

## New indexes for nine beef breeds

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In November 2023 nine new beef breeds were included in the NAV breeding evaluation. All nine breeds received NAV breeding values for single traits at the same time. In March 2024 all nine breeds got indexes for Production, Growth, Slaughter quality, Dam, Calving and Birth. These indexes were created by combining the weighted values of individual traits. The weights were determined by the breed organizations at the end of 2023 and beginning of 2024, which enabled the calculation of new indexes.

For the two breeds Highland cattle and Blonde d'Aquitaine, the evaluation was conducted across the three NAV countries using data from all countries. The breed associations in Denmark, Sweden and Finland have jointly decided on weights used in the calculation of the indexes. The seven other new beef breeds are only evaluated using Danish data, and the weights were decided by the Danish breed associations.

### Information for six new indexes

The indexes can be categorized into production traits and functional traits, such as birth and maternal traits. The overall Production trait combines Growth and Slaughter quality. If we delve deeper, Growth is a combination of Daily carcass gain and Yearly weight – direct, while Slaughter quality is a combination of Carcass conformation score and Carcass fat score. The weights in the production traits are listed in tables 1 and 2.

Breed	Growth		Slaughter quality		Production	
	Daily carcass gain	Yearly weight, direct	Carcass conformation score	Carcass fat score	Growth	Slaughter quality
Blonde	75	25	75	25	70	30
Highland Cattle	60	40	90	10	60	40

Table 1: Weights in the production traits for the new beef breeds that are evaluated across the NAV countries.

Breed	Growth		Slaughter quality		Production	
	Daily carcass gain	Yearly weight, direct	Carcass conformation score	Carcass fat score	Growth	Slaughter quality
Danish Blue	75	25	100	0	50	50
Shorthorn	60	40	100	0	60	40
Dexter	50	50	100	0	50	50
Galloway	50	50	100	0	70	30
Piemontese	50	50	100	0	70	30
Salers	50	50	100	0	50	50
Grauvieh	50	50	100	0	70	30

Table 2: Weights in the production traits for the new beef breeds that are only evaluated in Denmark.

For the functional traits, the Dam index is the overall index that combines calving and milk. Calving is a combination of the maternal effect from Calving ease for 1. calving and later calvings, along with Calf survival for 1. calving and later calvings. Milk is a single trait in itself and that index was already published in November 2023.

The birth index is a combination of the direct effect from Calving ease for 1. calving and later calvings, along with Calf survival for 1. calving and later calvings, indicating the calf's own effect on the calving. The weights in the functional traits are listed in table 3 and 4.

Breed	Birth – direct effect				Calving – maternal effect				Dam	
	Calf survival 1. calving	Calving ease 1. calving	Calf survival later calvings	Calving ease later calvings	Calf survival 1. calving	Calving ease 1. calving	Calf survival later calvings	Calving ease later calvings	Calving	Milk
Blonde	20	32	27	21	40	40	10	10	50	50
Highland Cattle	35	30	20	15	35	30	20	15	50	50

Table 3: Weights in the functional traits for the new beef breeds that are evaluated across the NAV countries.

Breed	Birth – direct effect				Calving – maternal effect				Dam	
	Calf survival 1. calving	Calving ease 1. calving	Calf survival later calvings	Calving ease later calvings	Calf survival 1. calving	Calving ease 1. calving	Calf survival later calvings	Calving ease later calvings	Calving	Milk
Danish Blue	10	10	40	40	10	10	40	40	80	20
Shorthorn	30	20	30	20	30	20	30	20	60	40
Dexter	40	40	10	10	40	40	10	10	30	70
Galloway	20	32	27	21	40	40	10	10	30	70
Piemontese	20	32	27	21	29	34	17	20	50	50
Salers	34	29	20	17	25	30	20	25	30	70
Grauvieh	40	40	10	10	46	34	3	15	50	50

Table 4: Weights in the functional traits for the new beef breeds that are only evaluated in Denmark.

Under [NAV Beef search](#), you can find the new indexes for the nine breeds. With the new nine breeds it is possible to see indexes for 14 different beef breeds on NAV beef search.