

## **Australian Brahman Selection Indexes**

There are two standard selection indexes calculated for Australian Brahman animals. These are:

- ❑ Jap Ox Index
- ❑ Live Export Index

Each selection index has been developed for a different production/market scenario

**Jap Ox Index** – The Jap Ox Index estimates the genetic differences between animals in net profitability per cow joined for an example commercial herd targeting pasture finished steers for export markets. Steers are assumed to be pasture grown & finished, weighing 600 kg live weight or 325 kg carcass weight at 32 months from a self-replacing herd run in a tropical environment. Daughters are retained in the industry for breeding. This Jap Ox Index relates to typical self-replacing Brahman herds in tropical Australia targeting Jap Ox specifications.

**Live Export Index** – The Live Export Index estimates genetic differences between animals in net profitability per cow joined for an example self-replacing commercial herd (run in a tropical environment) targeting steers for the live export markets. This index assumes steers are pasture grown until entry to overseas feedlots and then feedlot finished for 120 days before being marketed at 470 kg liveweight (250 kg HSCW and 10 mm P8 fat depth) at 26 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.

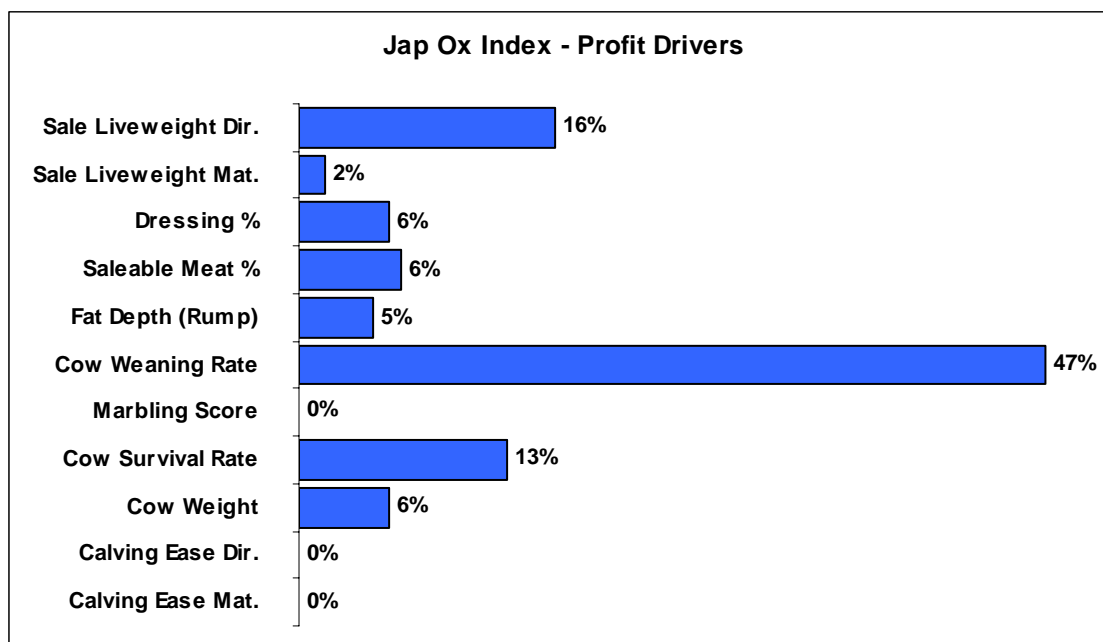
All selection index values have been derived using BreedObject technology. More detailed information regarding this selection index is provided on the following page. Further information is also available in the Tip Sheet titled “Selection Indexes – A General Introduction”.

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

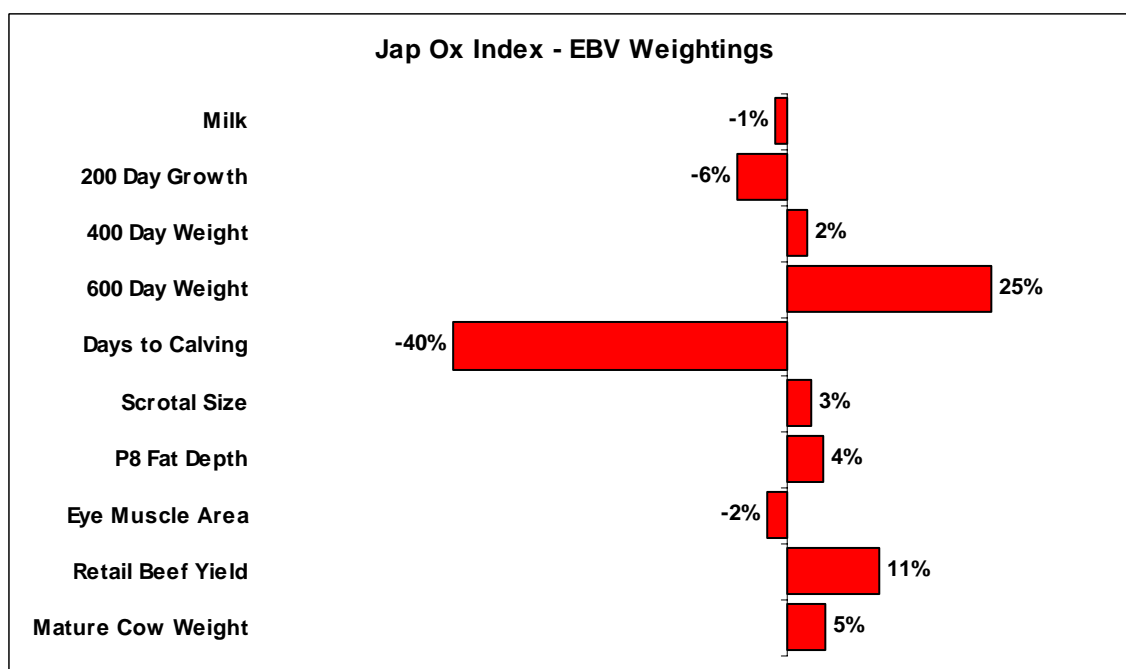
## ***Brahman Jap Ox Index***

The Brahman Jap Ox Index estimates the genetic differences between animals in net profitability per cow joined for an example commercial herd targeting pasture finished steers for export markets. Steers are assumed to be pasture grown & finished, weighing 600 kg live weight or 325 kg carcass weight at 32 months from a self-replacing herd run in a tropical environment. Daughters are retained in the industry 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 typical self-replacing commercial Brahman herd in tropical Australia targeting Jap Ox specifications.

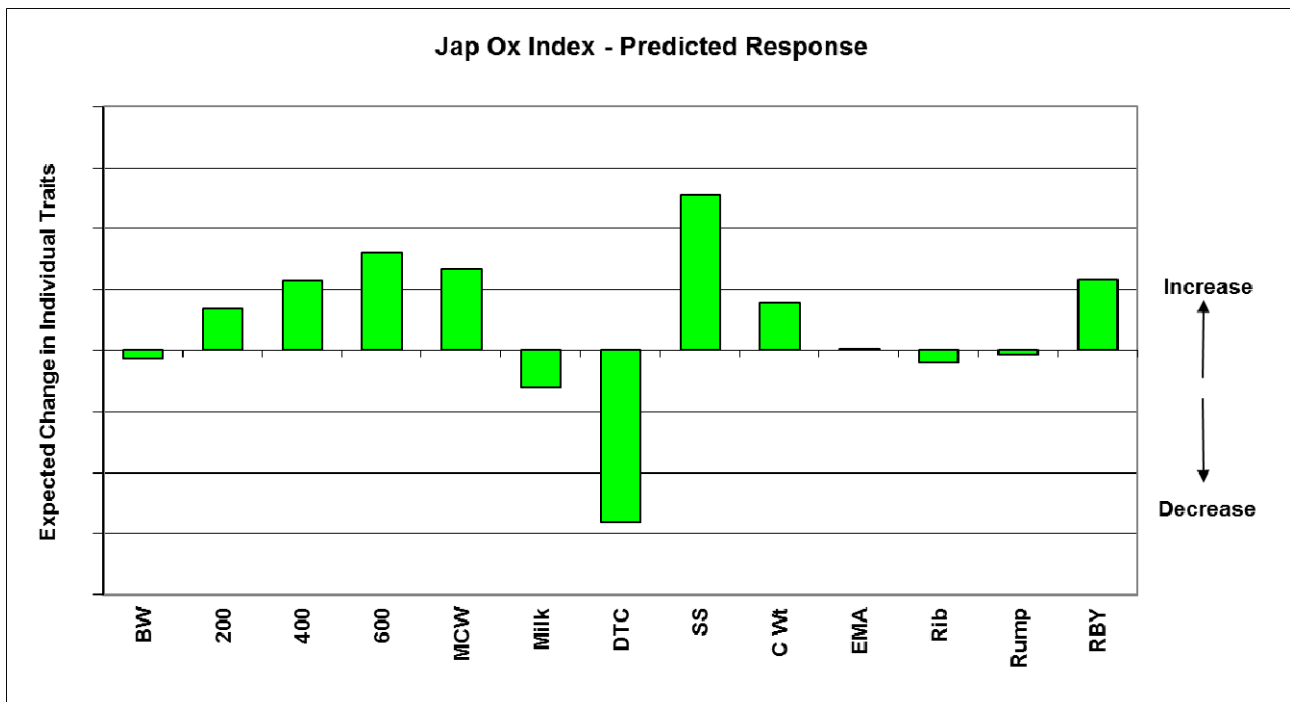


Considering the genetic relationship between the key profit drivers and the EBVs that are available, this transposes to the following EBV emphases. The sign indicates the direction of the emphasis. For example, greater 600 Day Weight EBVs and shorter Days to Calving EBVs are favoured.



While the graphs on the previous page show the different profit drivers and emphases that have been placed on each EBV within the Jap Ox 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 600 Day Growth.

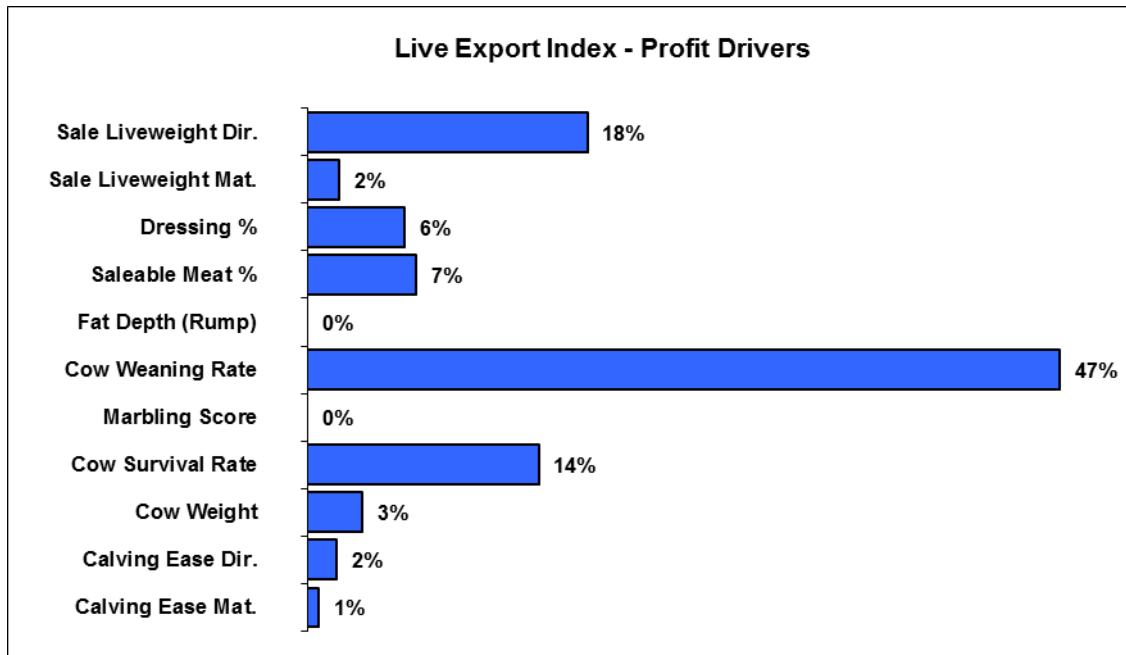
The following bar graph provides an indication of the relative change that would be expected in each individual trait if producers select animals using the Jap Ox Index. The graph reflects the relative change if the Brahman Published Sires (at the November 2011 Brahman GROUP BREEDPLAN analysis) were 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.



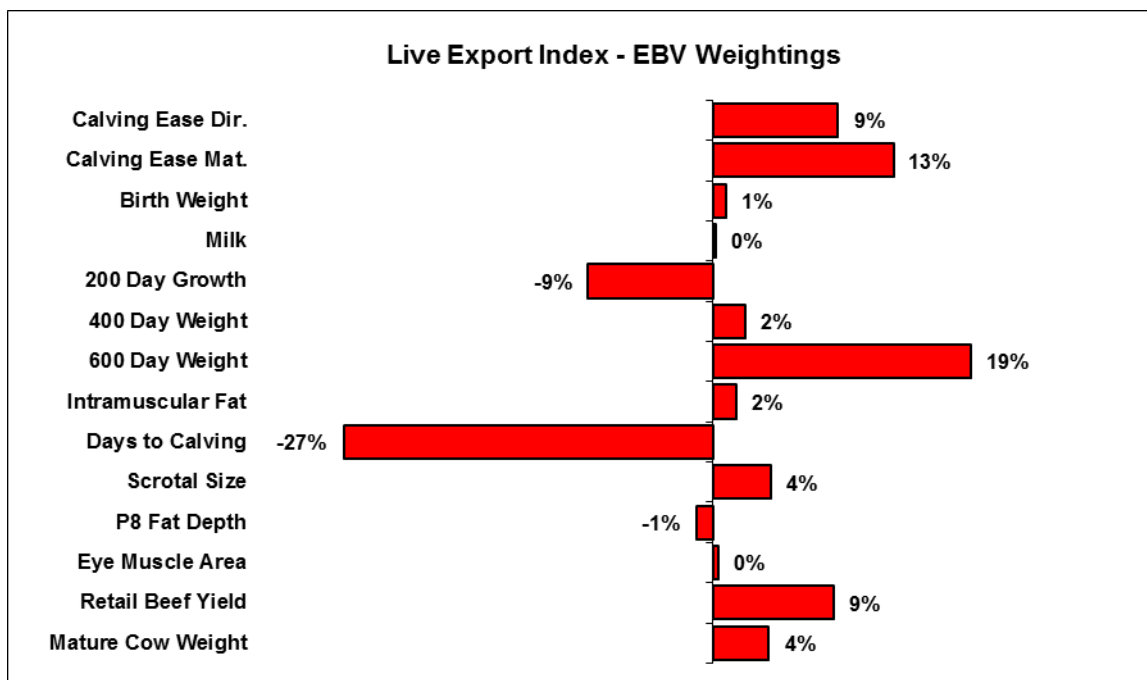
## ***Brahman Live Export Index***

The Brahman Live Export Index estimates genetic differences between animals in net profitability per cow joined for an example self replacing commercial herd (run in a tropical environment) targeting steers for the live export markets. This index assumes steers are pasture grown until entry to overseas feedlots and then feedlot finished for 120 days before being marketed at 470 kg liveweight (250 kg HSCW and 10 mm P8 fat depth) at 26 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 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 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 Live Export 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 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 Live Export Index. The graph reflects the relative change if the Brahman Published Sires (at the November 2011 Brahman 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.

