
 Conversion Factors For Production Traits. Source: INTERBULL 1312
 Converted Canadian Proof = A + (B* Foreign Proof)
 Converted Proof Reliability = PCORR2*Foreign Reliability

breed	country2	amilk	bmilk	afat	bfat	aprot	bprot	pcorr2
AYS	AUS	509.69	1.259	29.039	1.170	22.562	1.656	0.5776
AYS	DEU	506.59	0.910	35.995	0.847	25.812	0.851	0.7744
AYS	DFS	-4256.96	53.587	-154.496	2.026	-107.447	1.536	0.7921
AYS	EST	275.40	1.008	16.667	1.092	17.115	0.965	0.7569
AYS	GBR	-257.60	2.347	-9.583	2.436	-3.742	2.577	0.7396
AYS	IRL	844.99	3.757	24.248	3.305	24.306	4.092	0.6084
AYS	LTU	-405.71	1.681	2.206	1.294	-0.233	1.591	0.7744
AYS	LVA	-268.11	1.916	5.841	1.637	1.091	2.039	0.7569
AYS	NLD	1511.74	0.787	56.440	0.744	53.740	0.672	0.8100
AYS	NOR	-3977.40	47.660	-164.591	1.971	-113.588	1.498	0.8100
AYS	NZL	142.17	1.600	32.451	1.476	17.843	1.699	0.5776
AYS	USA	-121.61	0.842	-7.527	0.856	-4.008	0.843	0.8281
AYS	ZAF	-72.52	0.899	-4.035	0.926	-3.322	0.899	0.7396

 Conversion Factors For SCS Traits. Source: INTERBULL 1312
 Converted Canadian Proof = A + (B* Foreign Proof)
 Converted Proof Reliability = SCORR2*Foreign Reliability

breed	country2	a	b	scorr2
AYS	AUS	3.802	-0.007	0.7569
AYS	DEU	2.967	0.529	0.8464
AYS	DFS	4.777	-0.019	0.8464
AYS	EST	4.959	-0.020	0.7744
AYS	GBR	3.014	0.020	0.8649
AYS	LTU	3.057	0.619	0.7569
AYS	LVA	3.070	0.522	0.7744
AYS	NLD	-3.188	0.059	0.8464
AYS	NOR	5.037	-0.021	0.8281
AYS	NZL	3.148	0.514	0.6241
AYS	USA	0.008	1.001	0.8836
AYS	ZAF	2.922	0.008	0.7396

 Conversion Factors For Type. Source = INTERBULL MACE 1312
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 Converted Proof Reliability = TCORR2*Foreign Reliability

country2=AUS

c	c	f			
a	o	o			
n	u	r	a	b	t
b	n	t	v	v	c
r	t	r	a	a	o
e	r	a	l	l	r
e	y	i	u	u	r
d	2	t	e	e	2

AYS	CONFORMATION	AUS	CONFORMATION	-56.643	0.4820	0.40
AYS	FEET AND LEGS	AUS	OVERALL FEET & LEG	-14.516	0.1034	
AYS	MAMMARY SYSTEM	AUS	OVERALL UDDER SCORE	-61.296	0.5388	
AYS	STATURE	AUS	STATURE	-56.109	0.5072	
AYS	CHEST WIDTH	AUS	CHEST WIDTH	-56.056	0.5586	
AYS	BODY DEPTH	AUS	BODY DEPTH	-62.533	0.5912	
AYS	PIN WIDTH	AUS	RUMP WIDTH	-59.742	0.5812	
AYS	RUMP ANGLE	AUS	RUMP ANGLE	-70.012	0.7031	
AYS	FOOT ANGLE	AUS	FOOT ANGLE	-57.554	0.5688	
AYS	REAR LEGS SIDE VIEW	AUS	REAR LEG SET	-84.115	0.8909	
AYS	REAR LEG REAR VIEW	AUS	REAR LEG REAR VIEW	-79.138	0.7643	
AYS	UDDER DEPTH	AUS	UDDER DEPTH	-57.917	0.5305	
AYS	MEDIAN SUSPENSORY	AUS	MEDIAN SUSPENSORY	-59.128	0.5562	
AYS	FORE ATTACHMENT	AUS	FORE UDDER	-53.973	0.4795	
AYS	TEAT PLACEMENT	AUS	FRONT TEAT PLACEMENT	-40.652	0.3756	
AYS	TEAT LENGTH	AUS	TEAT LENGTH	-43.536	0.4448	
AYS	REAR ATTACHMENT HEIGHT	AUS	REAR UDDER HEIGHT	-63.923	0.5418	
AYS	REAR TEAT PLACEMENT	AUS	REAR TEAT PLACEMENT	-73.760	0.6870	
AYS	ANGULARITY	AUS	ANGULARITY	-46.631	0.4075	

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country2=DEU

c	a	n	b	r	e	e	d	c	f	o	u	n	t	r	a	y	2	a	b	t	v	v	a	l	u	e	c	o	r	r	2
AYS	CONFORMATION	DEU	OVERALL TYPE (RZE)	-26.181	0.2597	0.58																									
AYS	FEET AND LEGS	DEU	OVERALL FEET & LEG	-47.054	0.4750																										
AYS	MAMMARY SYSTEM	DEU	OVERALL UDDER SCORE	-39.811	0.3777																										
AYS	STATURE	DEU	STATURE	-49.148	0.5054																										
AYS	CHEST WIDTH	DEU	CHEST WIDTH	-41.627	0.4320																										
AYS	BODY DEPTH	DEU	BODY DEPTH	-44.266	0.4718																										
AYS	PIN WIDTH	DEU	RUMP WIDTH	-48.741	0.5245																										
AYS	RUMP ANGLE	DEU	RUMP ANGLE	-57.884	0.5272																										
AYS	FOOT ANGLE	DEU	FOOT ANGLE	-42.381	0.4568																										
AYS	REAR LEGS SIDE VIEW	DEU	REAR LEG SET	-56.459	0.5538																										
AYS	REAR LEG REAR VIEW	DEU	REAR LEG REAR VIEW	-44.866	0.4598																										
AYS	UDDER DEPTH	DEU	UDDER DEPTH	-49.079	0.4722																										
AYS	MEDIAN SUSPENSORY	DEU	MEDIAN SUSPENSORY	-40.332	0.4150																										
AYS	FORE ATTACHMENT	DEU	FORE UDDER	-48.780	0.4424																										
AYS	FRONT TEAT PLACEMENT	DEU	FRONT TEAT PLACEMENT	-45.280	0.4316																										
AYS	TEAT LENGTH	DEU	TEAT LENGTH	-37.243	0.3632																										
AYS	REAR ATTACHMENT HEIGHT	DEU	REAR UDDER HEIGHT	-50.137	0.4660																										
AYS	REAR TEAT PLACEMENT	DEU	REAR TEAT PLACEMENT	-53.398	0.5042																										
AYS	ANGULARITY	DEU	ANGULARITY	-45.448	0.4797																										

AYS	FOOT ANGLE	GBR	FOOT ANGLE	0.141	2.9956
AYS	REAR LEGS SIDE VIEW	GBR	REAR LEG SET	-1.116	2.8729
AYS	UDDER DEPTH	GBR	UDDER DEPTH	-0.362	2.8935
AYS	MEDIAN SUSPENSORY	GBR	MEDIAN SUSPENSORY	0.271	3.0514
AYS	FORE ATTACHMENT	GBR	FORE UDDER	0.586	2.9607
AYS	TEAT PLACEMENT	GBR	FRONT TEAT PLACEMENT	2.377	3.2956
AYS	TEAT LENGTH	GBR	TEAT LENGTH	-1.275	3.0244
AYS	REAR ATTACHMENT HEIGHT	GBR	REAR UDDER HEIGHT	-3.060	3.7430
AYS	ANGULARITY	GBR	ANGULARITY	-4.943	4.3014

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country2=NLD

	c		c	f				
	a		o	o		a	b	t
	n		u	r		v	v	c
b	t		n	t		a	a	o
r	r		t	r		l	l	r
e	a		r	a		u	u	r
e	i		y	i		e	e	2
d	t		2	t				
AYS	CONFORMATION	NLD	CONFORMATION	-105.333	1.1008	0.61		
AYS	FEET AND LEGS	NLD	OVERALL FEET & LEG	-84.153	0.8504			
AYS	MAMMARY SYSTEM	NLD	OVERALL UDDER SCORE	-109.576	1.1345			
AYS	STATURE	NLD	STATURE	-104.159	1.1273			
AYS	CHEST WIDTH	NLD	CHEST WIDTH	-106.831	1.1168			
AYS	BODY DEPTH	NLD	BODY DEPTH	-98.059	1.0691			
AYS	PIN WIDTH	NLD	RUMP WIDTH	-99.000	1.0511			
AYS	RUMP ANGLE	NLD	RUMP ANGLE	-100.523	0.9930			
AYS	FOOT ANGLE	NLD	FOOT ANGLE	-121.392	1.2524			
AYS	REAR LEGS SIDE VIEW	NLD	REAR LEG SET	-112.598	1.1196			
AYS	REAR LEG REAR VIEW	NLD	REAR LEG REAR VIEW	-125.320	1.2850			
AYS	UDDER DEPTH	NLD	UDDER DEPTH	-108.016	1.0970			
AYS	MEDIAN SUSPENSORY	NLD	MEDIAN SUSPENSORY	-107.473	1.1080			
AYS	FORE ATTACHMENT	NLD	FORE UDDER	-132.515	1.3318			
AYS	TEAT PLACEMENT	NLD	FRONT TEAT PLACEMENT	-128.773	1.3069			
AYS	TEAT LENGTH	NLD	TEAT LENGTH	-96.711	0.9955			
AYS	REAR ATTACHMENT HEIGHT	NLD	REAR UDDER HEIGHT	-91.465	0.9539			
AYS	REAR TEAT PLACEMENT	NLD	REAR TEAT PLACEMENT	-128.211	1.3014			
AYS	ANGULARITY	NLD	ANGULARITY	-84.279	0.9374			

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country2=NOR

	c		c	f				
	a		o	o		a	b	t
	n		u	r		v	v	c
b	t		n	t		a	a	o
r	r		t	r				

e e d	a i t	r y 2	a i t	l u e	l u e	r r 2
AYS	CONFORMATION	NOR	OVERALL CONFORMATION	-14.952	0.0659	0.03
AYS	FEET AND LEGS	NOR	OVERALL FEET & LEG	-25.679	0.2073	
AYS	MAMMARY SYSTEM	NOR	OVERALL UDDER SCORE	-58.701	0.4881	
AYS	STATURE	NOR	STATURE	-61.901	0.5347	
AYS	BODY DEPTH	NOR	BODY DEPTH	-30.826	0.2639	
AYS	RUMP ANGLE	NOR	RUMP ANGLE	-38.784	0.3999	
AYS	FOOT ANGLE	NOR	FOOT ANGLE	-20.602	0.2061	
AYS	REAR LEGS SIDE VIEW	NOR	REAR LEG SET	-39.951	0.4438	
AYS	REAR LEG REAR VIEW	NOR	REAR LEG REAR VIEW	-44.088	0.4093	
AYS	UDDER DEPTH	NOR	UDDER DEPTH	-46.118	0.3975	
AYS	MEDIAN SUSPENSORY	NOR	MEDIAN SUSPENSORY	-29.624	0.2487	
AYS	FORE ATTACHMENT	NOR	FORE UDDER	-45.029	0.3992	
AYS	FRONT TEAT PLACEMENT	NOR	FRONT TEAT PLACEMENT	-39.573	0.3586	
AYS	TEAT LENGTH	NOR	TEAT LENGTH	-41.685	0.3927	
AYS	REAR ATTACHMENT HEIGHT	NOR	REAR UDDER HEIGHT	-55.374	0.4387	
AYS	REAR TEAT PLACEMENT	NOR	REAR TEAT PLACEMENT	31.147	-0.3675	

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country2=NZL

c n b r e e d	a t r a i t	c o n t r a i t	f u r t h e r	a v a l u e	b v a l u e	t c o r r 2
AYS	CONFORMATION	NZL	OVERALL CONFORMATION	-7.640	9.6276	0.18
AYS	MAMMARY SYSTEM	NZL	OVERALL UDDER SCORE	-7.644	11.8635	
AYS	STATURE	NZL	STATURE	-10.844	10.7233	
AYS	CHEST WIDTH	NZL	CHEST WIDTH	-0.736	9.2435	
AYS	BODY DEPTH	NZL	BODY DEPTH	-3.242	8.2942	
AYS	PIN WIDTH	NZL	RUMP WIDTH	-3.331	17.8437	
AYS	RUMP ANGLE	NZL	RUMP ANGLE	-4.506	18.9931	
AYS	REAR LEGS SIDE VIEW	NZL	REAR LEG SET	4.026	26.6999	
AYS	MEDIAN SUSPENSORY	NZL	MEDIAN SUSPENSORY	-3.477	13.0833	
AYS	FORE ATTACHMENT	NZL	FORE UDDER	-7.146	14.3384	
AYS	FRONT TEAT PLACEMENT	NZL	FRONT TEAT PLACEMENT	-4.182	17.4535	
AYS	REAR ATTACHMENT HEIGHT	NZL	REAR UDDER HEIGHT	-7.705	14.4784	
AYS	REAR TEAT PLACEMENT	NZL	REAR TEAT PLACEMENT	-6.128	16.1859	

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 Converted Canadian Proof = A + (B* Foreign Proof)
 Converted Proof Reliability = TCORR2*Foreign Reliability

country2=USA

c	c	f			
a	o	o			
n	u	r	a	b	t
b	n	t	v	v	c
r	t	r	a	a	o
e	r	a	l	l	r
e	y	i	u	u	r
d	2	t	e	e	2

AYS	CONFORMATION	USA	CONFORMATION	-2.125	6.6884	0.69
AYS	FEET AND LEGS	USA	OVERALL FEET & LEG	-2.921	4.4688	
AYS	MAMMARY SYSTEM	USA	OVERALL UDDER SCORE	-0.940	5.8494	
AYS	STATURE	USA	STATURE	-1.865	2.8153	
AYS	CHEST WIDTH	USA	CHEST WIDTH	-0.209	5.2152	
AYS	BODY DEPTH	USA	BODY DEPTH	-1.138	4.4413	
AYS	PIN WIDTH	USA	RUMP WIDTH	0.095	4.4121	
AYS	RUMP ANGLE	USA	RUMP ANGLE	-0.386	5.7109	
AYS	FOOT ANGLE	USA	FOOT ANGLE	-0.785	6.9069	
AYS	REAR LEGS SIDE VIEW	USA	REAR LEG SET	0.910	8.2760	
AYS	UDDER DEPTH	USA	UDDER DEPTH	-0.756	4.8847	
AYS	MEDIAN SUSPENSORY	USA	MEDIAN SUSPENSORY	-0.803	5.0014	
AYS	FORE ATTACHMENT	USA	FORE UDDER	-1.206	4.9623	
AYS	TEAT PLACEMENT	USA	FRONT TEAT PLACEMENT	-0.274	4.2706	
AYS	TEAT LENGTH	USA	TEAT LENGTH	-0.193	4.0492	
AYS	REAR ATTACHMENT HEIGHT	USA	REAR UDDER HEIGHT	-1.417	4.7146	
AYS	ANGULARITY	USA	ANGULARITY	-1.008	6.1092	

CALCULATION OF FAT% AND PROTEIN% FOR DECEMBER 2013

BREED	BMILK	BFAT	BPRT
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AYS	7444	304	251
BSW	8070	334	283
CN	5778	247	202
GUE	6906	297	232
JER	6289	311	240
HOL	9756	369	313
MS	6706	250	228

$$EBVFAT\% = 200 * [(BFAT + EBVFAT * 0.5) / (BMILK + EBVMILK * 0.5) - (BFAT / BMILK)]$$

$$EBVPROT\% = 200 * [(BPRT + EBVPRT * 0.5) / (BMILK + EBVMILK * 0.5) - (BPRT / BMILK)]$$

EXAMPLE :

A HOLSTEIN bull has EBV MILK=+1000, EBVFAT=+50, EBVPROT=+40

$$\begin{aligned}
 EBVFAT\% &= 200 * [(369 + 50 * 0.5) / (9756 + 1000 * 0.5) - (369 / 9756)] \\
 &= 200 * [(369 + 25) / (9756 + 500) - (0.03782)] \\
 &= 200 * [0.03842 - 0.03782] \\
 &= 200 * 0.00059 \\
 &= 0.12
 \end{aligned}$$

$$\begin{aligned}
 EBVPROT\% &= 200 * [(313 + 40 * 0.5) / (9756 + 1000 * 0.5) - (313 / 9756)] \\
 &= 200 * [(313 + 20) / (9756 + 500) - (0.03208)] \\
 &= 200 * [0.03247 - 0.03208] \\
 &= 200 * 0.00039
 \end{aligned}$$

$$= 0.08$$