Changes in NAV genetic evaluation

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Farmers from NAV´s owner organizations had a workshop on the 9th of January in Copenhagen to discuss changes in the breeding goal Nordic Total Merit (NTM).

Nordic breed representatives for Holstein, Red Dairy Cattle (RDC) and Jersey discussed possible adjustments in NTM and in sub-indices in NTM. Some of the discussions resulted in clear suggestions that have been agreed on across countries and accepted by the NAV board. These changes are introduced in NAV routine genetic evaluation in May 2014, while other changes will be introduced later on.

Changes in Yield index and NTM for RDC

The consumer demand for fat has increased and because of this there has been a gradual change in the payment system in the dairies in Denmark and Sweden. Farmers are nowadays paid more for fat than previously.

At the workshop there was a wish both from Danish and Swedish farmers within the red breeds to increase the weight on fat in the yield index. Finnish farmers were not interested in such a change because they currently have another payment system in Finnish dairies.

However, the RDC group agreed on a change from the previous weighing of milk, fat and protein in the ratio -25:25:100 to a new weighing -20:40:80. Thus, the relative weight on fat compared to protein was increased from a quarter (1:4) to a half (1:2).

The same change was made for Holstein already in May last year, whereas Jersey has a somewhat different relative weighting of -30:50:80, thus a relation between fat and protein of 1:1.6. This is actually closest to the current payment system in Denmark and Sweden.

The RDC group did not however want to lose any genetic progress in yield index due to the changes within the index. To counterbalance the changed ratios within the index, the economic weight for yield index in NTM is therefore increased from 0.92 to 0.96.

Discussion on Body versus Frame

Further it was discussed within the Holstein group to replace the current sub-index for body with a new sub-index called frame. The new index frame would combine some of the breeding values for body traits to better describe the size of the cows. Breeding goal within body traits would not be changed. Body has no economic weight and is therefore not included in NTM for any of the breeds and the same would be the case for frame.

However, discussions are still on-going regarding exactly how frame would be composed. RDC and Jersey suggested at the workshop to change name on their current body index to frame, without changing the content of the index, when Holstein changes will be implemented. This will not happen in the routine evaluation in May 2014.

Publication age for young bulls

Except for the changes in genetic evaluation resulting from discussions at the workshop, the NAV board has also agreed to lower the age when genomically tested young bulls get their official genomically enhanced breeding values (GEBV). From the previous age of 17 months, the GEBVs for bulls will from now on be published already at an age of 10 months. These breeding values will be published every third month in connection with the ordinary routine evaluations.

The new age for publication of GEBV bulls has no effect on the NAV genetic evaluation but is more in agreement with what is done in other countries.

International genomic breeding values for Holstein

Interbull starts to publish genomic breeding values for young Holstein bulls. You can find these bulls on NAVs search page for Interbull breeding values [add address/link here, different in each country]. These breeding values have been published on the search page for the first time in the end of May.

After this first introduction of international genomic breeding values, they will be updated at the same time as traditional international breeding values from Interbull, thus three times a year. You can distinguish between young genomic bulls and bulls with daughter information by looking if the bull has daughters or not. If the bull has daughters the breeding values are traditional and based on daughter information and pedigree information, but if the bull hasn´t any daughters the breeding values are based on genomic information and pedigree information.