

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 commercial herd in temperate Australia using Hereford bulls and targeting the following specifications.

Supermarket Index - Estimates the genetic differences between animals in net profitability per cow joined in a commercial self replacing herd targeting the domestic supermarket trade. Steers are either finished on grass or grain (e.g. 50 – 70 days) with steers slaughtered at 500 kg live weight (270 kg HSCW and 12 mm P8 fat depth) at 17 months of age. Daughters are retained for breeding. Emphasis has been placed on eating quality and tenderness to favour animals that are suited to MSA requirements.

Grass Fed Steer Index - Estimates the genetic differences between animals in net profitability per cow joined in a commercial self replacing herd targeting pasture finished steers. Steers are slaughtered at 600 kg live weight (330 kg HSCW and 8 mm P8 fat depth) at 23 months of age. Daughters are retained for breeding. Emphasis has been placed on eating quality and tenderness to favour animals that are suited to MSA requirements. This index is suitable for use by both straight bred Hereford herds and in crossbreeding programs where Hereford bulls are being used over a *Bos indicus* based cow herd.

Grain Fed Steer Index – Estimates the genetic differences between animals in net profitability per cow joined in a commercial self replacing herd targeting pasture grown steers with a 125 day feedlot finishing period for the grain fed high quality, highly marbled markets. Steers are slaughtered 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. This index is suitable for use by both straight bred Hereford herds and in black baldy crossbreeding programs where Hereford bulls are being used over an Angus based cow herd.

EU Index – Estimates the genetic differences between animals in net profitability per cow joined in a commercial self replacing herd targeting the EU market. Steers are either finished on grass or grain (e.g. 125 days) with steers slaughtered at 600 kg live weight (330 kg HSCW and 20 mm P8 fat depth) at 20 months of age. Daughters are retained for breeding. Emphasis has been placed on eating quality and tenderness to favour animals that are suited to MSA requirements.

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

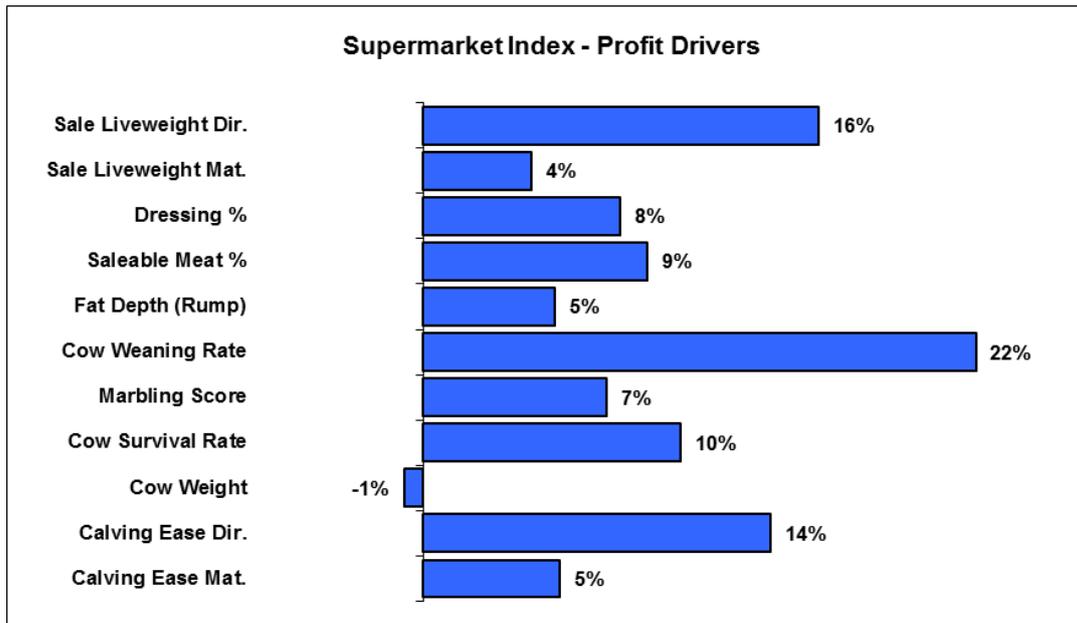
If you have any further queries regarding Hereford Selection Indexes, please do not hesitate to contact staff at your BREEDPLAN processing centre.



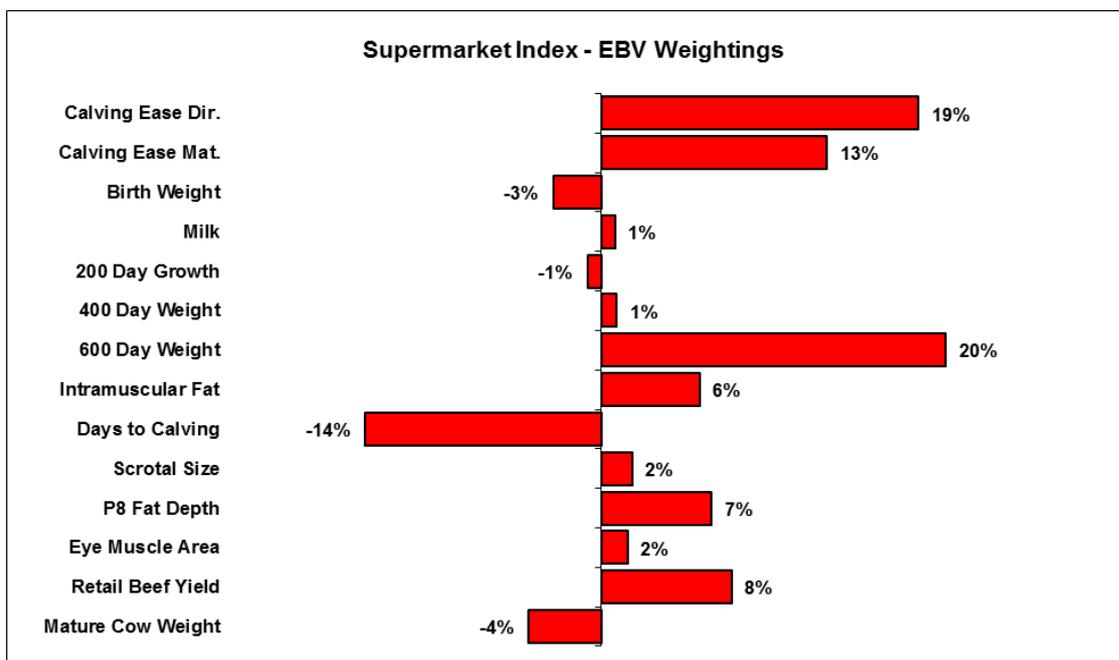
Hereford Supermarket Index

The Hereford Supermarket Index estimates the genetic differences between animals in net profitability per cow joined in a commercial self replacing herd targeting the domestic supermarket trade. Steers are either finished on grass or grain (e.g. 50 – 70 days) with steers slaughtered at 500 kg live weight (270 kg HSCW and 12 mm P8 fat depth) at 17 months of age. Daughters are retained for breeding. Emphasis has been placed on eating quality and tenderness to favour animals that are suited to MSA requirements.

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.

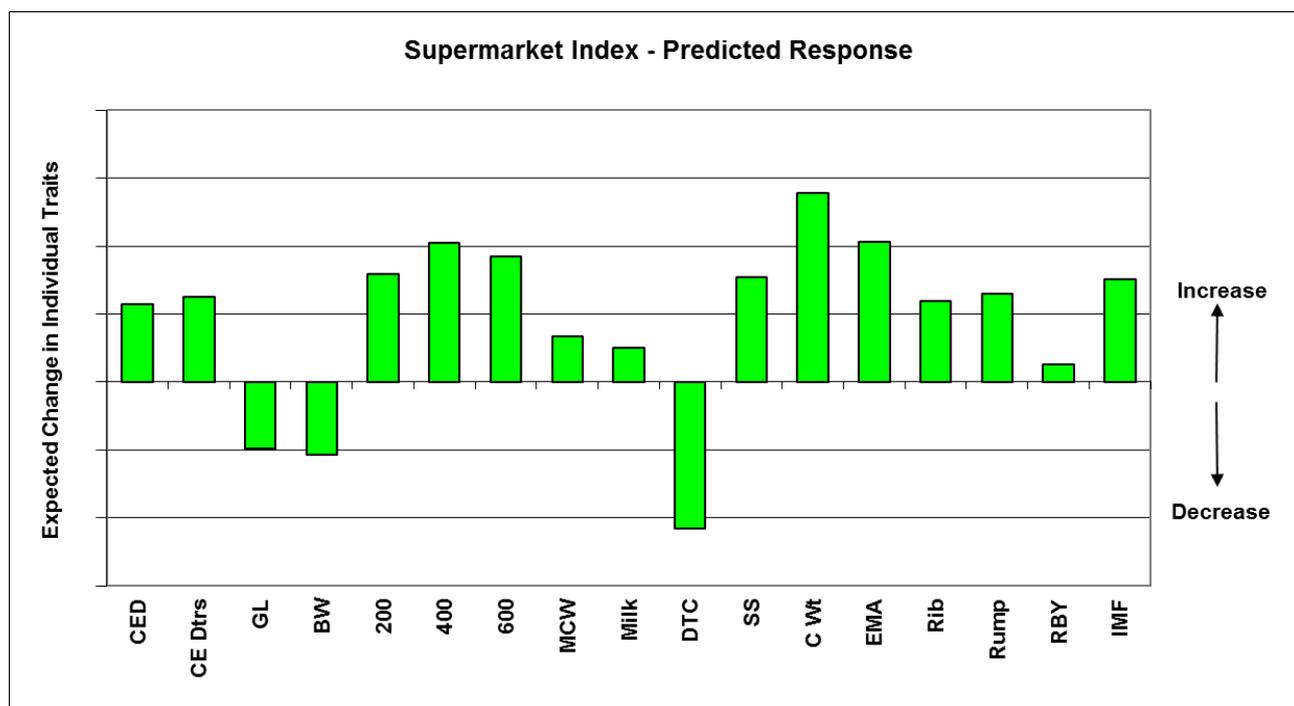


Considering the genetic relationship between the key profit drivers and the EBVs that are available, the bar graph below illustrates the different emphasis that has been placed on each EBV within this selection index. The sign indicates the direction of the emphasis. For example, greater 600 Day Weight 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.

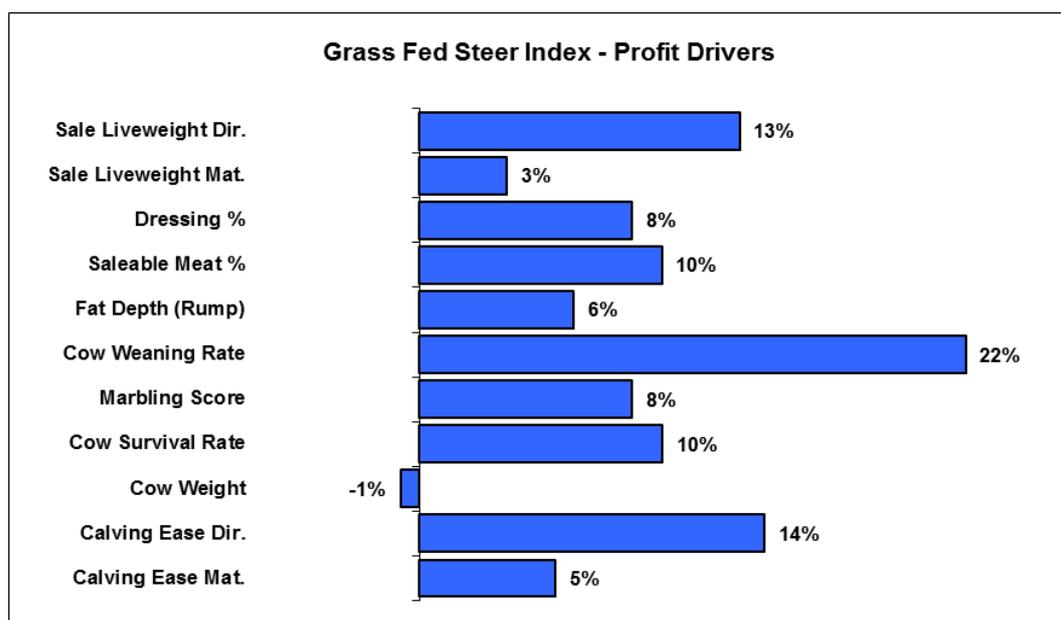
The following bar graph provides an indication of the relative change that would be expected in each individual trait if producers select animals using the Supermarket Selection Index. The graph reflects the relative change if the Hereford Published Sires (at the January 2014 Hereford GROUP BREEDPLAN 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.



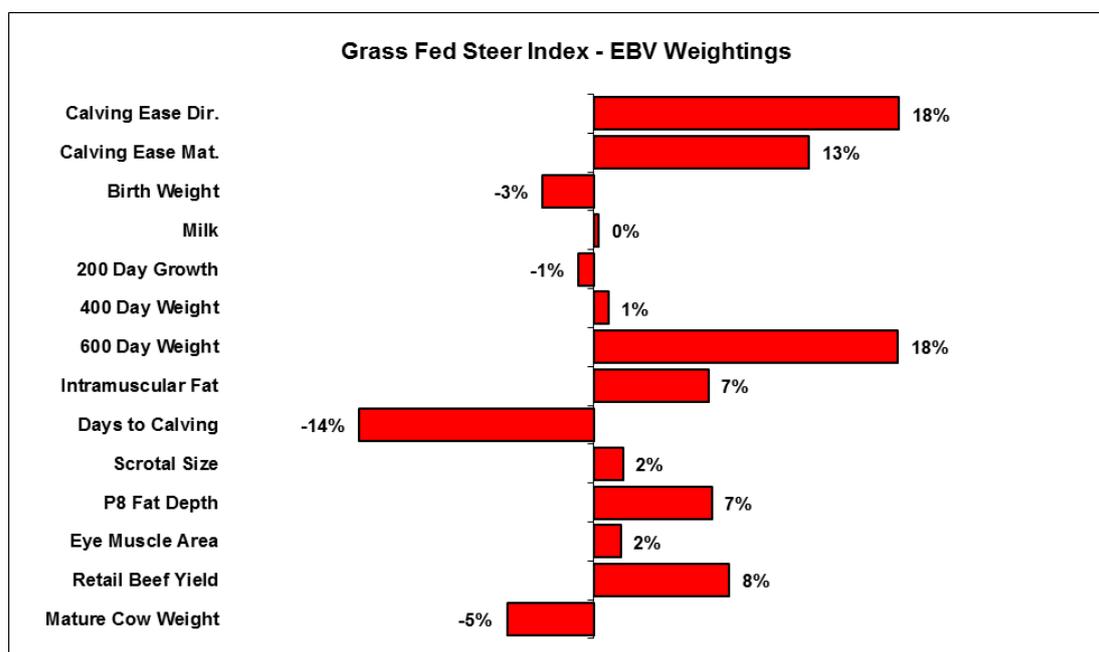
Hereford Grass Fed Steer Index

The Hereford Grass Fed Steer Index estimates the genetic differences between animals in net profitability per cow joined in a commercial self replacing herd targeting pasture finished steers. Steers are slaughtered at 600 kg live weight (330 kg HSCW and 8 mm P8 fat depth) at 23 months of age. Daughters are retained for breeding. Emphasis has been placed on eating quality and tenderness to favour animals that are suited to MSA requirements. This index is suitable for use by both straight bred Hereford herds and in crossbreeding programs where Hereford bulls are being used over a *Bos indicus* based cow herd.

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.

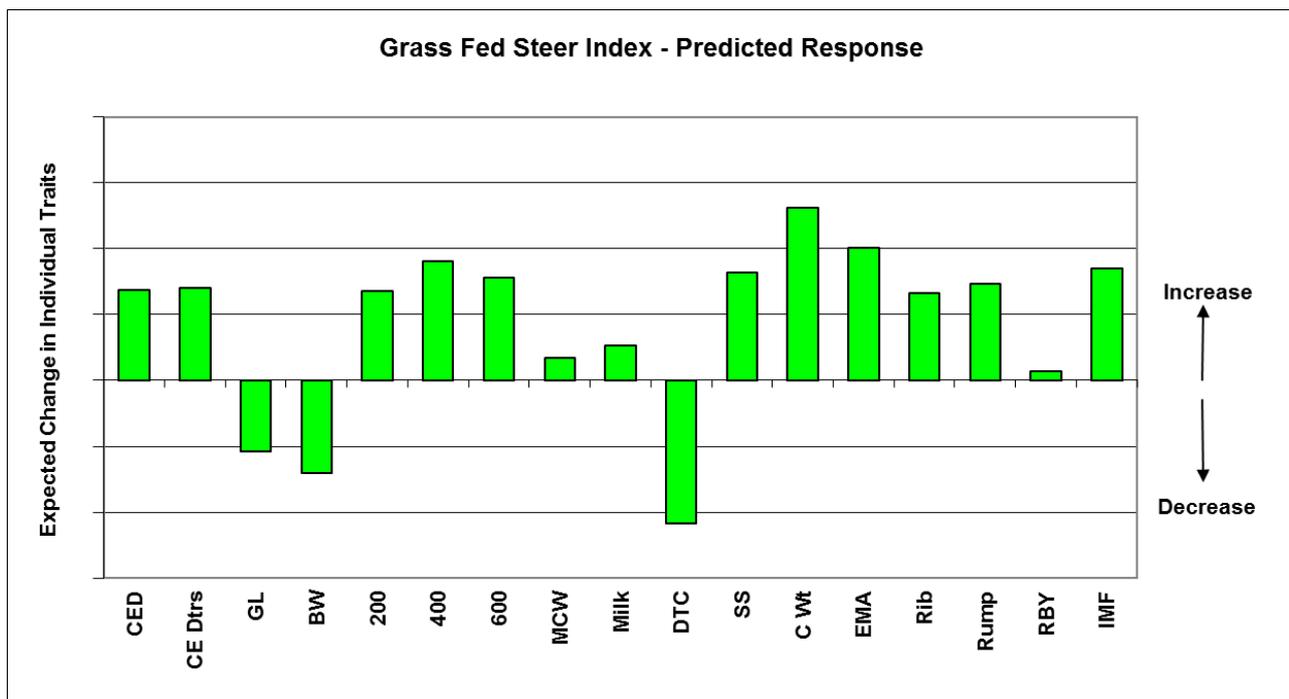


Considering the genetic relationship between the key profit drivers and the EBVs that are available, the bar graph below illustrates the different emphasis that has been placed on each EBV within this selection index. The sign indicates the direction of the emphasis. For example, greater 600 Day Weight 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.

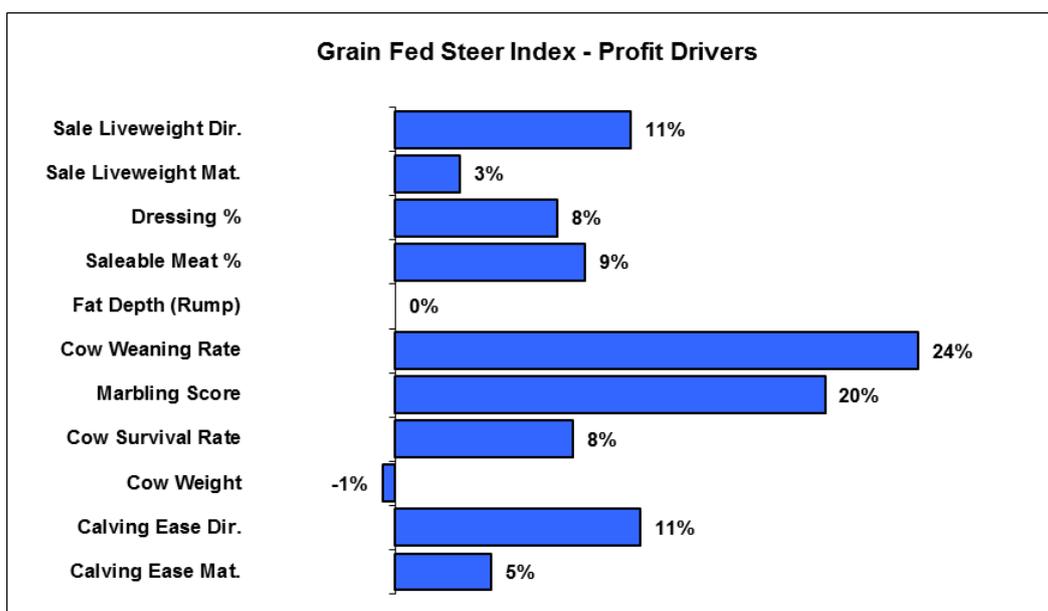
The following bar graph provides an indication of the relative change that would be expected in each individual trait if producers select animals using the Grass Fed Steer Selection Index. The graph reflects the relative change if the Hereford Published Sires (at the January 2014 Hereford GROUP BREEDPLAN 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.



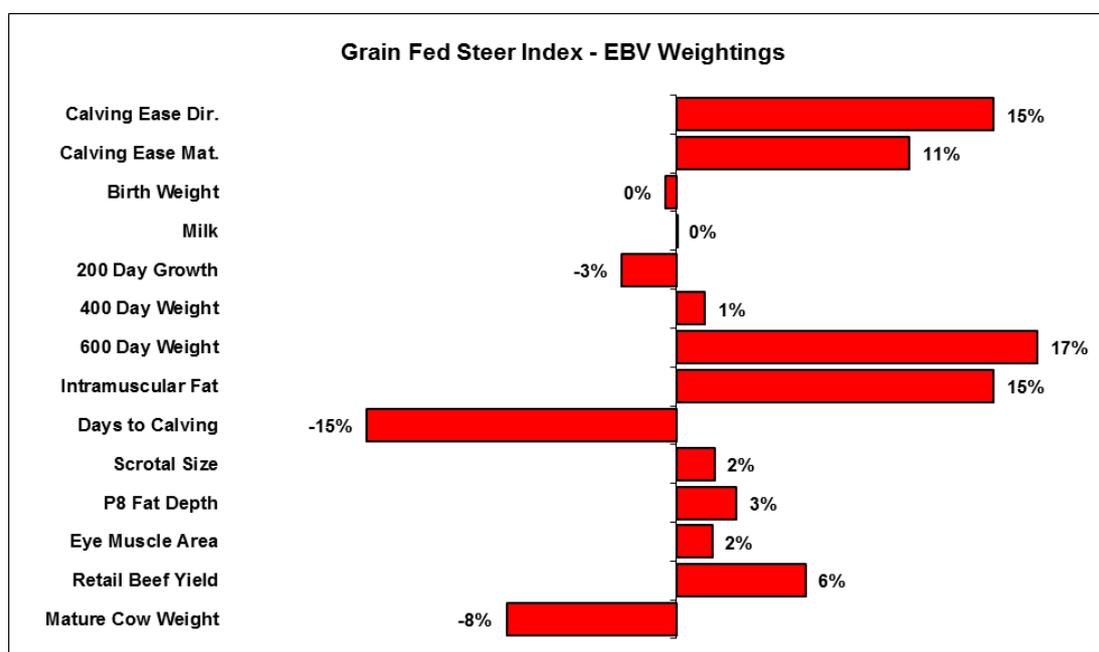
Hereford Grain Fed Steer Index

The Hereford Grain Fed Steer Index estimates the genetic differences between animals in net profitability per cow joined in a commercial self replacing herd targeting pasture grown steers with a 125 day feedlot finishing period for the grain fed high quality, highly marbled markets. Steers are slaughtered 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. This index is suitable for use by both straight bred Hereford herds and in black baldy crossbreeding programs where Hereford bulls are being used over an Angus based cow herd.

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.

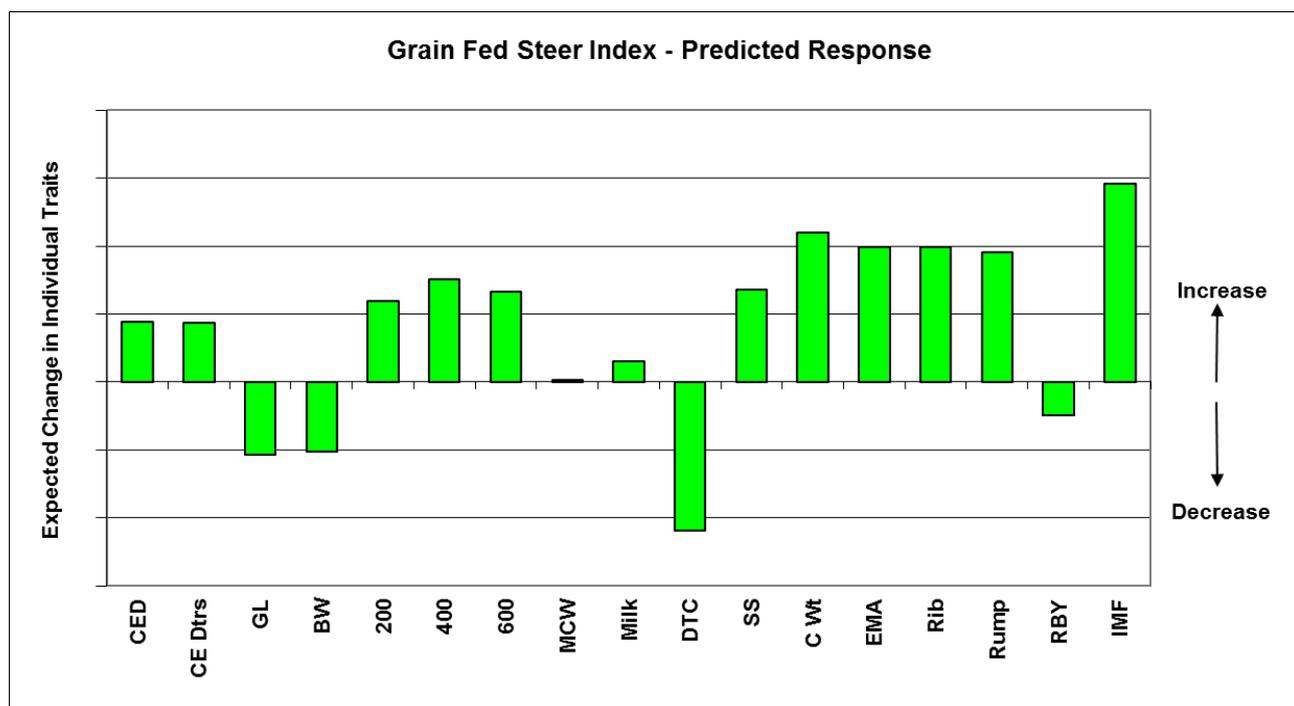


Considering the genetic relationship between the key profit drivers and the EBVs that are available, the bar graph below illustrates the different emphasis that has been placed on each EBV within this selection index. The sign indicates the direction of the emphasis. For example, greater 600 Day Weight 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.

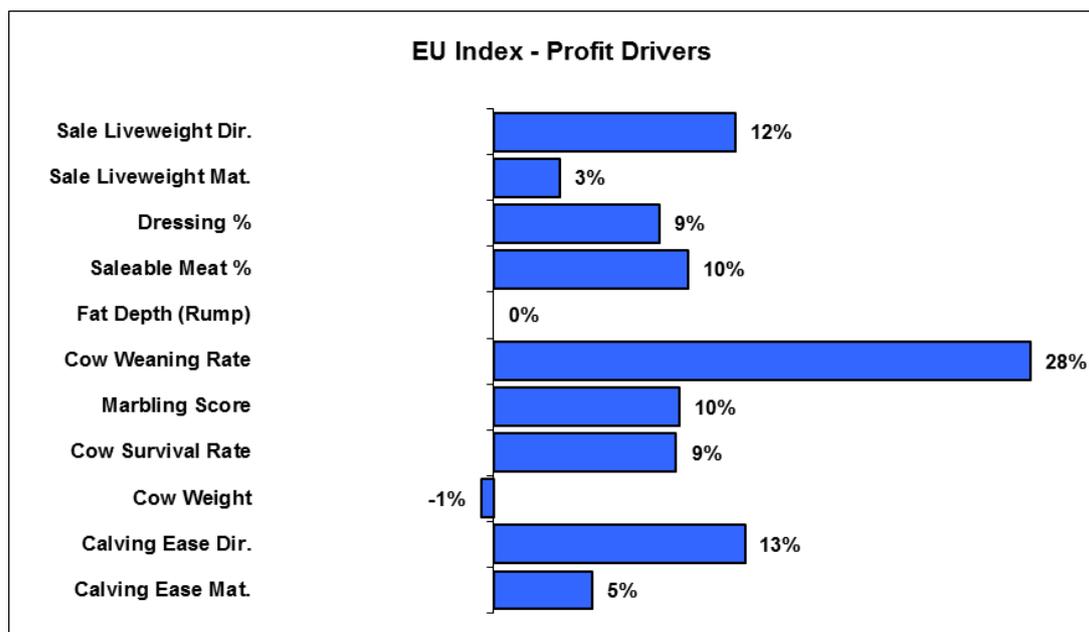
The following bar graph provides an indication of the relative change that would be expected in each individual trait if producers select animals using the Grain Fed Steer Selection Index. The graph reflects the relative change if the Hereford Published Sires (at the January 2014 Hereford GROUP BREEDPLAN 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.



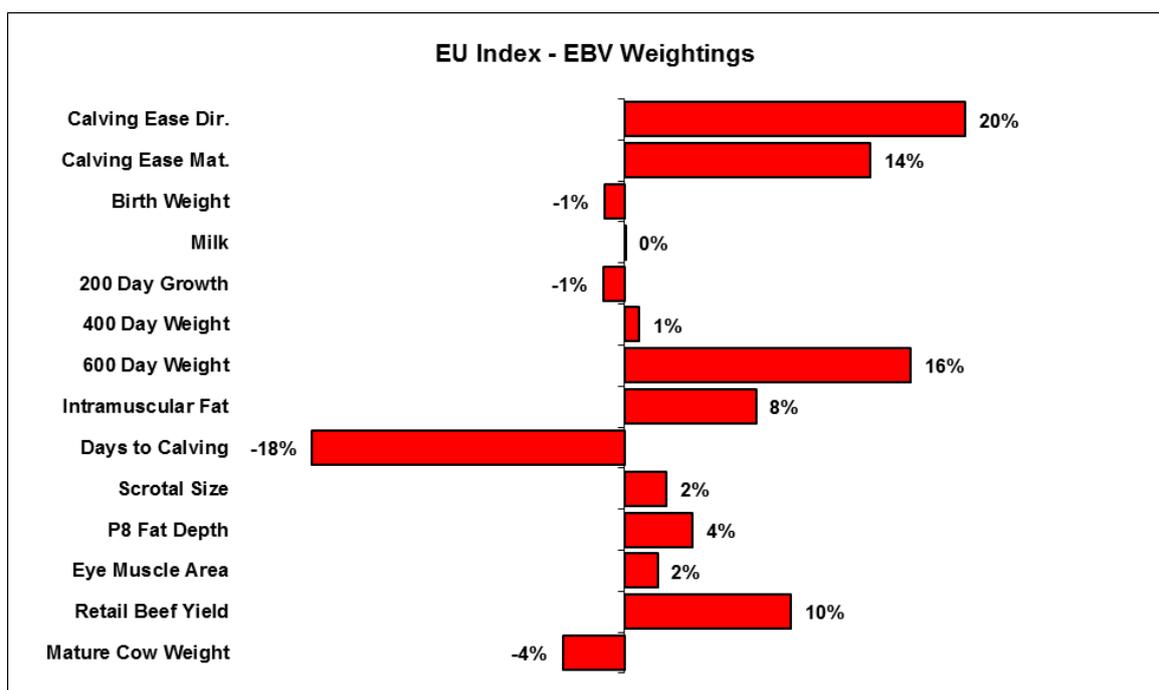
Hereford EU Index

The Hereford EU Index estimates the genetic differences between animals in net profitability per cow joined in a commercial self replacing herd targeting the EU market. Steers are either finished on grass or grain (e.g. 125 days) with steers slaughtered at 600 kg live weight (330 kg HSCW and 20 mm P8 fat depth) at 20 months of age. Daughters are retained for breeding. Emphasis has been placed on eating quality and tenderness to favour animals that are suited to MSA requirements.

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, 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 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 EU Selection Index. The graph reflects the relative change if the Hereford Published Sires (at the January 2014 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.

