**New Zealand Murray Grey Selection Indexes**

There is currently one selection index calculated for New Zealand Murray Grey animals. This is the Dairy Index.

The Dairy Index estimates the genetic differences between animals in net profitability per cow joined for an example commercial dairy herd targeting the production of dairy beef progeny from dairy cows and heifers where all progeny are slaughtered. Steers are assumed marketed at 450 kg live weight (240 kg carcase weight and 6 mm fat depth) at 16 months of age. While calving ease is by far the most important profit driver in the Index, growth and to a lesser extent meat yield also contribute.

The Dairy Index relates to typical commercial dairy herd producing dairy beef through the use of Murray Grey bulls. It is not suitable for use when selecting bulls for a self replacing purebred Murray Grey breeding program.

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 the Dairy Index is provided on the following pages.

*If you have any further queries regarding New Zealand Murray Grey Selection Indexes, please do not hesitate to contact staff at the New Zealand Murray Grey Beef Cattle Society.*
Murray Grey Dairy Index

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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 dairy beef progeny.

![Dairy Index - Profit Drivers](chart)

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.

![Dairy Index - EBV Weightings](chart)

July 2011
While the graphs on the previous page show the different profit drivers and emphases that have been placed on each EBV within the Dairy 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.

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 Dairy Selection Index. The graph reflects the relative change if all New Zealand Murray Grey Sires (at the July 2011 Murray Grey 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.