Using Australian Limousin Selection Indexes



Selection indexes assist beef producers to make selection decisions that take into account the relevant growth, carcase, fertility and efficiency attributes of each animal to identify candidates whose progeny will be the most profitable for a particular commercial enterprise. Selection indexes provide an overall indication of an animal's genetic value for profit in a specific production system/target market and are calculated based on weightings placed on individual traits that are deemed to be important for that production system.

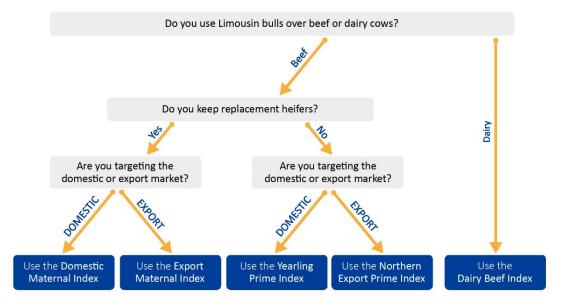
The weightings are calculated using <u>BreedObject</u> software that analyses all sources of costs and income for the production system represented by each selection index. As such, selection indexes account for both sides of the profit equation and reflect the short and long term profit possible through selection of superior genetics. For example, short term profit can be generated by a bull through the sale of his progeny, and the longer term profit generated by his daughters in a self-replacing cow herd.

Best Practice Guide to Animal Selection Using Australian Limousin Selection Indexes

Incorporating selection index information into breeding decisions takes the hard work out of trying to decide how much emphasis you need to put on individual EBVs when determining which animals you want to retain in your herd or purchase. The recommended strategy for selecting animals is to complete the following steps:

Identify the selection index of most relevance to your or your client's breeding objectives.
This decision should be aided by the index descriptions at the end of this document and the following flowchart.

Which Australian Limousin Selection Index should you use?





- Rank animals on the chosen selection index. This can be done via the web search facility available for the breed.
- 3. Consider the individual BREEDPLAN EBVs of importance. All breed level selection indexes are designed for the average of the production system specified in their description. This means that individual farm environments and management choices may require that their own thresholds are applied. For example, if looking for a bull to use over heifers, particular attention should be paid to Calving Ease and Birth Weight EBVs.
- 4. Consider other traits of importance. Structure, fertility (e.g. BULLCHECK[™]), temperament, genetic conditions and pedigree are all important additional considerations.

Further information is available in the <u>A BREEDPLAN Guide to Animal Selection</u> tip sheet that can be found in the Help Centre on the BREEDPLAN website.

Available Australian Limousin Selection Indexes

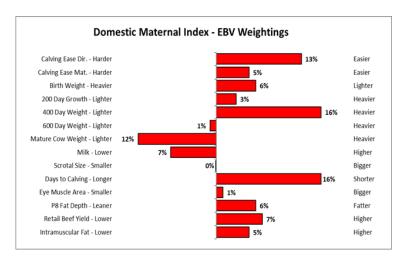
The Australian Limousin Breeders' Society currently reports five different selection indexes. These are the:

- Domestic Maternal Index
- Export Maternal Index
- Northern Export Index
- Yearling Prime Index
- Dairy Beef Index

Each selection index is reported in units of net profitability per cow mated (\$), and targets the following specifications:

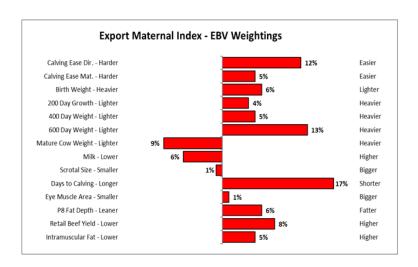
Domestic Maternal Index

- Commercial herd targeting the domestic supermarket trade.
- Heifers are retained so maternal traits are important.
- Steers target 450 kg live weight (250 kg HSCW & 8 mm P8 fat), while heifers surplus target 425 kg live weight (235 kg HSCW & 9 mm P8 fat) at 15 months.
- Positive emphasis on meeting MSA specifications.



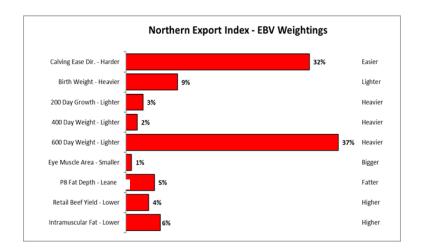
Export Maternal Index

- Commercial herd targeting the heavy export trade.
- Heifers are retained so maternal traits are important.
- Steers target 560 kg live weight (330 kg HSCW & 12 mm P8 fat), while surplus heifers target 525 kg live weight (290 kg HSCW & 14 mm P8 fat) at 22 months.
- Positive emphasis on meeting MSA specifications.



Northern Export Index

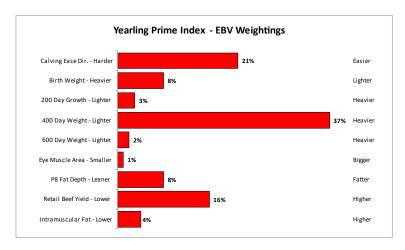
- Commercial herd targeting the export trade.
- Bulls used over Bos indicus cow base.
- All progeny (including heifers) are slaughtered.
- Steers target 580 kg live weight (330 kg HSCW & 12 mm P8 fat), while heifers target 545 kg live weight (300 kg HSCW & 14 mm P8 fat) at 27 months.



Please note: The Northern Export Index is also suitable for those producers in temperate Australia who wish to target heavier carcase weights.

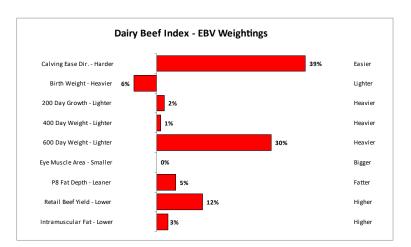
Yearling Prime Index

- Commercial herd targeting domestic trade.
- Bulls used over British breed or dairy cows.
- All progeny (including heifers) are slaughtered.
- Progeny target 365 kg live weight (200 kg HSCW & 5 mm P8 fat).
- Positive emphasis on meeting MSA specifications.



Dairy Beef Index

- Commercial dairy herd targeting the production of dairy beef.
- All progeny (including heifers) are slaughtered.
- Progeny target 415 kg live weight (225 kg HSCW & 8 mm P8 fat) at 17 months of age.
- Positive emphasis on calving ease and short gestation to suit the dairy production system.
- Positive emphasis on meeting MSA specifications.



More detail on the trait and EBV emphasis for each of the selection indexes described above is available in the <u>Australian Limousin Selection Indexes: Technical Specifications</u> tip sheet that can be found in the <u>Help Centre</u> on the BREEDPLAN website.

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