

Frame index describes cow size for Nordic red breeds

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Prior to November 2018, the frame index, combining linear body traits, for Nordic red breeds aimed at bringing cows towards the optimal body condition. How traits are combined in the index has now been changed so that it describes the size of the cow. This means that cows and bulls that give offspring that are higher, wider and deeper than average cows will get the highest values for frame.

This change, made in connection to the implementation of the revised NTM in November 2018, was made because it was a clear wish from Nordic farmers with the red breeds. A similar change for the Holstein breed was made already some years back.

The correlation between previous and current index is 0.78. This means that there will be quite much re-ranking among bulls and cows based on their frame index.

Frame, or size of the cow, is not included in the breeding goal for Nordic red breeds or any of the other breeds. However, the index can be useful for farmers that wish to avoid either too large or too small cows.

Table 1. Weight on body traits in the old and the new frame index for Nordic red breeds.

Linear type trait	Old weights	New weights
Stature	0.10	0.15
Body depth	0.15	0.25
Chest width	0.20	0.30
Dairy form	0.10	0.10
Topline	0.10	0.00
Rump width	0.15	0.20
Rump angle	0.20	0.00

Table 2. Correlations between breeding values for individual linear body traits and the old and the new frame index for Nordic red breeds. Calculated from the daughter proven Nordic RDC bulls born in 2009 and onwards.

Linear type trait	Old frame index	New frame index
Stature	0.79	0.56
Body depth	0.56	0.80
Chest width	0.40	0.74
Dairy form	0.27	0.08
Topline	0.07	-0.17
Rump width	0.57	0.62
Rump angle	-0.39	-0.11