

NAV subindices for beef: Correlations

Table 1. Correlation between growth index and underlying traits by breed.

| | Growth index | | | | | |
|-------------------------|--------------|-----------|----------|----------|-----------|------------|
| | Angus | Charolais | Hereford | Limousin | Simmental | |
| Yearling weight, direct | 0.87 | 0.88 | 0.95 | 0.90 | 0.95 | DNK |
| Daily carcass gain | 0.99 | 0.99 | 0.93 | 0.99 | 0.95 | |
| Yearling weight, direct | 0.92 | 0.91 | 0.95 | 0.91 | 0.96 | FIN |
| Daily carcass gain | 0.99 | 0.99 | 0.96 | 0.99 | 0.96 | |
| Yearling weight, direct | 0.89 | 0.87 | 0.95 | 0.90 | 0.96 | SWE |
| Daily carcass gain | 0.98 | 0.98 | 0.92 | 0.99 | 0.94 | |

Table 2. Correlation between slaughter quality index and underlying traits by breed.

| | Slaughter quality index | | | | | |
|----------------------------|-------------------------|-----------|----------|----------|-----------|------------|
| | Angus | Charolais | Hereford | Limousin | Simmental | |
| Carcass fat score | 0.08 | -0.05 | 0.18 | 0.16 | 0.08 | DNK |
| Carcass conformation score | 1.00 | 0.95 | 0.99 | 0.93 | 0.95 | |
| Carcass fat score | 0.06 | -0.16 | 0.11 | -0.28 | 0.04 | FIN |
| Carcass conformation score | 1.00 | 0.95 | 0.99 | 0.95 | 0.93 | |
| Carcass fat score | 0.03 | 0.10 | 0.14 | -0.20 | 0.31 | SWE |
| Carcass conformation score | 1.00 | 0.94 | 0.99 | 0.95 | 0.92 | |

Table 3. Correlation between production index and underlying subindices and traits by breed.

| | Production index | | | | | |
|--------------------------------|------------------|-----------|----------|----------|-----------|------------|
| | Angus | Charolais | Hereford | Limousin | Simmental | |
| Growth index | 0.94 | 0.90 | 0.78 | 0.82 | 0.74 | DNK |
| Yearling weight, direct | 0.95 | 0.94 | 0.83 | 0.84 | 0.93 | |
| Daily carcass gain | 0.75 | 0.76 | 0.65 | 0.65 | 0.85 | FIN |
| Slaughter quality index | 0.94 | 0.93 | 0.74 | 0.80 | 0.74 | |
| Carcass fat score | 0.03 | -0.04 | 0.05 | 0.06 | -0.07 | SWE |
| Carcass conformation score | 0.67 | 0.59 | 0.74 | 0.79 | 0.74 | |
| Growth index | 0.95 | 0.93 | 0.81 | 0.86 | 0.69 | FIN |
| Yearling weight, direct | 0.95 | 0.96 | 0.84 | 0.87 | 0.94 | |
| Daily carcass gain | 0.84 | 0.82 | 0.71 | 0.70 | 0.89 | SWE |
| Slaughter quality index | 0.95 | 0.95 | 0.83 | 0.84 | 0.69 | |
| Carcass fat score | 0.13 | -0.12 | 0.07 | -0.22 | -0.08 | DNK |
| Carcass conformation score | 0.69 | 0.66 | 0.83 | 0.82 | 0.68 | |
| Growth index | 0.97 | 0.89 | 0.84 | 0.80 | 0.49 | FIN |
| Yearling weight, direct | 0.97 | 0.94 | 0.86 | 0.86 | 0.93 | |
| Daily carcass gain | 0.84 | 0.73 | 0.72 | 0.69 | 0.86 | SWE |
| Slaughter quality index | 0.97 | 0.93 | 0.77 | 0.78 | 0.49 | |
| Carcass fat score | -0.05 | -0.04 | -0.11 | -0.14 | 0.03 | DNK |
| Carcass conformation score | 0.50 | 0.63 | 0.77 | 0.76 | 0.50 | |

Table 4. Correlation between calving index and underlying traits by breed.

| | Calving index | | | | | |
|------------------------------------|---------------|-----------|----------|----------|-----------|------------|
| | Angus | Charolais | Hereford | Limousin | Simmental | |
| Calving ease, maternal, 1st calv. | 0.93 | 0.95 | 0.92 | 0.88 | 0.88 | DNK |
| Calf survival, maternal, 1st calv. | 0.89 | 0.94 | 0.85 | 0.90 | 0.88 | |
| Calving ease, maternal, 2+ calv. | 0.78 | 0.95 | 0.87 | 0.88 | 0.91 | |
| Calf survival, maternal, 2+ calv. | 0.90 | 0.91 | 0.89 | 0.85 | 0.80 | |
| Calving ease, maternal, 1st calv. | 0.90 | 0.93 | 0.91 | 0.94 | 0.93 | |
| Calf survival, maternal, 1st calv. | 0.88 | 0.88 | 0.85 | 0.85 | 0.89 | FIN |
| Calving ease, maternal, 2+ calv. | 0.81 | 0.92 | 0.88 | 0.92 | 0.95 | |
| Calf survival, maternal, 2+ calv. | 0.86 | 0.85 | 0.84 | 0.85 | 0.80 | |
| Calving ease, maternal, 1st calv. | 0.89 | 0.97 | 0.94 | 0.93 | 0.94 | |
| Calf survival, maternal, 1st calv. | 0.83 | 0.92 | 0.85 | 0.89 | 0.92 | SWE |
| Calving ease, maternal, 2+ calv. | 0.73 | 0.89 | 0.87 | 0.90 | 0.93 | |
| Calf survival, maternal, 2+ calv. | 0.87 | 0.87 | 0.91 | 0.89 | 0.86 | |
| | | | | | | |

Table 5. Correlation between dam index and underlying subindices and traits by breed.

| | Dam index | | | | | |
|------------------------------------|-----------|-----------|----------|----------|-----------|------------|
| | Angus | Charolais | Hereford | Limousin | Simmental | |
| Milk | 0.49 | 0.54 | 0.85 | 0.63 | 0.69 | DNK |
| Calving index | 0.77 | 0.86 | 0.54 | 0.83 | 0.84 | |
| Calving ease, maternal, 1st calv. | 0.71 | 0.81 | 0.54 | 0.75 | 0.75 | |
| Calf survival, maternal, 1st calv. | 0.69 | 0.82 | 0.41 | 0.71 | 0.74 | |
| Calving ease, maternal, 2+ calv. | 0.58 | 0.80 | 0.52 | 0.77 | 0.78 | |
| Calf survival, maternal, 2+ calv. | 0.70 | 0.78 | 0.45 | 0.68 | 0.67 | FIN |
| Milk | 0.73 | 0.76 | 0.93 | 0.82 | 0.77 | |
| Calving index | 0.66 | 0.63 | 0.43 | 0.49 | 0.65 | |
| Calving ease, maternal, 1st calv. | 0.60 | 0.59 | 0.39 | 0.42 | 0.61 | |
| Calf survival, maternal, 1st calv. | 0.56 | 0.56 | 0.40 | 0.47 | 0.57 | |
| Calving ease, maternal, 2+ calv. | 0.57 | 0.57 | 0.34 | 0.43 | 0.62 | |
| Calf survival, maternal, 2+ calv. | 0.58 | 0.53 | 0.35 | 0.48 | 0.53 | SWE |
| Milk | 0.78 | 0.82 | 0.90 | 0.80 | 0.79 | |
| Calving index | 0.58 | 0.59 | 0.39 | 0.51 | 0.61 | |
| Calving ease, maternal, 1st calv. | 0.60 | 0.57 | 0.34 | 0.48 | 0.58 | |
| Calf survival, maternal, 1st calv. | 0.41 | 0.56 | 0.38 | 0.46 | 0.58 | |
| Calving ease, maternal, 2+ calv. | 0.49 | 0.52 | 0.29 | 0.45 | 0.55 | |
| Calf survival, maternal, 2+ calv. | 0.44 | 0.51 | 0.38 | 0.42 | 0.52 | |

Table 6. Correlation between birth index and underlying traits by breed.

| | Birth index | | | | | DNK |
|----------------------------------|--------------|------------------|-----------------|-----------------|------------------|------------|
| | Angus | Charolais | Hereford | Limousin | Simmental | |
| Calving ease, direct, 1st calv. | 0.93 | 0.86 | 0.94 | 0.81 | 0.88 | |
| Calf survival, direct, 1st calv. | 0.87 | 0.68 | 0.89 | 0.87 | 0.82 | |
| Calving ease, direct, 2+ calv. | 0.84 | 0.91 | 0.91 | 0.88 | 0.94 | |
| Calf survival, direct, 2+ calv. | 0.86 | 0.68 | 0.86 | 0.88 | 0.83 | |
| Calving ease, direct, 1st calv. | 0.93 | 0.96 | 0.96 | 0.94 | 0.95 | |
| Calf survival, direct, 1st calv. | 0.76 | 0.72 | 0.82 | 0.76 | 0.82 | |
| Calving ease, direct, 2+ calv. | 0.88 | 0.96 | 0.91 | 0.94 | 0.96 | |
| Calf survival, direct, 2+ calv. | 0.77 | 0.76 | 0.77 | 0.80 | 0.81 | |
| Calving ease, direct, 1st calv. | 0.95 | 0.97 | 0.97 | 0.96 | 0.97 | |
| Calf survival, direct, 1st calv. | 0.79 | 0.83 | 0.86 | 0.78 | 0.86 | |
| Calving ease, direct, 2+ calv. | 0.91 | 0.97 | 0.93 | 0.95 | 0.96 | |
| Calf survival, direct, 2+ calv. | 0.80 | 0.85 | 0.79 | 0.82 | 0.89 | |