Enhancements to be made in the Murray Grey GROUP BREEDPLAN Analysis, December 2008

A number of enhancements will be implemented to the BREEDPLAN software that is used to calculate EBVs for Murray Grey animals within the Summer 2009 Murray Grey GROUP BREEDPLAN analysis. These enhancements will all result in the calculation of improved BREEDPLAN EBVs and are part of the normal evolution of the BREEDPLAN software.

1. Revised Selection Indexes (Australia only)

The Murray Grey Beef Cattle Society Board has recently conducted a comprehensive review of the Murray Grey Selection Indexes. 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.

Resulting from the review of the Selection Indexes, several revisions will be made to the Selection Indexes that are calculated for Murray Grey animals. These revisions include:

(i) A new “Heavy Grass Fed” Selection Index will now be calculated. This selection index is designed for Murray Grey members that are producing steers for the heavier grass fed markets such as the Korean market.

(ii) The economic parameters used in the calculation of the Supermarket and Long Fed Selection Indexes have been updated to better reflect current costs and returns.

(iii) An increased emphasis has been placed on improved calving ease in both the Supermarket and Long Fed Selection Indexes.

(iv) A small emphasis has been placed on marbling in the Supermarket Selection Index in response to industry feedback regarding the importance of eating quality and tenderness.

The result of these revisions is that there will be changes to both the Selection Index values and ranking of Murray Grey animals.

2. New analytical software

The increasing size of the Breed Society databases and the computational demands of the GROUP BREEDPLAN evaluation have required the development of more efficient analytical processes. The “solver” program is the statistical software behind the BREEDPLAN analysis that calculates the EBVs. An updated “solver” program has been developed that has quicker processing speed (ie “works faster”) and makes better estimates of the breeding values, particularly for animals with limited performance and pedigree data. The effect of the new program is likely to be greatest when comparing animals across years (ie current vs historic), rather than within year (ie contemporaries) and for traits that are less well recorded (eg mature cow weight) than the more widely recorded traits (eg growth traits).

3. Improved Calving Ease Analysis

The calving ease analysis has been modified to include additional depth in the pedigree information. This is to overcome limitations in pedigree structures that are associated with incomplete recording of calving difficulty scores.

As a result of this modification, Calving Ease EBVs will change significantly for some individual animals. Also, more spread in the Calving Ease EBVs will be evident. Given the importance of Calving
Ease EBVs in the Australian Murray Grey Selection Indexes, this change will also impact on the Selection Index values of some Australian animals.

4. Updated Genetic Base

The genetic base is a historical group of animals that forms the benchmark within the Murray Grey BREEDPLAN analysis. The genetic base that is currently used within the Murray Grey GROUP BREEDPLAN analysis defines the base group as all animals born in 1990. The genetic base will be updated to a more recent group of animals and will now be defined as all animals born in 1995. This change will have little or no effect on the EBVs that are reported for animals.

Should you have any queries regarding any of the enhancements that will be implemented into the BREEDPLAN software, please do not hesitate to contact Andrew Byrne at SBTS by phone on (02) 6773 3357.