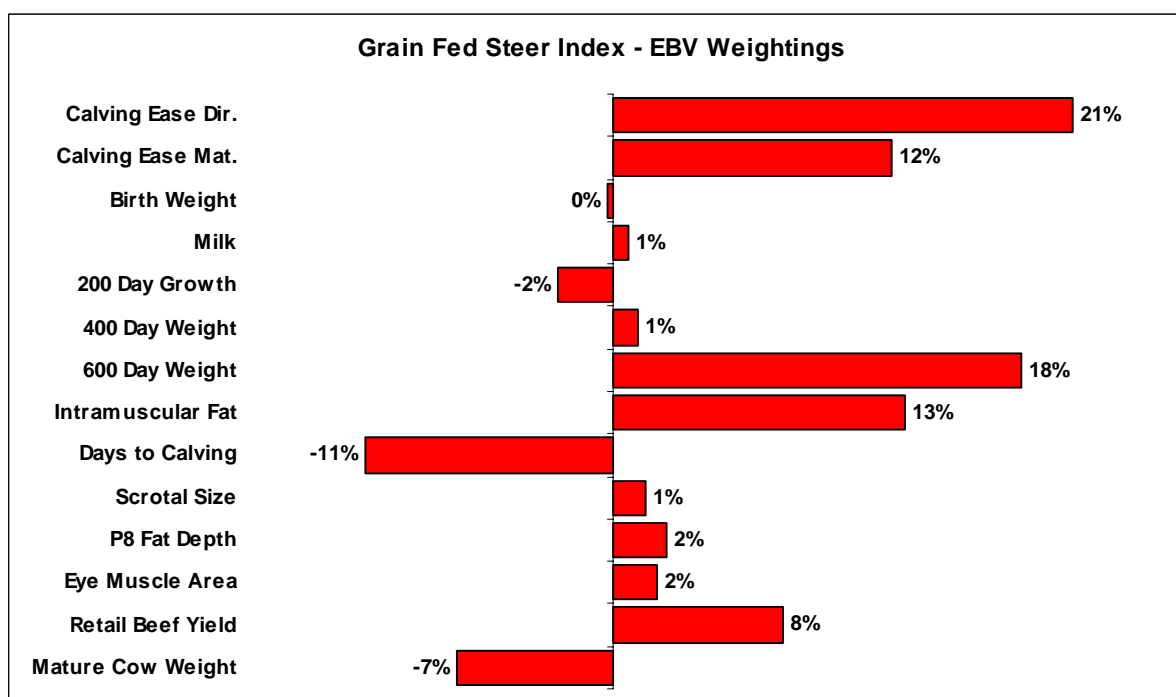
Hereford Grain Fed Steer Index

The Hereford Grain Fed Steer Index estimates the genetic differences between animals in net profitability per cow joined for an example commercial herd targeting pasture grown steers with a 125 day feedlot finishing period for the grain fed markets. Steers are assumed marketed at 600 kg live weight (330 kg HSCW and 20 mm P8 fat depth) at 20 months of age. Daughters are retained for breeding. There is a significant premium if steers reach a marble score of 2 or greater.

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 the production of grain finished steers.

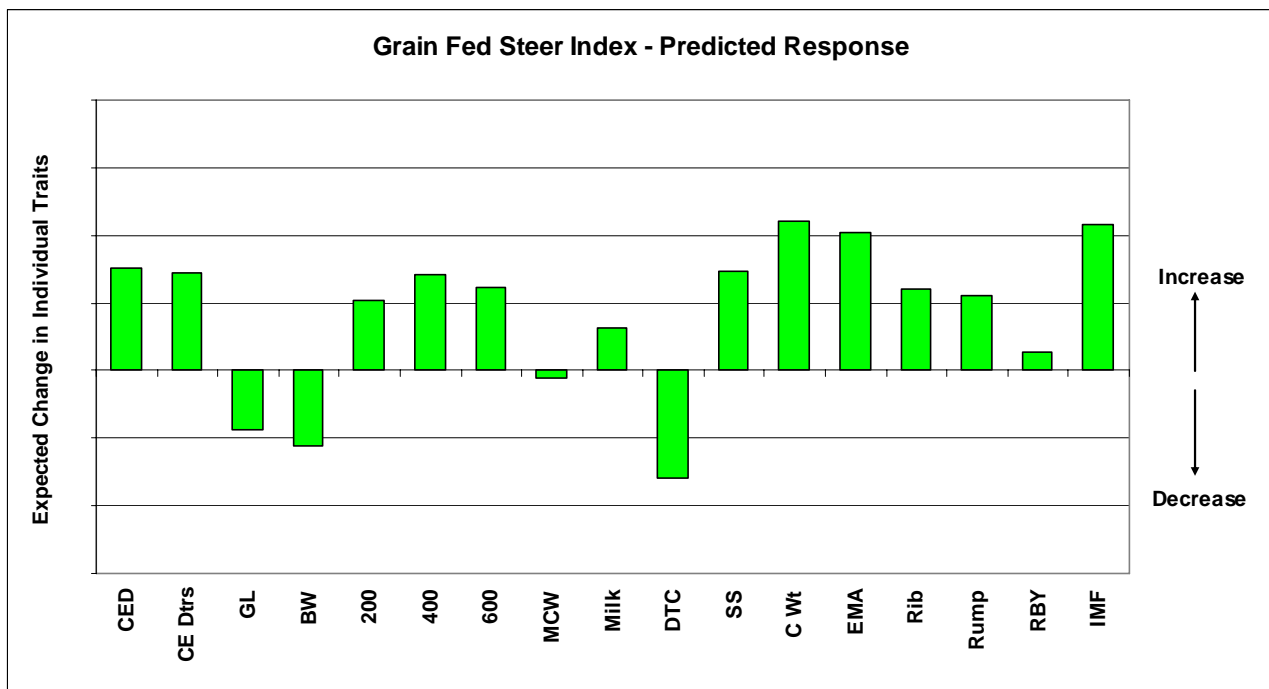


Considering the genetic relationship between the key profit drivers and the EBVs that are available, the bar graph below illustrates the different emphasis that has been placed on each EBV within this selection index. The sign indicates the direction of the emphasis. For example, greater 600 Day Weight EBVs and shorter Days to Calving 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 Grain 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 only a very small direct weighting on 400 Day Weight in this selection index, it would be expected that growth to 400 days would increase considerably as there is a large weighting on 600 Day Weight.

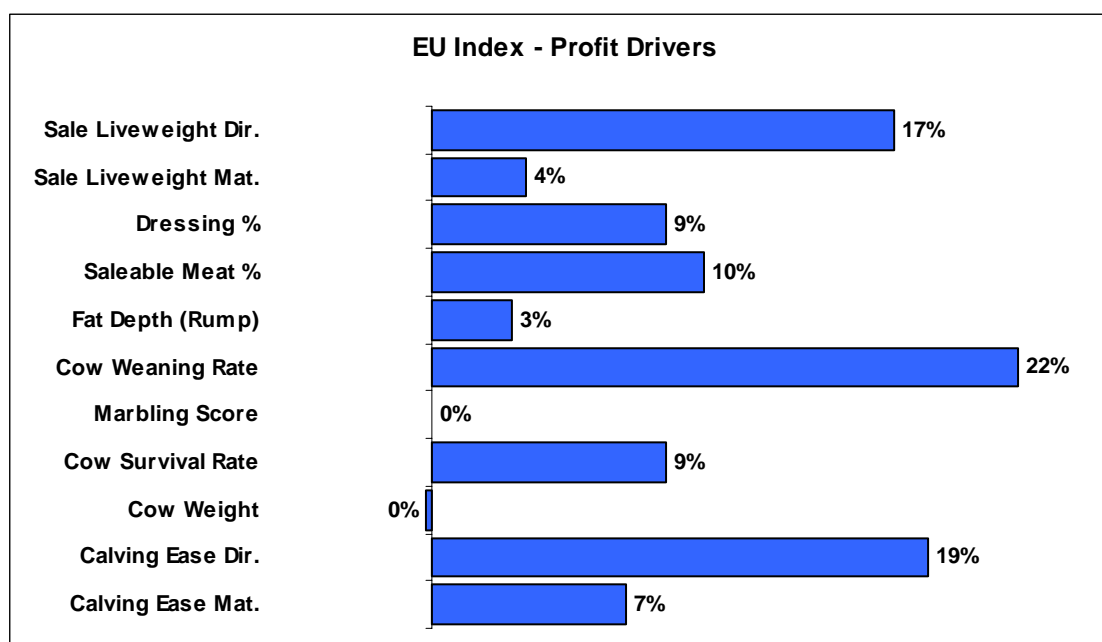
The following bar graph provides an indication of the relative change that would be expected in each individual trait if producers select animals using the Grain Fed Steer Selection Index. The graph reflects the relative change if the Hereford Published Sires (at the Autumn 2010 Hereford GROUP BREEDPLAN 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.



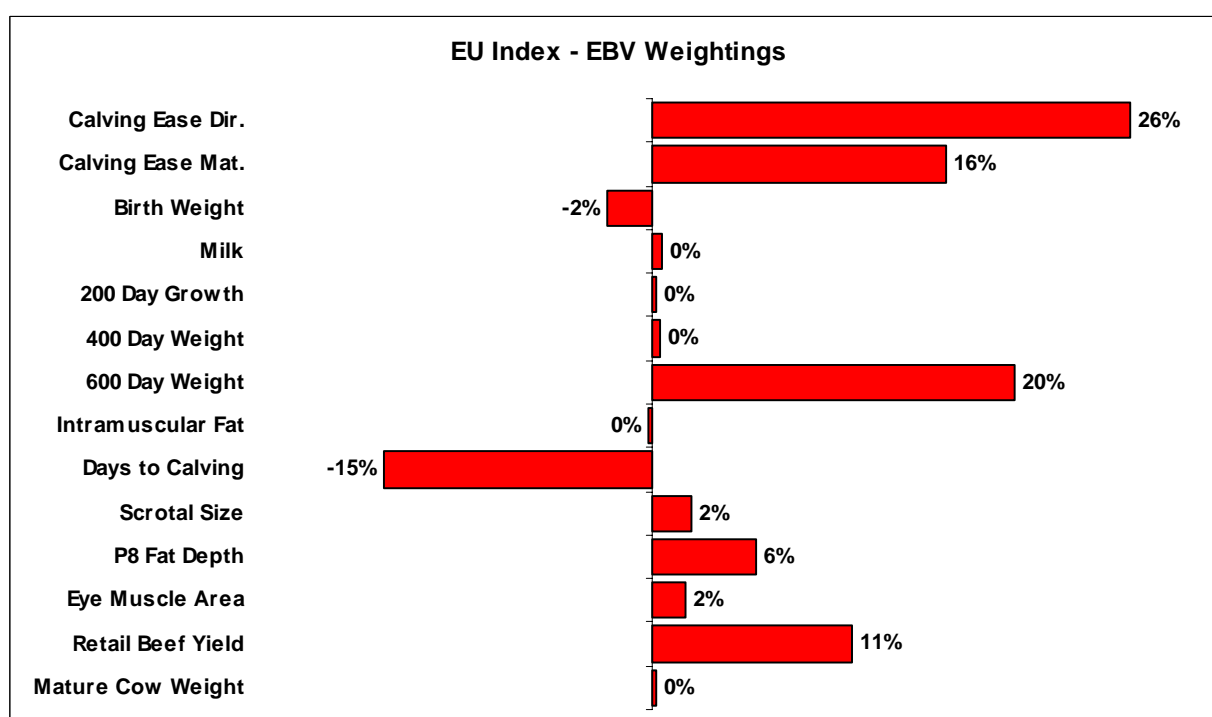
Hereford EU Index

The Hereford EU Index estimates the genetic differences between animals in net profitability per cow joined for an example commercial herd targeting pasture finished steers for the EU market. 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. There is no marbling requirement.

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 the EU market.



Considering the genetic relationship between the key profit drivers and the EBVs that are available, the bar graph below illustrates the different emphasis that has been placed on each EBV within this selection index. The sign indicates the direction of the emphasis. For example, greater 600 Day Weight EBVs and shorter Days to Calving 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 EU 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 no direct weighting on 400 Day Weight in this selection index, it would be expected that growth to 400 days would increase considerably 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 EU Selection Index. The graph reflects the relative change if the Hereford Published Sires (at the Autumn 2010 Hereford 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.

