All Breed Concerned By Meat Index

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1. Computing Economic Value

Carcass conformation adults (CCa)

```
### # prices
vec_price_cca <- c(7.526960,7.938872,8.450784,8.800000,9.137304,9.392693,9.642693)
```

Carcass conformation calves (CCc)

```
### # prices
vec_price_ccc <- c(11.2,12.7,13.6,14.2,14.7,15.2,15.7)
```

Carcass fatness adults (CFa)

```
### # prices
vec_price_cfa <- c(-0.9000000,
-0.3000000,
0.0000000,
-0.3926929,
-0.8480817)
```

Carcass fatness calves (CFc)

```
### # prices
vec_price_cfc <- c(-1.5,
-0.6,
0.0,
-0.4,
-1.0)
```

Carcass weight adults (CWa)

```
 n_scale_fact_cwa <- 100
vec_price_cwa <- c(0.0,
-0.1,
-0.2,
-0.3,
-0.5,
-0.7,
```

```
-0.9,
-1.2,
-1.4,
-1.6,
-1.8)
vec_thre_cwa <- c(2.9,
3.0,
3.1,
3.2,
3.3,
3.4,
3.5,
3.6,
3.7,
3.8) * n_scale_fact_cwa
```

Carcass weight calves (CWc)

```
n_scale_fact_cwc <- 100
vec_price_cwc <- seq(0.0,-1.1,-0.1);vec_price_cwc
#>  [1]  0.0 -0.1 -0.2 -0.3 -0.4 -0.5 -0.6 -0.7 -0.8 -0.9 -1.0 -1.1
vec_thre_cwc <- seq(1.4, 1.5, 0.01) * n_scale_fact_cwc
vec_thre_cwc
#>  [1] 140 141 142 143 144 145 146 147 148 149 150
```

Overview of the phenotypic mean

Traits	OB	BV	SI	SF	MO	AN	AU	CH	LM
cca	5.20	4.78	5.83	4.57	5.39	5.62	6.72	6.65	6.56
ccc	4.98	4.08	5.33	3.88	4.73	5.48	6.33	6.32	6.55
cfa	2.88	2.85	2.82	2.87	2.68	3.09	2.65	2.63	2.71
cfc	2.62	2.68	2.66	2.76	2.64	2.51	1.88	2.06	2.21
cwa	261.00	277.00	279.00	288.00	299.00	232.00	277.00	291.00	242.00
cwc	125.00	126.00	127.00	124.00	128.00	123.00	125.00	127.00	131.00

Presenting output for economic values

The computed economic values are shown in the following tables:

1.1) Table are presenting economic value in trait unit.

Traits	OB	BV	SI	SF	MO	AN	AU	CH	LM
cca	0.2786366	0.3015193	0.2474393	0.3120456	0.2676898	0.2566795	0.1693358	0.2151147	0.195981
ccc	0.5004597	0.5680155	0.4893199	0.5992985	0.5278464	0.4797031	0.4095372	0.3936749	0.380331
cfa	0.0553657	0.0729381	0.1006845	0.0615499	0.1893340	-0.0695384	0.1666568	0.1728996	0.135709
cfc	0.4011634	0.3732053	0.3796711	0.3137966	0.4235119	0.4167919	0.6784757	0.5960549	0.587428
cwa	-0.0038515	-0.0057708	-0.0065763	-0.0076378	-0.0100679	-0.0022259	-0.0067188	-0.0083398	-0.002288

Traits	OB	BV	SI	SF	MO	AN	AU	CH	LI
cwc	-0.0113522	-0.0133317	-0.0139556	-0.0101531	-0.0160444	-0.0099657	-0.0135917	-0.0149259	-0.019582

1.2) Table are presenting economic value in genetic standard deviation.

Traits	OB	BV	SI	SF	MO	AN	AU	CH	LI
cca	0.1765163	0.1910125	0.1567528	0.1976809	0.1695815	0.1626064	0.1072742	0.1362752	0.124154
ccc	0.3170913	0.3598946	0.3100331	0.3797155	0.3344435	0.3039399	0.2594828	0.2494324	0.240977
cfa	0.0199815	0.0263234	0.0363370	0.0222133	0.0683306	-0.0250964	0.0601464	0.0623995	0.048977
cfc	0.1393642	0.1296515	0.1318978	0.1090129	0.1471280	0.1447935	0.2357025	0.2070695	0.204072
cwa	-0.0537280	-0.0805030	-0.0917393	-0.1065469	-0.1404470	-0.0310518	-0.0937277	-0.1163407	-0.031917
cwc	-0.0632318	-0.0742578	-0.0777326	-0.0565530	-0.0893674	-0.0555089	-0.0757056	-0.0831370	-0.109071

2. Computing Relative Economic Factors

Relative economic factors are defined as the ratio of each economic value on the basis of one genetic standard deviation to the sum of all economic values in a given breed.

Traits	OB	BV	SI	SF	MO	AN	AU	CH	LI
cca	0.2292678	0.2216841	0.1948468	0.2267704	0.1786388	0.2249061	0.1289293	0.1594506	0.163539
ccc	0.4118534	0.4176842	0.3853772	0.4355921	0.3523061	0.4203889	0.3118637	0.2918518	0.317422
cfa	0.0259529	0.0305502	0.0451676	0.0254821	0.0719802	-0.0347116	0.0722880	0.0730114	0.064514
cfc	0.1810128	0.1504701	0.1639515	0.1250546	0.1549861	0.2002685	0.2832829	0.2422845	0.268809
cwa	-0.0697845	-0.0934297	-0.1140338	-0.1222257	-0.1479482	-0.0429488	-0.1126481	-0.1361261	-0.042042
cwc	-0.0821285	-0.0861817	-0.0966232	-0.0648750	-0.0941405	-0.0767761	-0.0909881	-0.0972756	-0.143671

3. Importance of calves versus adults for each population

Categories	OB	BV	SI	SF	MO	AN	AU	CH	LM
adults	0.393803	0.2139547	0.8528401	0.4078332	0.7878739	0.9317762	0.9794591	0.9890877	0.9588979
calves	0.606197	0.7860453	0.1471599	0.5921668	0.2121261	0.0682238	0.0205409	0.0109123	0.0411021

4. Szenarios

Szenario A) we are using the relative economic factors (table 2)

Szenario B) The relative factors are weighted with animal categories to get weighted relative factors (File name: weighted_economic_value_relative_allBreeds.csv)

Traits	OB	BV	SI	SF	MO	AN	AU	CH	LI
cca	0.0902863	0.0474303	0.1661731	0.0924845	0.1407449	0.2095622	0.1262809	0.1577107	0.156817
ccc	0.2496643	0.3283187	0.0567121	0.2579432	0.0747333	0.0286805	0.0064060	0.0031848	0.013046
cfa	0.0102203	0.0065364	0.0385208	0.0103925	0.0567113	-0.0323435	0.0708031	0.0722147	0.061862
cfc	0.1097294	0.1182764	0.0241271	0.0740532	0.0328766	0.0136631	0.0058189	0.0026439	0.011048
cwa	-0.0274814	-0.0199897	-0.0972526	-0.0498477	-0.1165646	-0.0400187	-0.1103342	-0.1346406	-0.040314

Traits	OB	BV	SI	SF	MO	AN	AU	CH	LI
cwc	-0.0497861	-0.0677427	-0.0142191	-0.0384168	-0.0199697	-0.0052380	-0.0018690	-0.0010615	-0.005905