

Australian Santa Gertrudis Selection Indexes

There are currently two different selection indexes calculated for Australian Santa Gertrudis animals. These are:

- ❑ Domestic Production Index
- ❑ Export Production Index

Each selection index describes a different production/market scenario and relates to a typical, self replacing Santa Gertrudis herd targeting the following specifications.

Domestic Production Index - Estimates the genetic differences between animals in net profitability per cow joined for an example self replacing commercial herd (run in a temperate environment) producing steers for the domestic trade. This Index assumes that the steer progeny are pasture grown and finished and marketed at 500 kg live weight (280 kg HSCW and 12 mm P8 fat depth) at 16 months of age. Daughters are retained for breeding

Export Production Index - Estimates the genetic differences between animals in net profitability per cow joined for an example commercial herd (run in a sub-tropical environment) producing steers for the export trade. This Index assumes that the steer progeny are pasture grown and finished and are marketed at 620 kg live weight (340 kg HSCW and 15 mm P8 fat depth) at 28 months of age. Daughters are retained for breeding.

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.

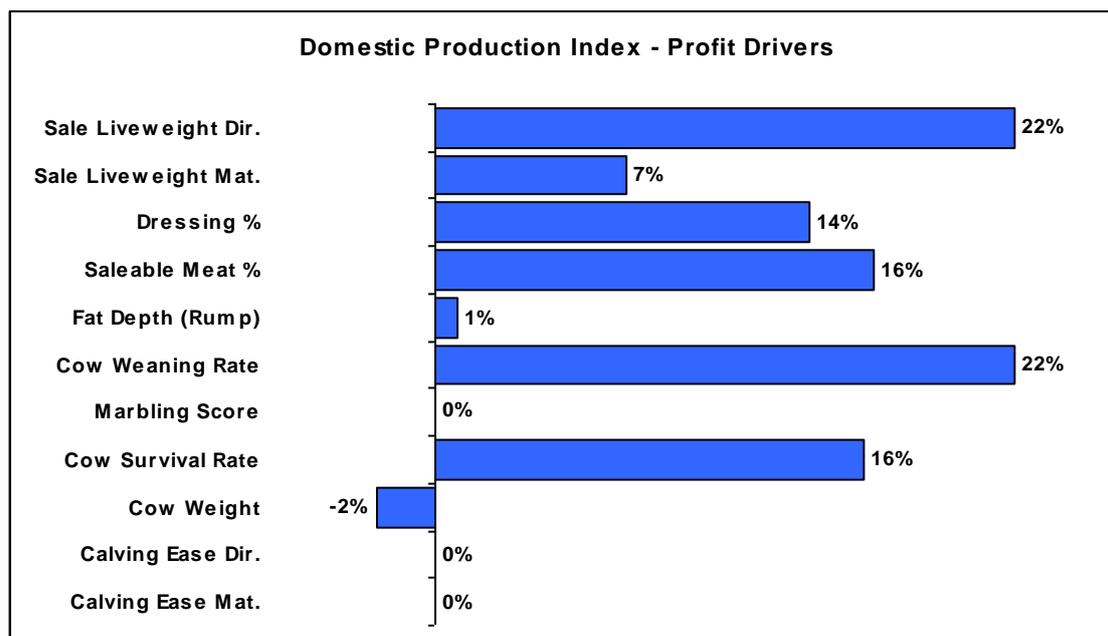
All selection index values have been derived using BreedObject technology. More detailed information regarding each selection index is provided on the following pages. Further information is also available in the Tip Sheet titled “Selection Indexes – A General Introduction”.

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

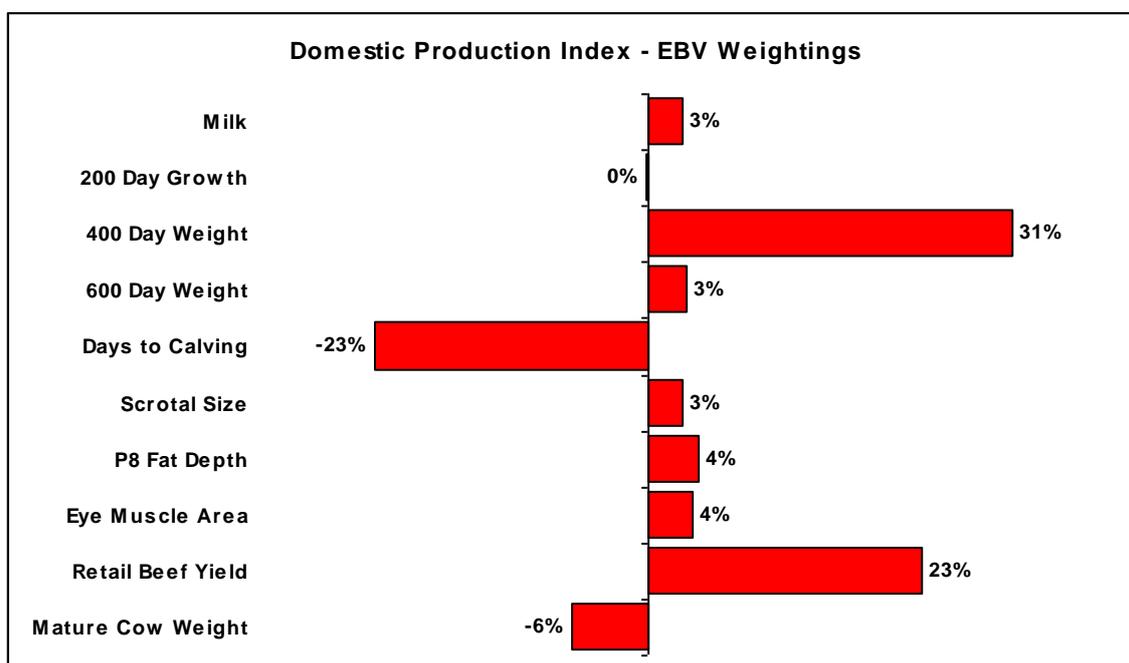
Santa Gertrudis Domestic Production Index

The Santa Gertrudis Domestic Production Index estimates the genetic differences between animals in net profitability per cow joined for an example self replacing commercial herd (run in a temperate environment) producing steers for the domestic trade. This Index assumes that the steer progeny are pasture grown and finished and marketed at 500 kg live weight (280 kg HSCW and 12 mm P8 fat depth) at 16 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 the production of steers for the domestic trade.

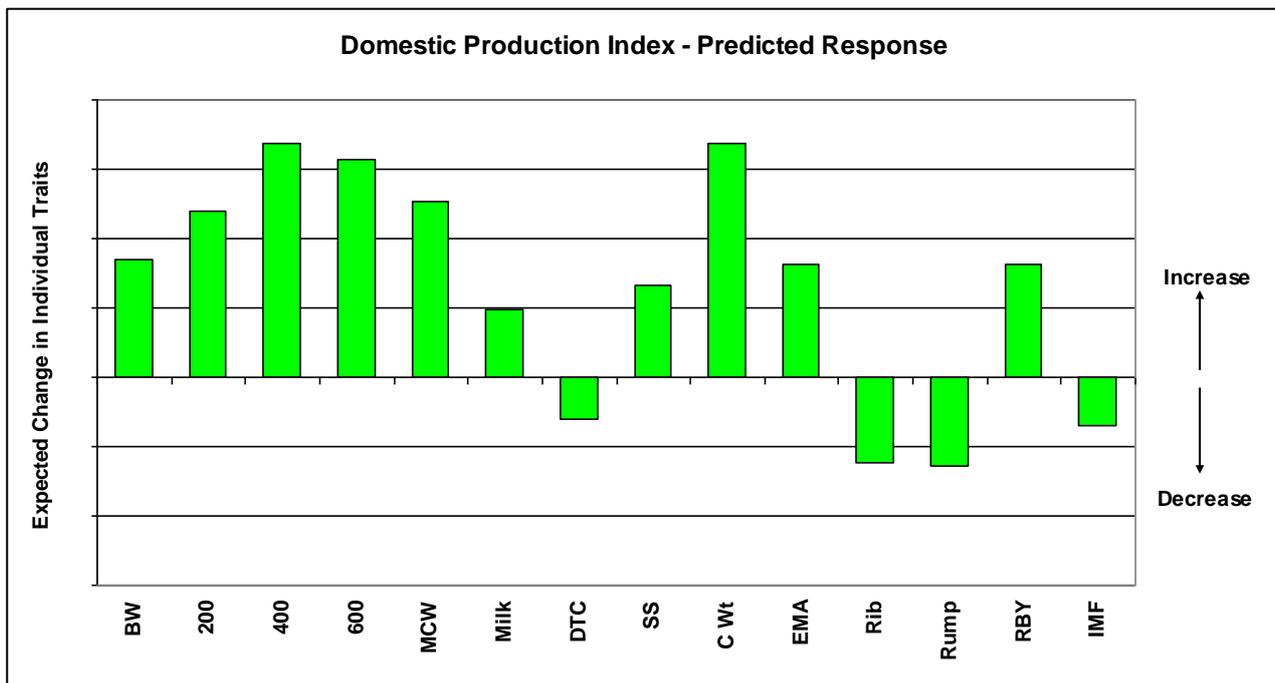


Considering the genetic relationship between the key profit drivers and the EBVs that are available, this transposes to the following EBV emphases. The sign indicates the direction of the emphasis. For example, greater 400-Day Weight EBVs and shorter Days to Calving EBVs are favoured.



While the graphs on the previous page show the different profit drivers and emphases that have been placed on each EBV within the Domestic Production 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 600 Day Weight in this selection index, it would be expected that growth to 600 days would increase as there is a large weighting on 400 Day Growth.

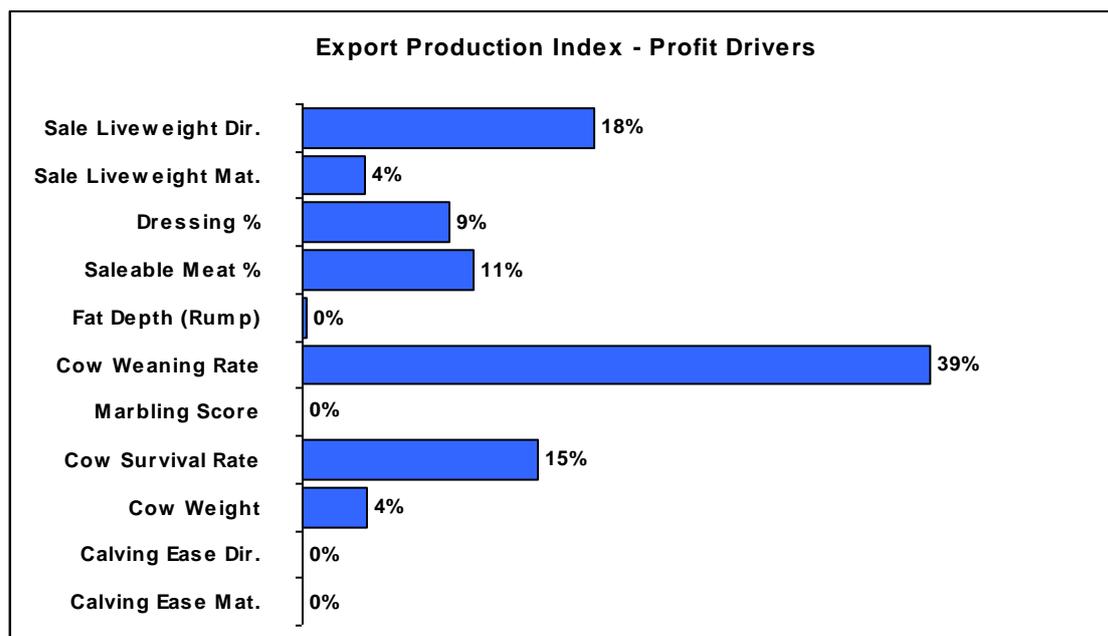
The following bar graph provides an indication of the relative change that would be expected in each individual trait if producers select animals using the Domestic Production Index. The graph reflects the relative change if the Santa Gertrudis Published Sires (at the Winter 2009 Santa Gertrudis GROUP 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.



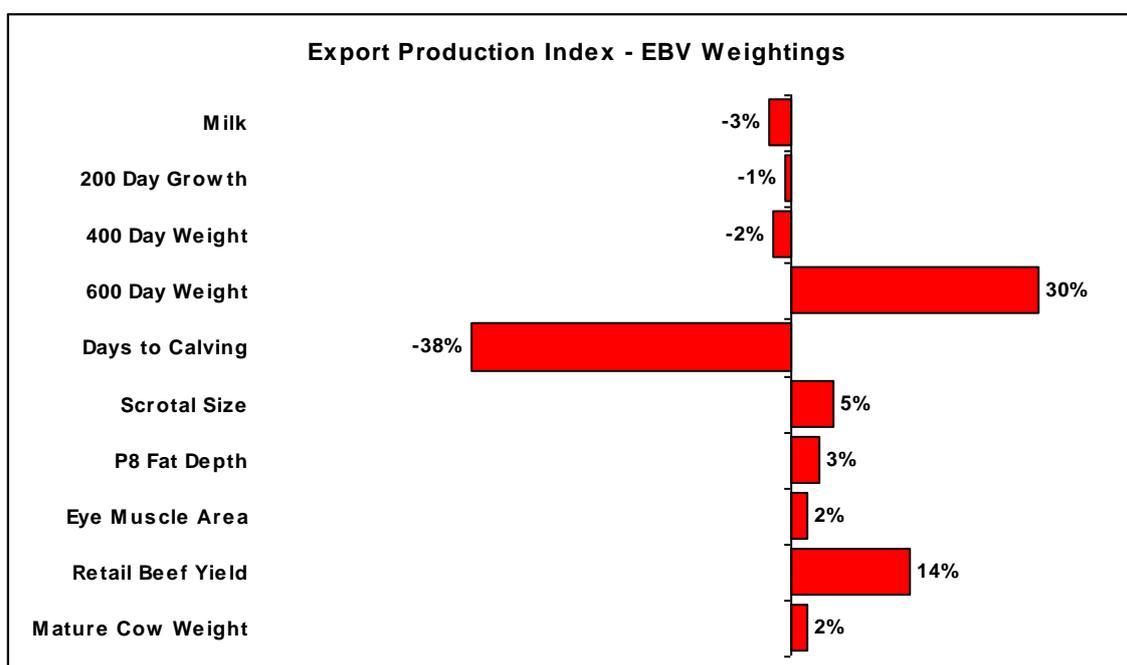
Santa Gertrudis Export Production Index

The Santa Gertrudis Export Production Index estimates the genetic differences between animals in net profitability per cow joined for an example commercial herd (run in a sub-tropical environment) producing steers for the export trade. This Index assumes that the steer progeny are pasture grown and finished and are marketed at 620 kg live weight (340 kg HSCW and 15 mm P8 fat depth) at 28 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 export markets.



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.



While the graphs on the previous page show the different profit drivers and emphases that have been placed on each EBV within the Export Production 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 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 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 Export Production Index. The graph reflects the relative change if the Santa Gertrudis Published Sires (at the Winter 2009 Santa Gertrudis 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.

