

**2010 NATIONAL FFA DAIRY CATTLE EVENT
SIRE SELECTION PROBLEM No. 1**

Situation: Semen from these four bulls is available. The bulls were selected to improve the next generation of this herd. RANK the four bulls as they best meet the following objectives in mating with the cow being considered below.

This herd owner has a purebred Holstein herd of 700 cows which is operated as a commercial herd. The lactation her average is currently 27,145M, 968F and 821P. Milk is marketed in a fluid milk area (without payment for protein) and the main concern of this mating is to create a profitable daughter with high production potential with and functional type to support it.

COW TO BE MATED		BULLS TO CONSIDER			
CURRENT RECORD	TRAITS	1	2	3	4
(3yr 3mo ME)	REL	98	98	92	87
24,375	MILK	+1894	+476	+449	+1369
	FAT %	-0.08	+0.04	+0.02	+0.03
3.4	FAT	+46	+28	+21	+57
1176	FluidMerit\$	+398	+305	+333	+539
	PROT %	-0.11	+0.01	0.00	-0.06
3.0	PROT	+27	+16	+13	+25
876	NetMerit\$	+293	+316	+359	+504
	TPI	+1618	+1803	+1803	+1923
	Productive Life	+1.5	+2.1	+2.7	3.3
	Daughter Preg. Rate	-2.5	0.9	3.0	-0.3
	Sire Conception Rate	+2.20	-0.10	+0.00	+0.00
LINEAR SCORE					
23	STATURE	1.06S	1.82T	1.56T	0.17T
24	STRENGTH	0.68F	0.11F	2.28S	0.47F
26	BODY DEPTH	0.67S	0.62D	0.44S	0.21D
24	DAIRY FORM	0.41O	2.08O	0.48T	2.34O
10	RUMP ANGLE	0.68H	0.13H	0.12L	0.31L
24	RUMP WIDTH	1.07N	1.37W	1.21W	0.44W
22	LEGS-SIDE VIEW	1.37P	0.76S	2.39P	1.15S
20	FOOT ANGLE	1.31S	1.34S	2.62S	0.21S
28	FORE ATTACHMT	1.76S	1.97S	0.84S	2.92S
27	REAR UDDER HT	1.69H	3.15H	0.20H	2.51H
23	REAR UDDER WD	2.58W	2.36W	0.72W	2.59W
35	UDDER CLEFT	0.23W	1.56S	0.06S	3.82S
38	UDDER DEPTH	0.14S	2.16S	0.09S	1.74S
28	F TEAT PLCMNT	0.76C	0.16C	0.70C	4.66C
22	R TEAT PLCMNT	0.23C	0.68C	0.27C	4.42C

STATURE (T-TALL,S-SHORT); STRENGTH(S-STRONG,F-FRAIL);BODY DEPTH (D-DEEP,S-SHALLOW)
 DAIRY FORM(O-OPEN, T-TIGHT RIB); RUMP ANGLE (H-HIGH, L-LOW PINS); THURL WIDTH(W-WIDE,N-NARROW);
 LEGS SIDE VIEW (C-CURVED,S-STRAIGHT); FOOT ANGLE (S-STEEP, L-LOW);
 FORE ATTACHMENT(S-STRONG,L-LOOSE);REAR UDDER HEIGHT(H-HIGH,L-LOW);
 REAR UDDER WIDTH(W-WIDE,N-NARROW);UDDER CLEFT(S-STRONG,W-WEAK);UDDER DEPTH (D-DEEP, S-SHALLOW);
 F TEAT PLACEMENT (W-WIDE, C-CLOSE); TEAT LENGTH (L-LONG, S-SHORT)

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2010 NATIONAL FFA DAIRY CATTLE EVENT
SIRE SELECTION PROBLEM No. 2

Situation: Semen from these four bulls has been purchased. The bulls were selected to improve the next generation of this herd. RANK the four bulls as they best meet the following objectives in mating with the cow described below.

This herd owner has a purebred Jersey herd of 412 cows in which functional type traits are important to the longevity of the cows. The main type traits emphasized are udder depth, support and attachments plus correct leg structure. The owner is also concerned at keeping inbreeding at a minimum in his herd. Production remains important; milk is marketed to a cheese plant. Current M.E. lactation average is 17,583 M, 745 F and 625 P.

COW TO BE MATED		BULLS TO CONSIDER			
CURRENT RECORD	TRAITS	1	2	3	4
(2yr 6mo ME)	REL	86	97	87	90
19675	MILK	+842	+1050	+112	+1129
4.7	FAT %	-0.04	+0.03	+0.16	+0.02
859	FAT	+30	+54	+7	+56
	Net Merit\$	+349	+356	+325	+254
3.8	PROT %	-0.02	-0.05	+0.08	+0.02
677	PROT	+26	+27	+19	+45
	Cheese Merit\$	+352	+346	+396	+302
	JPI	132	114	118	127
	Productive Life	+4.2	+3.1	+3.1	-0.7
	EFI (Inbreeding %)	7.7%	6.7%	6.1%	8.9%
	SCS	+3.02	+2.87	+2.98	+3.00
LINEAR SCORE					
36	STATURE	-0.20	-0.80	+0.60	-0.30
33	STRENGTH	+0.10	+0.40	+0.70	+0.40
48	DAIRY FORM	+0.90	+0.90	+0.00	+0.40
28	RUMP ANGLE	S0.50	H0.40	H0.30	S0.90
36	THURL WIDTH	-0.20	-0.20	0.20	0.00
34	REAR LEGS	S0.60	S0.70	P0.50	S0.10
20	FOOT ANGLE	S0.50	L1.00	S1.30	S0.10
30	FORE UDDER	+0.80	-0.10	+1.90	-0.20
40	REAR UDDER HT	+1.20	+0.80	+1.10	+0.10
38	REAR UDDER WD	+0.90	+0.60	+0.80	+0.10
33	UDDER CLEFT	+1.00	+0.20	-0.50	+0.20
17	UDDER DEPTH	S0.50	D1.20	S2.60	D1.60
14	TEAT PLACEMENT	C0.50	C0.50	W0.10	W0.20
26	TEAT LENGTH	L0.30	L1.30	L0.20	L0.90

RUMP ANGLE (H-HIGH, L-LOW); REAR LEGS (S-SICKLE,P-POSTY);
FOOT ANGLE (S-STEEP, L-LOW); UDDER DEPTH (D-DEEP, S-SHALLOW);
TEAT PLACEMENT (W-WIDE, C-CLOSE); TEAT LENGTH (L-LONG, S-SHORT)