







## Explanation of the headings . . .

Name of Bull	NAAB Sample		Selection Indexes				Milk, Protein and Fat					Type Data				
	Code	Code	NM\$	Rel.	CM\$	FMS	TPI	lbs.M	lbs.P	%P	lbs. F	%F	Rel.	UDC	F&L	PTAT

**NAME OF BULL** — Bull's registered name.

**NAAB CODE** — A three-part code. A number before the letter either indicates the stud code or marketing code number. Please see [www.naab-css.org/membership/coding.html](http://www.naab-css.org/membership/coding.html) for a complete explanation. The letters indicate breed, the number following the letters is individual bull identification number.

**LIFETIME NET MERIT - NM\$** — Combines PTAs for 9 traits in Holsteins and Brown Swiss. In the other breeds, 8 traits are used because there is no calving ability index available. The values go up slightly for each trait in those four breeds. The index gives the following weighting for Holsteins and Brown Swiss: Productive Life, 22; Fat, 19; Protein, 16; Daughter Pregnancy Rate, 11; Somatic Cell Score, -10; Udder, 7; Body Size, -6; Calving Ability, 5; and Feet and Legs, 4.

**CHEESE MERIT - CM\$** — Combines PTAs for 10 traits in Holsteins and Brown Swiss. In the other breeds, 9 traits are used because there is no calving ability index available. The values go up 1.04 for each trait in those four breeds. The index gives the following weighting for Holsteins and Brown Swiss: Protein, 25; Productive Life, 15; Milk, -15; Fat, 13; Somatic Cell Score, -9; Daughter Pregnancy Rate, 8; Udder, 5; Body Size, -4; Calving Ability, 3; and Feet and Legs, 3.

**FLUID MERIT - FM\$** — Combines PTAs for 9 traits in Holsteins and Brown Swiss. In the other breeds, 8 traits are used because there is no calving ability index. The values go up 1.06 for each trait in those four breeds. The index gives the following weighting for Holsteins and Brown Swiss: Productive Life, 22; Fat, 20; Milk, 19; Daughter Pregnancy Rate, 12; Udder, 7; Somatic Cell Score, -5; Calving Ability, 5; Body Size, -6; and Feet and Legs, 4.

**REL.** — Reliability indicates the accuracy of genetic evaluations. Reliabilities are expressed as percents and range from 1 to 99. The closer Reliability is to 99, the more reliable the Predicted Transmitting Abilities (PTAs).

**TPI Holsteins** — Total Performance Index is a value which is determined by placing an emphasis on production and type. The weighting for this index is 26 PTA Protein, 16 for PTA Fat, 14 PTA PL, 10 PTA Type, 10 Udder Composite, 10 Daughter Pregnancy Rate, -5 PTA SCS, 5 Foot and Leg Composite, -2 Daughter Calving Ease, -1 PTA Dairy Form, and -1 Daughter Stillbirth.

**JPI Jerseys** — Jersey Performance Index is a value that is determined by placing an emphasis of 40 for PTA Protein; 20 for PTA Fat; 15 for FTI (Functional Trait Index); and 12 for PTA PL (Productive Life), 7 for PTA DPR (Daughter Pregnancy Rate), 3 for FUI (Functional Udder Index), and minus 3 for PTA SCS (Somatic Cell Score).

**PPR Brown Swiss** — The Progressive Performance Ranking (PPR) is calculated with an emphasis of 45 for PTA Protein, 20 for PTA Fat, 8 PTA SCS, 8 PL, 10 Udder Composite, 3, DPR, 3 PTA Final Score, and 3 for Foot and Leg Composite. **PTI Ayrshires and Milking Shorthorns** — Determined by placing an emphasis of 4 for PTA Pounds of Protein, 2 for PTA Pounds of Fat, and 1 for PTA Type. **PTI Guernseys** — Computed with a weighting of 5 for PTA Protein, 1 for PTA Fat, and 1 for FHL (Functional Herd Life).

**PTA LBS. P, %P, LBS. M, LBS. F, AND %F** — PTAs for pounds protein, percent protein, pounds milk, pounds fat, and percent fat indicate how much more (or less) "performance" to expect from an average daughter of bull compared to a average daughter of another bull with a proof of zero. The genetic base, called PTA 05, was selected so half the cow population will have positive PTAs. It was established by setting to zero the weighted average PTAs of all cows born in 2005.

**PTA SCS** — Predicted Transmitting Ability-Somatic Cell Score is expressed in somatic cell score units. For somatic cell score, lower units are better. Research has shown that the lowest incidence of clinical mastitis and the fewest number of mastitis episodes occurred among daughters of bulls with the lowest PTA-SCS, and the mastitis measures increased with increasing PTA-SCS. A one-point increase in the sire's PTA-SCS was associated with a 75 percent increase in daughter's mastitis incidence in both first and second lactation.

**PTA PL** — Predicted Transmitting Ability-Productive Life is expressed in months a cow is in production. A higher PTA would result in a longer herd life.

**UDC Holsteins** — Udder Composite Score is a ranking of bulls based on ability for udder improvement. Weights for the various udder traits are: Udder Depth, 35 percent; Front Teat Placement, 5 percent; Rear Udder Height, 16 percent; Fore Udder Attachment, 16 percent; Rear Udder Width, 12 percent; Udder Cleft, 9 percent, and Rear Teat Placement, 7 percent.

**F&L Holsteins** — Feet and Leg Composite Score is a ranking of bulls based on ability for feet and leg improvement. Weights for the four traits are: Foot Angle, 24 percent; Rear Legs, Rear View, 18.5 percent; Rear Legs, Side View, 7.5 percent; and 50 percent Feet and Leg Breakdown.

**CALVING EASE** — Service sire calving ease is the tendency of calves from a particular sire to be born more easily (or more difficult) than an average calf. **Sire Stillbirth** is the tendency of newborn calves sired by a particular bull when mated to heifers to be born dead or die within the first 48 hours after birth. Bulls with lower numbers sire more live calves.

## Guernsey Top 10 Net Merit Bulls

Name of Bull	NAAB Code	Selection Indexes				Production-related PTAs						Type Data			
		NM\$	Rel.	CM\$	PTI	lbs.M	lbs.P	%P	lbs. F	%F	Rel.	SCS	PL	PTAT	Rel.
SNIDERS RONALDS <b>ALSTAR</b>	7GU398	488	72	457	150	1078	24	-0.06	43	-0.03	85	3.01	4.9	0.5	82
PINE RIDGE <b>DOUBLE L</b>	200GU109	465	74	454	102	77	-1	-0.02	30	0.16	87	2.63	6.4 M	1.3	74
MYOWN POKER <b>BINGO-ET</b>	200GU111	418	68	444	123	749	28	0.02	44	0.06	83	2.79	3.4 M	-0.3	69
JENS GOLD C <b>BLUE SPRUCE</b>	1GU436	393	44	435	170	511	25	0.05	52	0.17	57	2.96	3.6	1.2	52
GOLDEN J RONALD <b>GRUMPY</b>	7GU405	373	70	393	142	651	24	0.02	40	0.06	84	2.95	3.5	1.0	80
WESGRAY LEGACY <b>KAPTAIN</b>	14GU309	306	55	292	106	1112	29	-0.04	41	-0.04	74	2.99	2.3	0.1	59
GOLDEN J LES <b>GEORGE</b>	1GU434	295	55	275	140	402	7	-0.03	45	0.16	73	2.90	3.1	2.0	67
SNIDERS OPTION <b>AARON</b>	7GU395	283	82	275	166	739	20	-0.02	57	0.14	93	2.81	1.2 M	1.1	88
LANG HAVEN DECISIONS <b>NATURAL</b>	7GU412	226	66	275	101	278	20	0.06	17	0.03	81	2.91	2.6	1.2	81
SPRING WALK ICY <b>ICEBERG</b>	1GU433	203	66	204	127	932	28	-0.02	41	0.00	82	3.00	-0.1	0.4	70

## Ayrshire Top 10 Net Merit Bulls

Name of Bull	NAAB Code	Selection Indexes				Production-related PTAs						Type Data			
		NM\$	Rel.	CM\$	PTI	lbs.M	lbs.P	%P	lbs. F	%F	Rel.	SCS	PL	PTAT	Rel.
KELLCREST <b>HUMOUR</b>	200AY328	623	66	666	144	776	33	0.05	50	0.11	80	2.80	6.0 M	0.4	63
KILDARE <b>PERCY-ET</b>	200AY622	586	58	610	227	2390	76	0.00	84	-0.04	75	2.69	1.5 M	0.0	55
CARMELGLEN <b>BRODY</b>	190AY10	567	42	634	147	1368	56	0.07	67	0.07	58	3.09	4.0		
HAUTPRE <b>KANSAS</b>	200AY643	565	52	628	200	1471	58	0.06	80	0.12	67	3.07	3.4 M	0.2	52
DUO STAR <b>NORMANDIN</b>	200AY594	546	72	538	145	1312	36	-0.02	44	-0.03	84	2.74	4.8 M	0.9	64
PALMYRA TRI-STAR <b>BURDETTE</b>	7AY84	389	69	419	103	372	18	0.03	12	-0.01	89	2.83	5.1	1.9	76
PA HILL JULLI <b>NIGEL-ET</b>	190AY9	380	46	437	122	959	42	0.06	64	0.14	61	3.13	2.1 M	-0.8	40
HIDDEN-VALLEY <b>GARTH</b>	76AY732	378	66	404	21	-215	0	0.04	-6	0.01	82	2.54	6.7	0.5	74
KELLCREST <b>SHOWSTAR-ET</b>	200AY638	378	58	381	76	268	9	0.00	19	0.05	77	2.82	5.5 M	1.0	60
JELYCA <b>OBLIQUE</b>	200AY329	377	57	385	159	1053	33	0.00	68	0.14	77	2.86	1.6 M	1.0	57

## Milking Shorthorn Top 3 Net Merit Bulls

Name of Bull	NAAB Code	Selection Indexes				Production-related PTAs						Type Data			
		NM\$	Rel.	CM\$	PTI	lbs.M	lbs.P	%P	lbs. F	%F	Rel.	SCS	PL	PTAT	Rel.
PANORAMA <b>ROYAL TREBLE</b>	14MS112	495	30	532	158	1205	44	0.03	69	0.11	63	2.63	1.6		
BAR-D-KUSZMAR <b>CLAY</b>	7MS341	88	87	68	29	98	-2	-0.03	30	0.16	96	3.00	1.8	0.3	81
BLISSFUL DIAMOND <b>SAM</b>	7MS344	76	81	54	31	247	2	-0.03	7	-0.01	94	2.79	0.7	0.3	76

\*FC = Carrier of the genetic recessive that causes milk to have a fish odor