BREEDPLAN Tips

Australian Limousin Selection Indexes

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

- Domestic Terminal Index
- Self Replacing Index
- Heavy Steer Terminal Index
- Vealer Terminal Index

Each selection index describes a different production/market scenario and relates to a typical commercial herd using Limousin bulls and targeting the following specifications.

Domestic Terminal Index - Estimates the genetic differences between animals in net profitability per cow joined for an example commercial crossbred herd using Limousin bulls over British bred females targeting the domestic market. Steers are either finished on grass or a short fed grain program and are marketed at 475 kg live weight (260 kg carcase weight) at 16 months of age. All male and female progeny are slaughtered.

Self Replacing Index - Estimates the genetic differences between animals in net profitability per cow joined for an example self replacing commercial purebred Limousin herd targeting the production of heavy steers. Steers are finished on grass or a short fed grain program and are marketed at 580 kg live weight (320 kg carcase weight) at 24 months of age. Daughters are retained for breeding and so maternal traits are of importance.

Heavy Steer Terminal Index – Estimates the genetic differences between animals in net profitability per cow joined for an example commercial crossbred herd using Limousin bulls over British bred females targeting the production of heavy steers. Steers are finished on grass or a short fed grain program and are marketed at 580 kg live weight (320 kg carcase weight) at 24 months of age. All male and female progeny are slaughtered.

Vealer Terminal Index – Estimates the genetic differences between animals in net profitability per cow joined for an example commercial crossbred herd using Limousin bulls over either British bred or dairy cross females targeting the production of vealers. Steers are finished on grass and are marketed at 380 kg live weight (210 kg carcase weight) at 10 months of age. All male and female progeny are slaughtered.

All selection indexes are reported as an EBV, in units of relative earning capacity ($) 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).

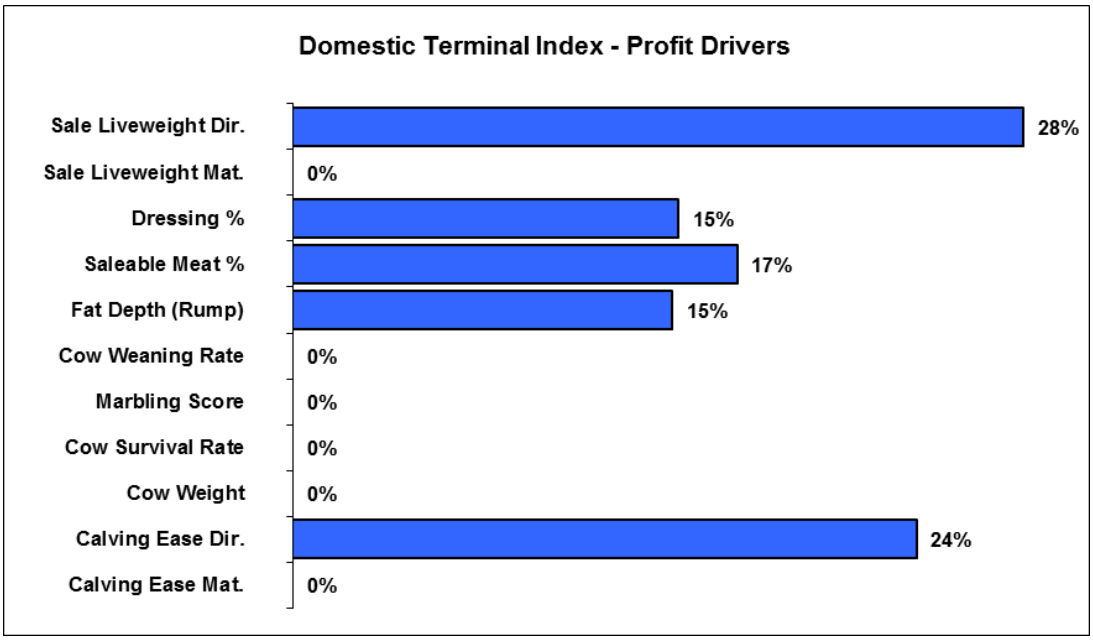
All selection index values have been derived using BreedObject technology. More detailed information regarding each selection index is provided on the following pages.

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

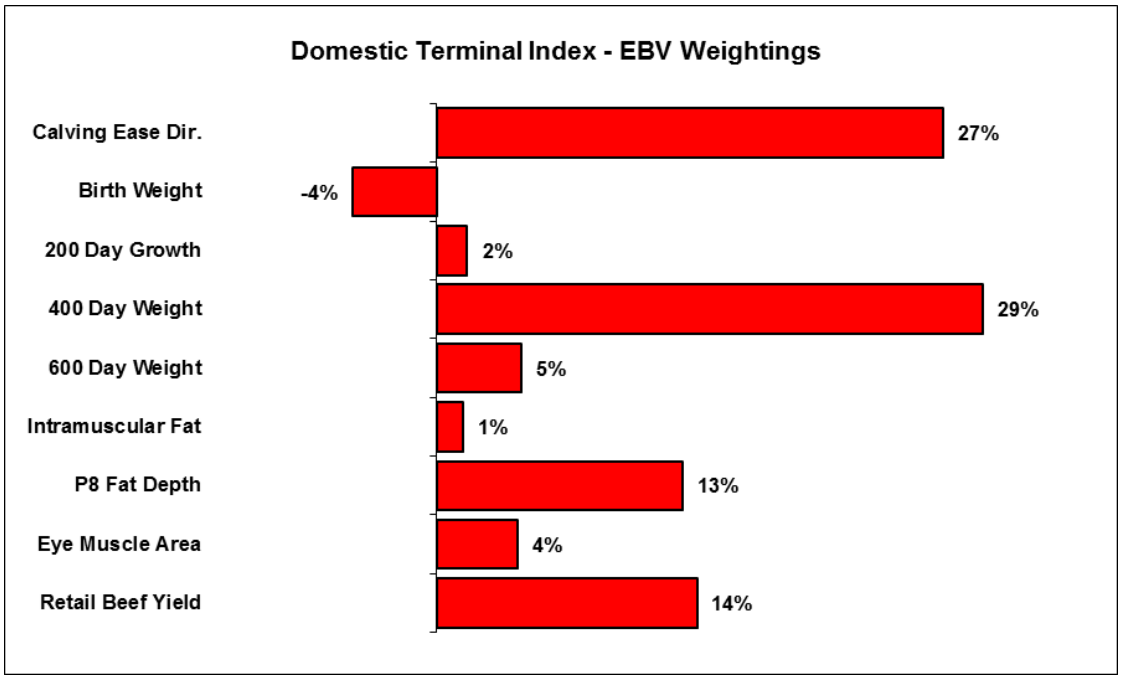
Limousin Domestic Terminal Index

The Limousin Domestic Terminal Index estimates the genetic differences between animals in net profitability per cow joined for an example commercial crossbred herd using Limousin bulls over British bred females targeting the domestic market. Steers are either finished on grass or a short fed grain program and are marketed at 475 kg live weight (260 kg carcase weight) at 16 months of age. All male and female progeny are slaughtered.

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.



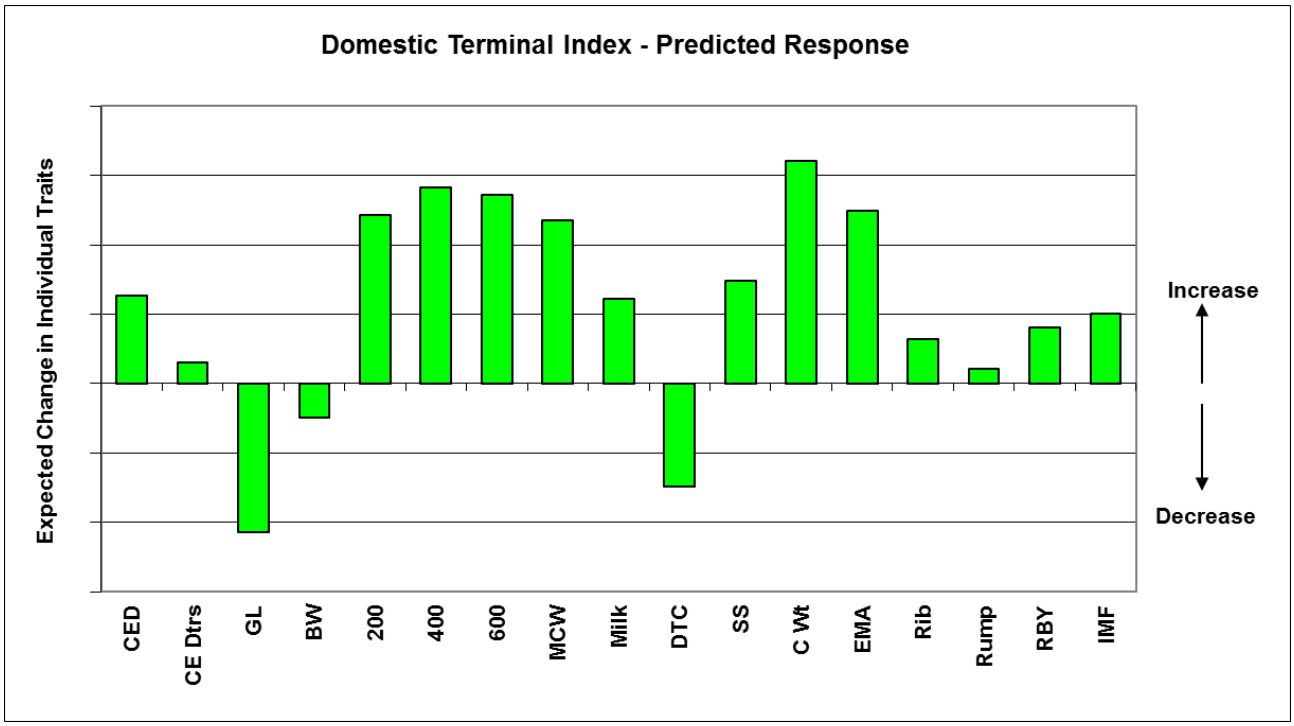
Considering the genetic relationship between the key profit drivers and the EBVs that are available, this transposes to the following EBV emphases. The sign indicates the direction of the emphasis. For example, greater 400 Day Weight EBVs but lighter Birth Weight EBVs are favoured.



May 2012

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

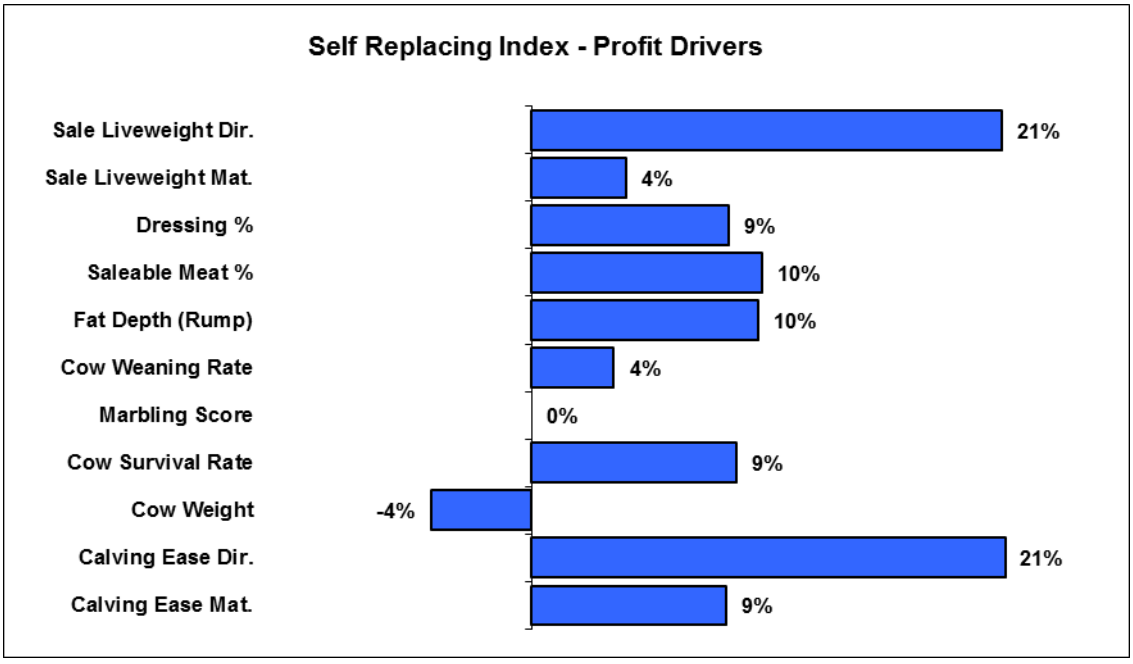
The following bar graph provides an indication of the relative change that would be expected in each individual trait if producers select animals using the Domestic Terminal Selection Index. The graph reflects the relative change if the Limousin Published Sires (at the April 2012 Limousin GROUP BREEDPLAN 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.



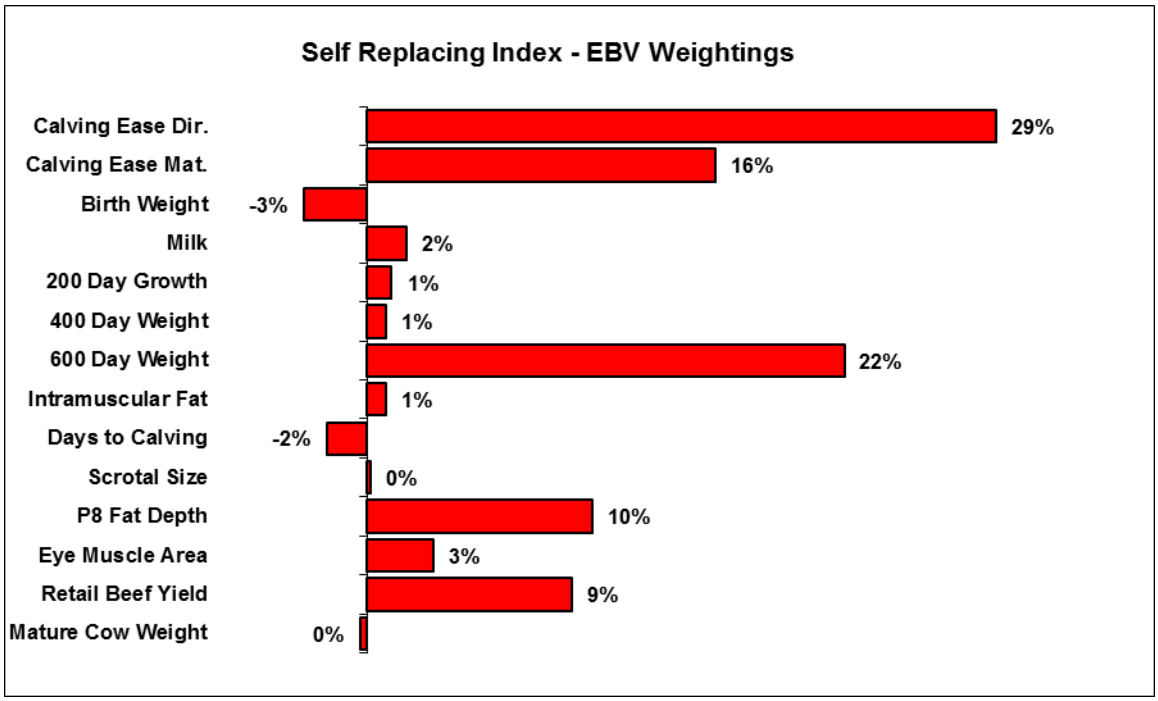
Limousin Self Replacing Index

The Limousin Self Replacing Index estimates the genetic differences between animals in net profitability per cow joined for an example self replacing commercial purebred Limousin herd targeting the production of heavy steers. Steers are finished on grass or a short fed grain program and are marketed at 580 kg live weight (320 kg carcase weight) at 24 months of age. Daughters are retained for breeding and so maternal traits are of importance.

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.



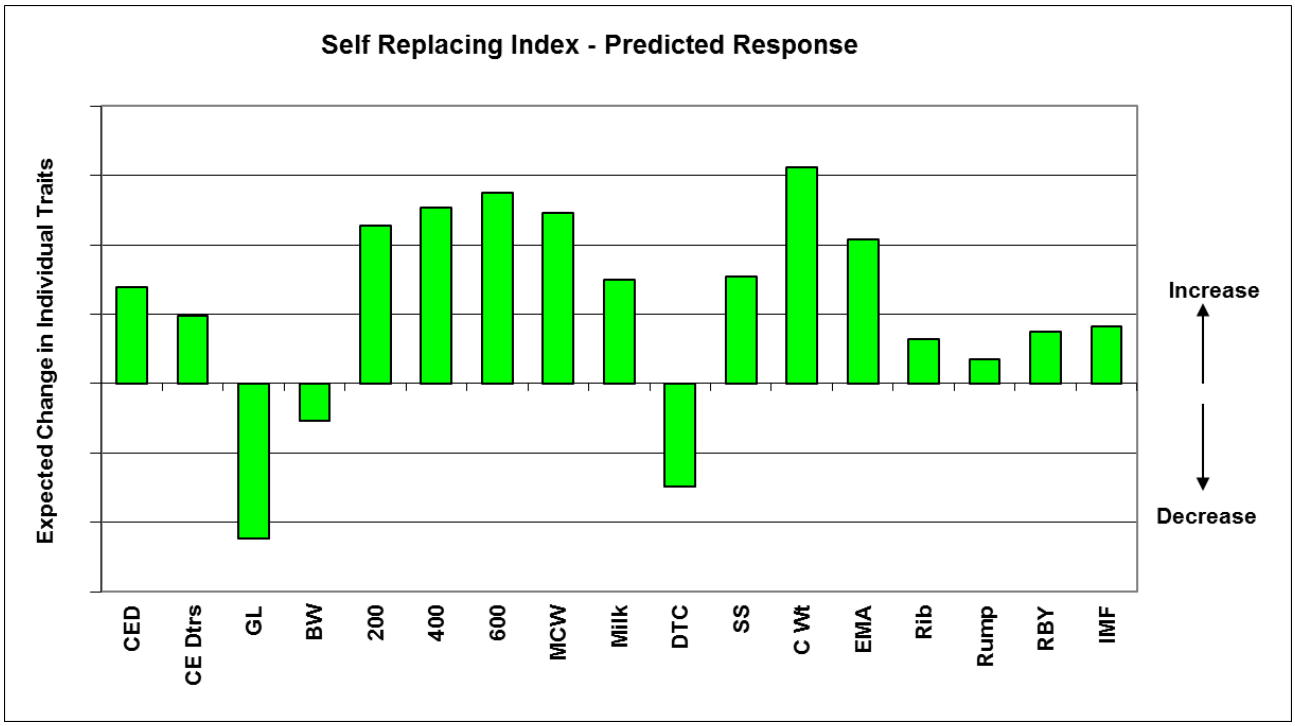
Considering the genetic relationship between the key profit drivers and the EBVs that are available, this transposes to the following EBV emphases. The sign indicates the direction of the emphasis. For example, greater 600 Day Weight EBVs but lighter Birth Weight EBVs are favoured.



May 2012

While the graphs on the previous page show the different profit drivers and emphases that have been placed on each EBV within the Self Replacing 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 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 600 Day Weight.

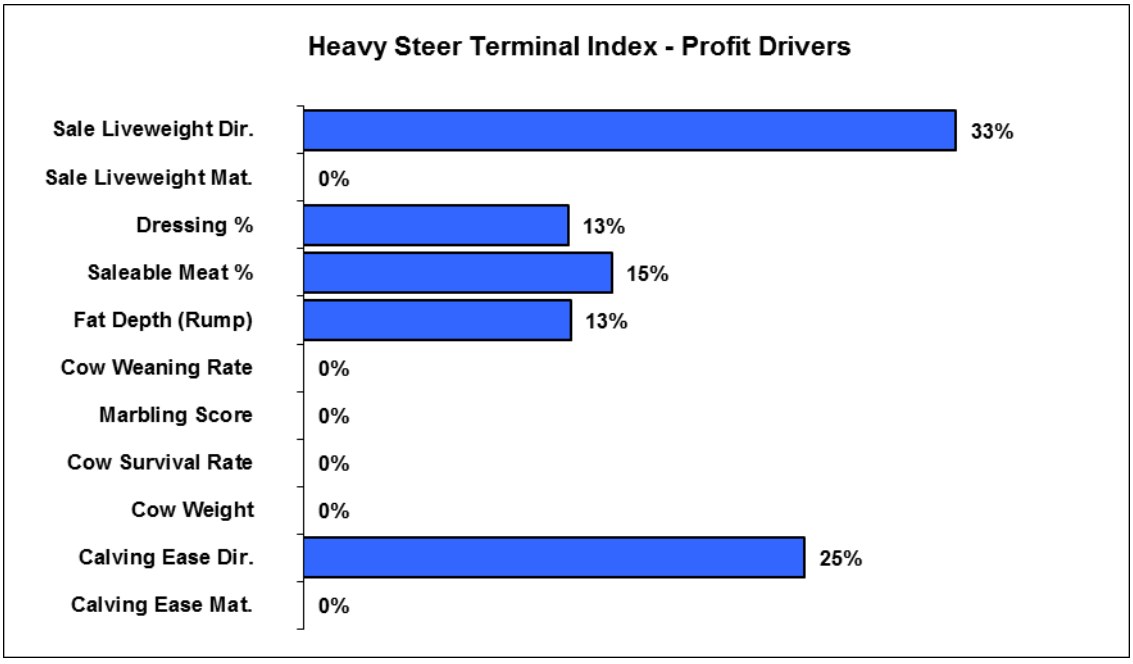
The following bar graph provides an indication of the relative change that would be expected in each individual trait if producers select animals using the Self Replacing Selection Index. The graph reflects the relative change if the Limousin Published Sires (at the April 2012 Limousin GROUP BREEDPLAN 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.



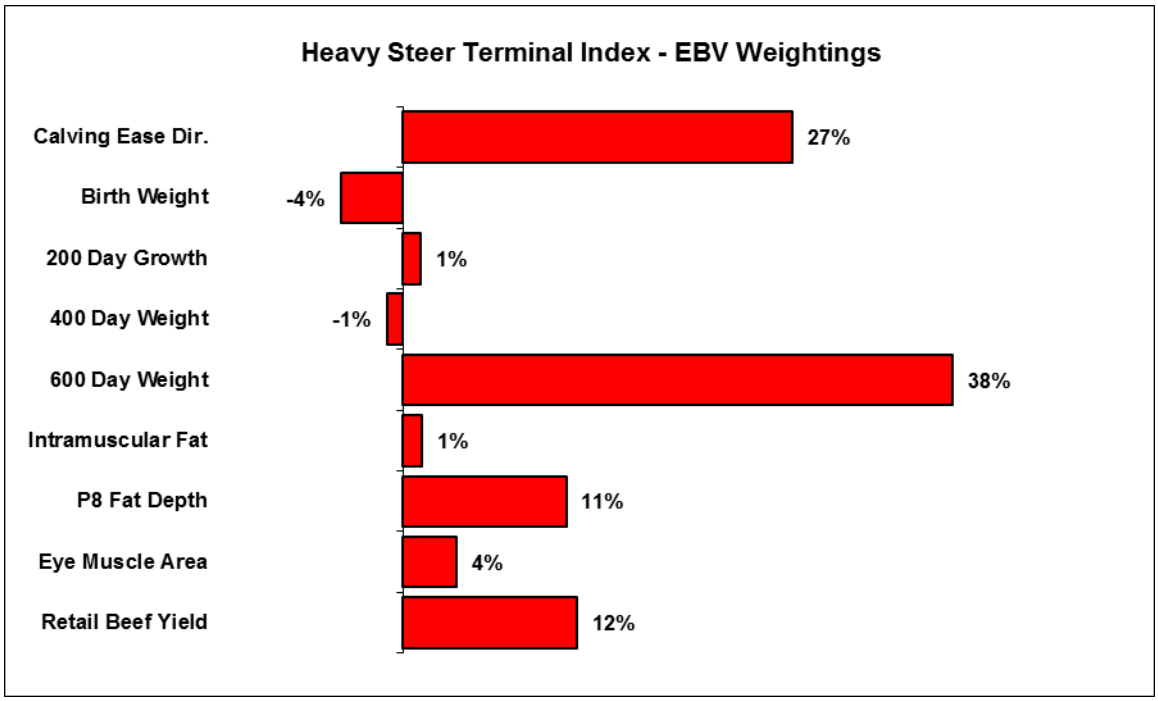
Limousin Heavy Steer Terminal Index

The Limousin Heavy Steer Terminal Index estimates the genetic differences between animals in net profitability per cow joined for an example commercial crossbred herd using Limousin bulls over British bred females targeting the production of heavy steers. Steers are finished on grass or a short fed grain program and are marketed at 580 kg live weight (320 kg carcase weight) at 24 months of age. All male and female progeny are slaughtered.

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 but lighter Birth Weight EBVs are favoured.



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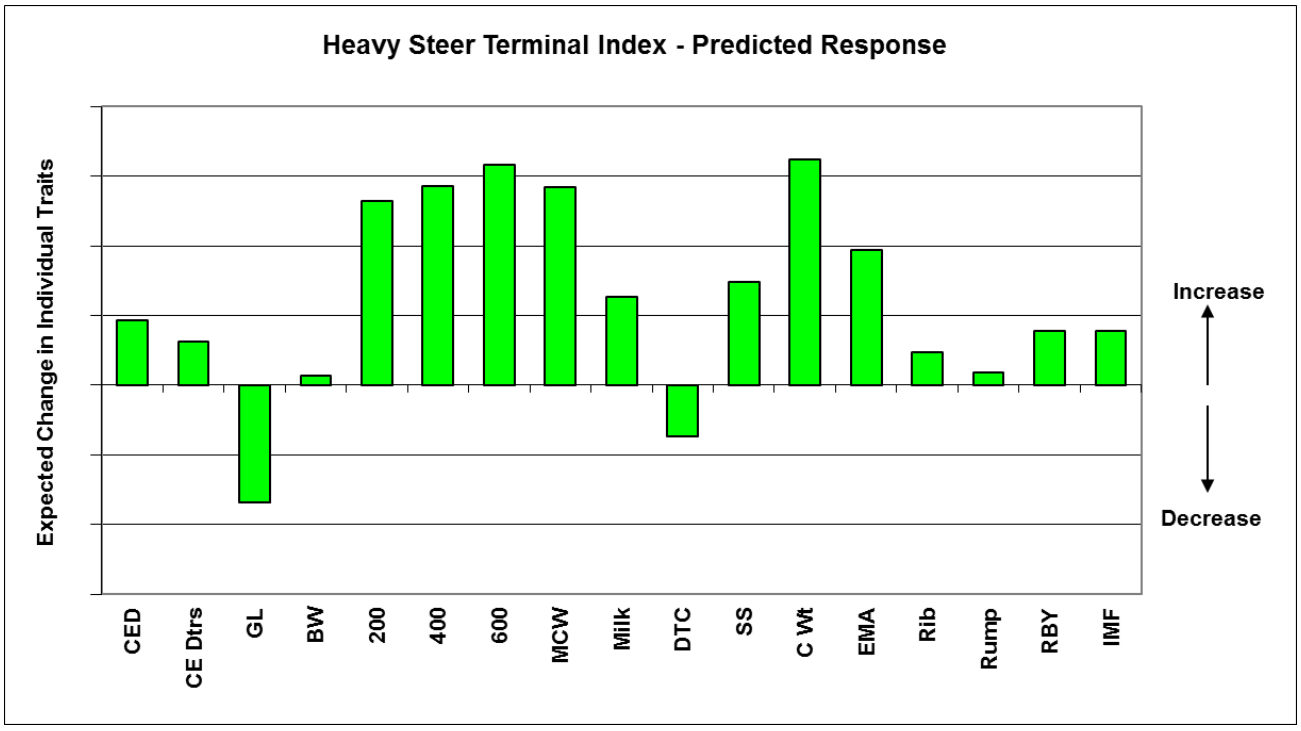
While the graphs on the previous page show the different profit drivers and emphases that have been placed on each EBV within the Heavy Steer Terminal Selection Index, they do not illustrate the likely change that will occur to each individual trait if producers select animals using this selection index. 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 slight negative 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 600 Day Weight.

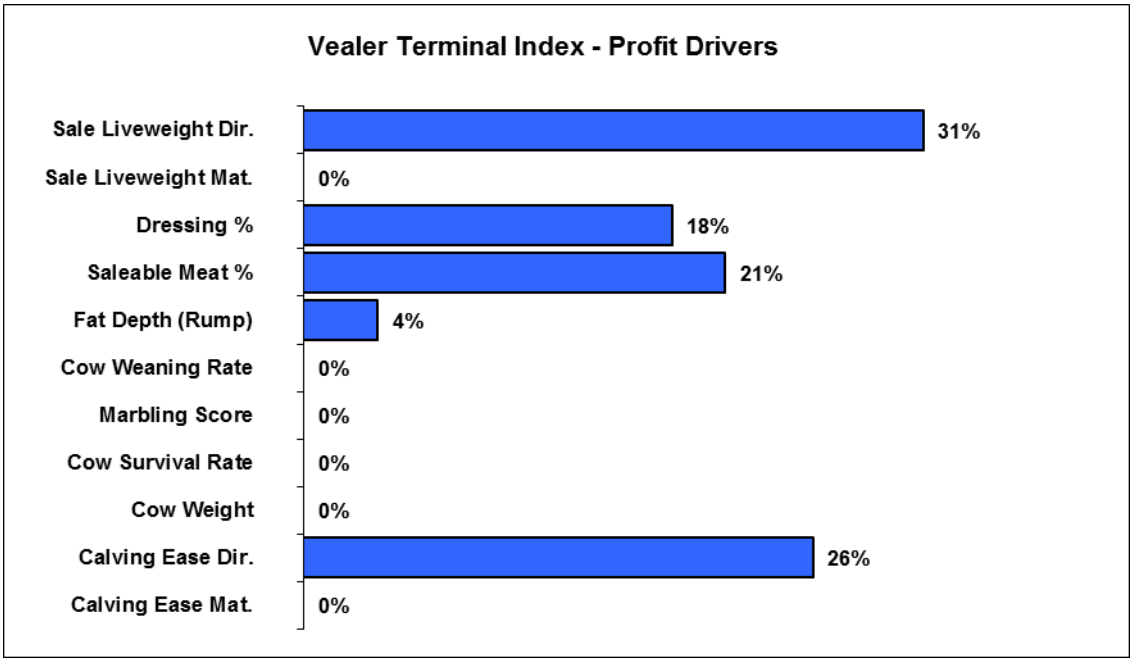
The following bar graph provides an indication of the relative change that would be expected in each individual trait if producers select animals using the Heavy Steer Terminal Selection Index. The graph reflects the relative change if the Limousin Published Sires (at the April 2012 Limousin GROUP BREEDPLAN 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.



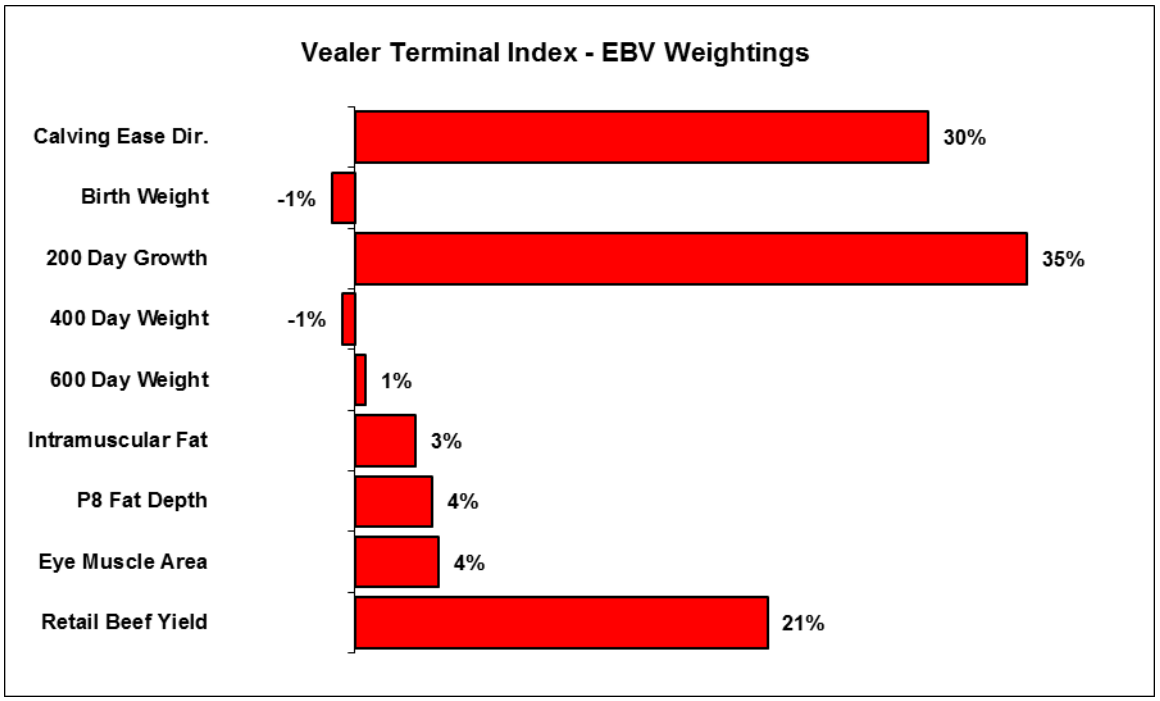
Limousin Vealer Terminal Index

The Limousin Vealer Terminal Index estimates the genetic differences between animals in net profitability per cow joined for an example commercial crossbred herd using Limousin bulls over either British bred or dairy cross females targeting the production of vealers. Steers are finished on grass and are marketed at 380 kg live weight (210 kg carcase weight) at 10 months of age. All male and female progeny are slaughtered.

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 200 Day Growth EBVs but lighter Birth Weight EBVs are favoured.



May 2012

While the graphs on the previous page show the different profit drivers and emphases 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 slight negative 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 Terminal Selection Index. The graph reflects the relative change if the Limousin Published Sires (at the April 2012 Limousin 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.