Determining the Economic Value of Bull Selection in Genomic Tested Herds

Instructions for use

Thank you for selecting this tool to determine the economic effects of bull selection on your genomic tested herd. This is a guide to help you use the spreadsheet which will calculate an approximation of the economic value of your selection decisions.

1. Enter your bull PTA traits using the ‘Average Bull Value Calculator’

In this tool you have the option of evaluating the economic value of individual bulls, or of a group of bulls on your herd. If you want to evaluate an individual, then just enter one bull into the column ‘Bull 1’ on the sheet ‘Average Bull Value Calculator’. If you wish to evaluate a group of bulls then enter all the bull’s individual traits into the ‘Bull X’ columns. The spreadsheet will then automatically calculate the average based on the weighting of how much of each bull is intended to be used. The average values are then automatically moved into the ‘Economics of Bull Selection’ tab.

2. Input which set of economic values most suit your herd’s management

Enter the ‘Economics of Bull Selection’ tab and select which index most suits your herd’s management. Choose from Net Merit (NM), which is most appropriate to the average commercial herd; Fluid Merit (FM), which is most appropriate to herds selling milk on a fluid contract, Cheese Merit (CM), which is most appropriate to herds selling milk on a constituent basis and Grazing Merit (GM), which is most appropriate to grazing herds. This will select the economic values associated with each trait that is most appropriate to your farm and so increase the accuracy of the estimations.

Enter the bull’s PTA traits

Enter the weighting of each bull on the herd’s overall matings, the total must add up to 100%
3. Enter your herd's (or a specific group's) average GPTA scores

Enter the GTPA scores from your genomic testing for the herd average or a select group of animals. Enter these into the 'Enter Herd Information' section of the 'Economics of Bull Selection' tab.

4. Assess the economic value output

Using the inputted values, the spreadsheet will then estimate genetic progress from current herd and the next generation if bred with the inputted bull/bulls. The difference will then be applied to the Net Merit Index 2014 update (for NM, CM, FM and GM) to provide the economic gain from one generation to the next. Then through altering the bull inputs, you can assess which bull, or bulls is the most appropriate selection for your herd.