

Performance Herds Australia Selection Indexes

There is one selection index calculated for animals recorded with Performance Herds Australia.

This is the MSA–B2 Index.

The MSA-B2 Index relates to a typical self replacing commercial herd using Shorthorn bulls and targeting the following specifications.

MSA-B2 Index – Estimates the genetic differences between animals in net profitability per cow joined for an example commercial British bred herd (i.e. Shorthorn, Angus or Hereford cows) in either a cool temperate/Mediterranean or warm temperate/grassland environment targeting the production of steers for either the heavy domestic MSA food service market or the Japanese B2 export market. Steers are pasture grown to feedlot entry at 460kg live weight at 16 months then grain finished for 120 days to be slaughtered at 20 months weighing 675kg (360 kg HSCW). Select heifers are retained for breeding and the balance grass fattened to MSA slaughter at 540kg (290kg HSCW).

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

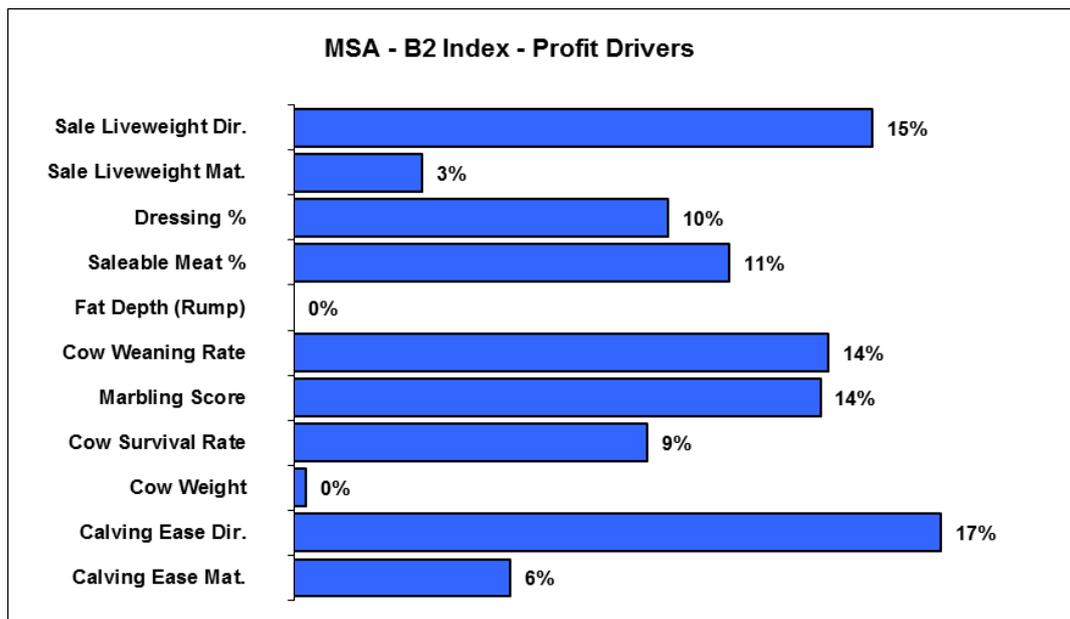
More detailed information regarding the MSA-B2 selection index is provided on the following pages.

If you have any further queries regarding Performance Herds Australia Selection Index, please do not hesitate to contact staff at your BREEDPLAN processing centre.

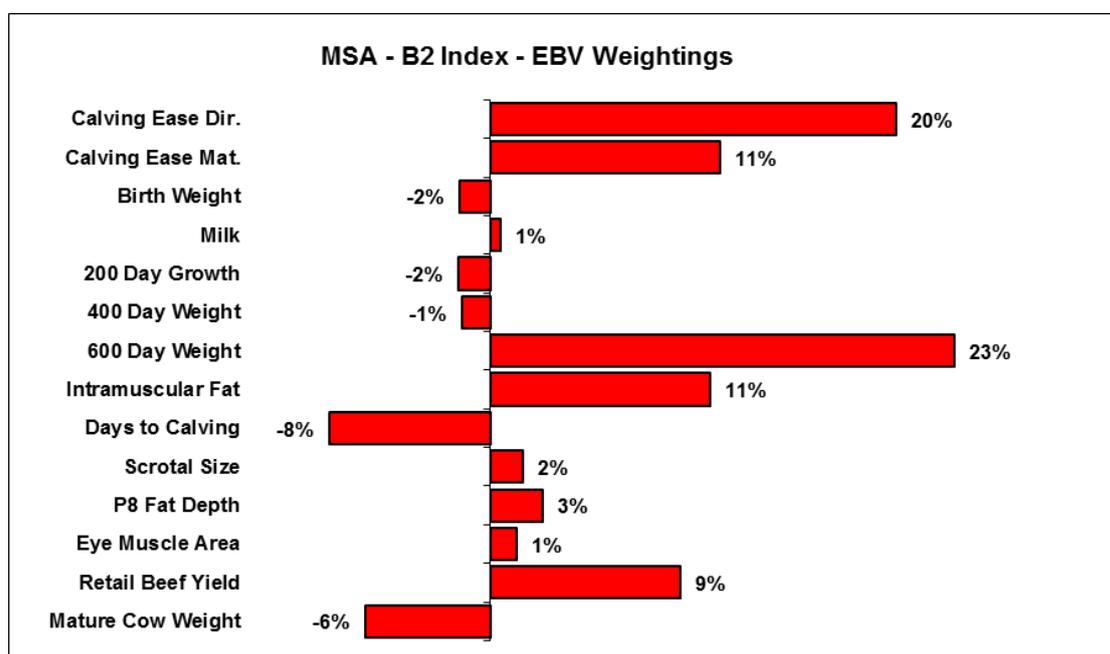
PHA MSA-B2 Index

The PHA MSA-B2 Index estimates the genetic differences between animals in net profitability per cow joined for an example commercial British bred herd (i.e. Shorthorn, Angus or Hereford cows) in either a cool temperate/Mediterranean or warm temperate/grassland environment targeting the production of steers for either the heavy domestic MSA food service market or the Japanese B2 export market. Steers are pasture grown to feedlot entry at 460 kg live weight at 16 months then grain finished for 120 days to be slaughtered at 20 months weighing 675 kg (360 kg HSCW). Select heifers are retained for breeding and the balance grass fattened to MSA slaughter at 540 kg (290 kg HSCW).

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 Mature Cow Weight 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 MSA-B2 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 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 MSA-B2 Index. The graph reflects the relative change if all the sires recorded with Performance Herds Australia (at the February 2013 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.

