Revision to Murray Grey Beef Cattle Society Selection Indexes

Over the past few months, the Murray Grey Beef Cattle Society Technical Committee, with the assistance of Southern Beef Technology Services (SBTS), has conducted a comprehensive review of the Selection Indexes that are calculated for Australian Murray Grey animals.

The purpose of this review was to evaluate whether the Selection Indexes were appropriate for current beef markets and to ensure that the economic parameters being used in the calculation of the Selection Indexes reflected current costs and returns. This is normal industry practice and is essential in order to maintain the relevance of the Selection Indexes.

What are Selection Indexes?

Murray Grey BREEDPLAN is now calculating Estimated Breeding Values (EBVs) for up to 17 different traits. While this provides cattle producers with a comprehensive range of information regarding the genetic merit of an animal, it can result in a dilemma when trying to select animals for use in a particular breeding program. In an ideal situation, it would be desirable to select animals that excel in all traits, but rarely will an animal be superior in all 17 traits. So which traits should producers put most emphasis on? How much emphasis should be placed on each trait?

BreedObject is a tool that can help solve this dilemma. BreedObject combines the BREEDPLAN EBVs for an animal with an economic weighting (based on costs of production and returns on outputs), to produce a single Selection Index. A separate Selection Index can be produced for any particular production scenario and market.

Selection Indexes enable cattle producers to make “balanced” selection decisions, taking into account the relevant calving ease, growth, carcase & fertility attributes of each animal to identify the animal with the genetic package that is most profitable for a particular cattle breeding enterprise.

What Selection Indexes are Now Available?

Resulting from the review of the Murray Grey Selection Indexes:

- The Supermarket Index has been slightly revised and updated so that it better reflected current costs and returns.
- The Heavy Grass Fed Steer Index has been revised and will now be called the EU Heavy Steer Index. In contrast to the Heavy Grass Fed Steer index, the EU Heavy Steer index targets the production of progeny with an older and heavier age of turnoff, and no marbling requirement.
- The Long Fed Index will no longer be produced as it was deemed to no longer be relevant to the future markets in which Murray Grey genetics are being used.
- A new Vealer Terminal Index will now be calculated.

The result is that three indexes will now be calculated for Murray Grey animals. These are:

1) Vealer Terminal (VT)
2) Supermarket (SUP)
3) EU Heavy Steer (EU)

The Murray Grey Selection Indexes were developed for use by both commercial and seedstock producers.

Further information on the new Murray Grey Selection Indexes can be found on the “Interpreting Australian Murray Grey Selection Indexes” tip sheet on the BREEDPLAN website (http://breedplan.une.edu.au).
How and When will the Revised Murray Grey Selection Indexes be Available?

The revised Murray Grey Selection Indexes will be implemented as part of the July GROUP BREEDPLAN analysis. They will be available for each eligible animal on the Murray Grey Beef Cattle Society on-line database search facility following the release of the July GROUP analysis results. For Murray Grey BREEDPLAN members, they will also be included in the GROUP EBV files that can be downloaded and imported into compatible herd recording programs (e.g HerdMASTER). Additionally, they will be included in the BREEDPLAN herd reports.

Selection Index Reportability

Accuracy of selection is an important component of genetic progress and the review of the selection indexes also included a review of minimum accuracy levels that indexes must have before they are reported for an animal. In association with other existing criteria, the new selection indexes will only report for an animal if one of the animal’s carcase or scanning traits has an accuracy of 30% or greater. Previously, this minimum accuracy was set at 25%. As a consequence, the Murray Grey Beef Cattle Society Technical Committee would encourage BREEDPLAN members to ultrasound scan their cattle, preferably both heifers and bulls, if they wish to have selection indexes reporting on those animals.

For further information regarding the revised Murray Grey Selection Indexes, please contact SBTS Technical Officer Gemma Wilkinson by phone: 02 6773 3265 or email: gemma@sbts.une.edu.au.