

**2014 FFA
Fall Dairy Judging Contest
Sire Selection Problem**

Situation:

Semen from the following four bulls is being considered for purchase to breed the 3 year-old cow on the left. This cow had a difficult calving her first two times so he would like a calving ease bull.

The dairy farmer has a 400-cow grade herd that averages 23,500 lbs. of milk. Net Merit Dollars is the main criteria that he selects for. Because his freestalls are only 47 inches wide, he prefers moderate sized cows. After that he tries to mate to correct the worst functional faults in the cows.

COWS TO BE MATED		BULLS TO CONSIDER			
3 YR OLD RECORD	TRAITS	1	2	3	4
3 Yr. 2 MO-ME					
24096	REL	87	87	89	81
3.7	PTA:Milk	2017	2823	2144	1530
892	F %	-.09	-.01	-.14	+.08
3.1	Fat	51	100	43	75
747	P %	-.04	-.04	-.03	+.03
	Protein	49	74	55	52
	Type	2.83	1.21	1.60	.56
	Somatic Cell Score	2.66	2.35	2.66	2.85
	Productive Life	3.2	6.7	3.4	3.2
	Net Merit Dollars	621	803	618	616
	Sire Calving Ease*	19	6	5	5
LINEAR SCORES					
27	Stature	3.25	-.63	1.77	-.35
28	Angularity	1.50	1.90	2.23	1.53
26	Strength	3.38	.01	1.45	-.81
27	Body Depth	3.81	-.37	1.47	-.58
18	Pelvic Width	1.93	.85	3.88	-.04
25	Pelvic Angle	.55	.39	.43	.42
25	Legs-side view	.93	-1.34	-.25	-.31
35	Foot Angle	-.94	2.02	1.62	1.56
09	Fore Udder	1.48	2.76	-.46	2.35
03	R Udder Height	4.42	1.20	.47	1.87
12	R Udder Width	4.95	1.36	-.64	1.65
28	Udder Support	2.34	1.73	0.27	.29
25	Udder Depth	1.23	1.01	.49	.51
25	Teat Placement	2.52	2.13	2.55	.43

*Calving ease is defined as % difficult births in heifers

2014 Sire Selection Key

This class is placed 2-4-3-1 with cuts of 5-4-4.

The farmer wants a calving ease sire that is high in Net Merit Dollars. After that he wants moderate sized cows (cow being mated to is about average for stature at 27).

He wants to correctly mate for the cows worst faults which appear to be the udder attachments – fore udder, rear udder height, and rear udder width.

2 places 1st because he is \$180 higher than the other three bulls for NM\$. 2 and 4 are similar for all other traits being considered.

4 places over 3 because 4 sires a more moderate size and excels 3 in udder attachments.

3 places over 1 because of the very great advantage in calving ease. At “19”, 1 is one of the worst bulls in the breed for calving ease. 3 will also sire a more moderated size cow. Granted, 1 is stronger for udder attachments than 3 but because 1 is extreme for calving problems and sires bigger cows than the dairy producer wishes, 1 needs to go to the bottom of this class.

2014 State Convention Dairy Judging Contest

1

COW								SIRE				
Comp num	Name	Identification	Birth Date		Code/Name	Identification						
99	Paula	19764524	9/10/09		29HO9324	H2174868						
GENETIC EVALUATION								GENETIC EVALUATION				
	Milk	%fat	Fat	%prot	Protein	NM\$	Rel	Milk	%fat	%prot	NM\$	Rel
ETA	779	.04	33	.08	36	231	55	ETA 99	.04	.07	157	99

Summary of Lactations

Age	Lact Num	305-Day Actual					Complete					305-Day-ME			
		Milk	%fat	Fat	%prot	Protein	DIM	Milk	%fat	Fat	%prot	Protein	Milk	Fat	Protein
2-02	1	15801	4.0	627	3.2	642	387	19991	4.0	799	3.2	640	20004	790	632
3-05	2	21935	4.0	877	3.2	692	351	25051	4.0	1002	3.2	792	24614	980	692
4-08	3	record in progress					projected ME					24461	1003	740	

2

COW								SIRE				
Comp num	Name	Identification	Birth Date		Code/Name	Identification						
110	Shelly	126905412	09/14/09		7HO9638	H2195662						
GENETIC EVALUATION								GENETIC EVALUATION				
	Milk	%fat	Fat	%prot	Protein	NM\$	Rel	Milk	%fat	%prot	NM\$	Rel
ETA	1335	.02	53	.03	44	533	66	ETA 1751	-.09	-.03	435	99

Summary of Lactations

Age	Lact Num	305-Day Actual					Complete					305-Day-ME			
		Milk	%fat	Fat	%prot	Protein	DIM	Milk	%fat	Fat	%prot	Protein	Milk	Fat	Protein
2-04	1	21918	4.1	904	3.2	690	385	26658	4.1	1093	3.2	852	27837	1141	891
3-07	2	25092	4.0	1004	3.1	777	365	28782	4.1	1180	3.1	892	29357	1174	911
4-09	3	record in progress					projected ME					25100	1020	720	

3

COW								SIRE				
Comp num	Name	Identification	Birth Date		Code/Name	Identification						
509	Princess	122145544	09/28/09		7HO9164	H2149849						
GENETIC EVALUATION								GENETIC EVALUATION				
	Milk	%fat	Fat	%prot	Protein	NM\$	Rel	Milk	%fat	%prot	NM\$	Rel
ETA	981	-.05	40	.00	43	475	60	ETA 187	.20	.06	311	99

Summary of Lactations

Age	Lact Num	305-Day Actual					Complete					305-Day-ME			
		Milk	%fat	Fat	%prot	Protein	DIM	Milk	%fat	Fat	%prot	Protein	Milk	Fat	Protein
2-03	1	18359	3.8	706	3.2	595	323	19171	3.9	740	3.3	624	23317	855	746
3-03	2	23345	3.4	786	3.4	783	390	28888	3.4	1080	3.4	982	27314	929	930
4-05	3	record in progress					projected ME					33323	1180	982	

4

COW								SIRE				
Comp num	Name	Identification	Birth Date		Code/Name	Identification						
534	Kimber	1302008376	10/21/09		7HO9707	H 2080263						
GENETIC EVALUATION								GENETIC EVALUATION				
	Milk	%fat	Fat	%prot	Protein	NM\$	Rel	Milk	%fat	%prot	NM\$	Rel
ETA	1930	-.01	67	.03	60	529	84	ETA 1226	.00	-.07	357	99

Summary of Lactations

Age	Lact Num	305-Day Actual					Complete					305-Day-ME			
		Milk	%fat	Fat	%prot	Protein	DIM	Milk	%fat	Fat	%prot	Protein	Milk	Fat	Protein
2-01	1	21460	3.7	791	3.2	680	398	27610	3.8	1048	3.2	883	27340	1008	872
3-05	2	32652	4.1	1325	3.3	1064	365	38482	4.1	1580	3.3	1263	36570	1498	1207
4-07	3	record in progress					projected ME					34802	1446	1114	

2014 State FFA Production Records Key

This class is placed 4-3-2-1 with cuts of 6-2-6.

In analyzing this class 2 and 4 are highest for NM\$ with 3 being just \$50 lower. 1 is much lower for NM\$ and all production records.

4 places over 3 in an easy placing because 4 has a higher \$NM but is higher in all production records.

Granted 3 has better reproductive performance having her 3rd calf 2 years 2 months after her first while 4 had her 3rd calf 2 years and 6 months after her first calf.

3 places over 2 in a really close placing based on the projected ME for the current record. The current projected record is 8,223 higher for milk production and higher for lbs. fat and protein. 3 also has slightly better calving intervals.

Granted 2 is slightly higher in NM\$ and had higher production for the first two lactations but we selected the best cow today and that appears to be 3 based on the projected production of the current lactation.

2 places easily over 1 because NM\$ is higher as well as most production records.

Service or Heat Intervals (Number)			Dry Period Summary		
< 18 Days	18-24 Days	36-48 Days	Other		
1	9	10	12		
Avg Cows by Days Dry					
< 40 Days	40 - 70	> 70			
66	1	40			
2%			82%	16%	

Based on 49 Cows

Peak and Persistency									
305 ME		Prod Index	Lact Cows	DIM	Peak DIM	Milk	Current	MLM	C-L
Milk	\$ Value	99	1	136	71	74	62	-10.0	
22,202	3,006	100	2	182	41	102	66	-8.1	
22,815	3,010	101	3+	46	104	72	72	-5.5	
23,322	3,041	100	All	53	94	67	-7.6		
22,799	3,023	100	All	141	141	67			

Peak Ratio (1st/Others) is 0.71

Daily Milk		
DHI	4450	
Sold	4454	
Shipped %	100	
Value \$	1118	
\$/cwt	25.12	

Current SCC Evaluation						
Cows	LS	% Infected	Lact	% Cows by Linear Score		
24	2.2	17	1	0,1	2,3	4,5,6 7,8,9
11	1.8	9	2	50	33	4
30	2.4	23	3+	55	27	18
65	2.2	18	All	37	33	30
				45	32	18
				5		5

Monthly SCC Production Loss is 580 Lbs with a \$ Loss of 146

Annual Summary									
Days in Milk		All Cows	Lact Cows	All Cows	Days in Milk	< 100	100 - 200	> 200	
< 100	100 - 200	69	1	62	60	65	60	54	
69	68	70	2	66	74	61	74	54	
54	62	72	3+	66	77	64	77	77	
73	75	77	All	67	72	64	72	68	
71	72	73	All	67	72	64	72	68	

Yearly SCC Summary			
% Infected by DIM			
Lact	< 30	30 - 220	> 220
1	10	13	12
2	13	13	6
3+	30	15	21
All	22	14	14

Changes in SCC Status (Distribution of Cows Sampled)			
Fresh vs Last Dry Off (%)		Current vs Last Test (%)	
Cures	Chronics	Cures	Chronics
19	5	7	5
Negatives		Negatives	
60	17	78	10

Based on 12 Tests

Rolling Herd									
Milk	Fat	Pro	All Cows	% in Milk	Milk	% Shipped	Date	Milk Cows	Fresh Cows
20,968	786	662	77	90	61	100	04-10-14	69	9
20,984	786	663	79	86	63	106	03-13-14	68	11
21,014	789	665	75	84	61	103	02-12-14	63	15
21,061	797	667	74	82	64	106	01-07-14	61	10
20,896	798	662	74	81	54	101	12-02-13	60	9
20,825	801	660	73	82	56	104	10-23-13	60	10
20,863	802	659	79	84	51	103	09-19-13	66	7
20,939	802	661	77	78	52	103	08-20-13	60	3
21,021	805	661	77	82	49	100	07-25-13	63	4
21,041	806	661	77	88	59	104	06-25-13	68	6
20,919	800	655	73	93	61	94	05-31-13	68	5
20,670	794	644	76	92	63	104	04-27-13	70	9
Averages >			76	85	58	102		65	8

Based on 761 Samples

Production Averages									
Quantity					Quality				
Milk	Fat	MLM	% Fat	% Pro	Raw SCC	LS SCC	Number Infections	Fresh Infections	New Infections
141	69	67	3.8	3.2	178	2.2	12	2	6
147	74	75	3.6	3.1	172	1.9	8	2	3
150	72	73	3.7	3.2	170	1.9	7	3	3
173	77	80	3.5	3.1	238	2.5	14	1	7
179	67	71	3.9	3.3	119	2.2	6	1	1
184	69	75	3.7	3.2	175	2.2	8	2	1
199	61	69	4.2	3.3	135	2.3	12	1	1
186	67	74	3.5	3.0	83	1.8	6	1	1
190	61	68	3.8	3.1	172	2.5	10	1	1
187	67	73	3.5	3.0	98	2.1	10	1	4
198	65	71	3.9	3.2	114	2.3	9	1	4
192	68	73	3.7	3.1	113	2.3	8	2	7
177	68	73	3.7	3.1	147	2.2	9	1	3

Based on 42 Cows Sampled

Based on 58 Cows Sampled

Record Publication

Open Disclosure

Data Collection Rating (Milk) = 93.9

Herd Genetic Profile

Service Sires	Progeny Test		Genomic		Group	Animal PTA		Site PTA			
	Num Bred	% NMS	% Rk	% NMS		% Rk	Num	NMS	% Rank	% AI	NMS
15	40	+372	55	60	Calves	49	+374	68	96	+461	67
13	23	+101	13	77	Yearlings	26	+247	49	96	+337	50
11	45	+278	41	55	Lact 1	25	+336	75	100	+327	45
21	38	+236	30	62	Lact 2	14	+232	60	100	+261	40
45	36	+224	30	64	Lact 3+	35	+194	54	100	+159	26
					Cows	74	+249	62	100	+239	35

Cows Entering and Leaving Herd

Number Entered	Number Left	Lact	Reason for Leaving										% Turnover
			Dairy	Low Milk	Repro	Sick	Mastitis	Fullegs	Died	Other	Turnover		
40	19	1	3	2	3	4	3	2	1	3	1	25	
1	11	2	5	2	1	2	3	1	1	1	1	14	
1	11	3+	2	2	2	3	3	1	1	4	1	14	
42	41	All	10	6	6	9	5	5	4	1	1	53	
		Left Herd	24%	15%	15%	22%	12%	10%	2%				

Annual Turnover Rate is 54%

Monthly Herd Turnover

	History												Test	Planning	% Turnover
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep			
Total Cows	75	74	75	77	76	77	75	73	73	71	68	67	66		
Cows Milking	61	60	63	64	66	67	66	68	68	62	62	58	52		
Heifers Calving	2	2	4	6	3	4	1	1	3	1	4	2	2		
Cows Calving	7	3	8	5	8	5	6	5	4	1	4	5	1		
Cows Died Off	8	3	6	6	5	5	5	1	4	5	1	8	6		
Cows Dry	14	14	12	13	10	10	9	5	5	9	6	9	14		
Cows Left	6	3	3	4	4	3	3	3	3	3	3	3	3		

Birth Summary

Dam's Lact Num	Males		Females		Offspring Born		Calving Difficulty Score	% 4&5	% 4+5
	Alive	Dead	Alive	Dead	1	2			
1	15	1	22	3	1	2	3	4 & 5	
2+	29	1	26	1	1	2	1		
Total	44	2	48	4	4	5	1		

Inventory

% Herd	Group	Age	Num	% Identified	
				Sire	Dam
	Calves	0-06	50	98	100
	Yearlings	1-07	26	100	100
	Youngstock	1-01	76	99	100
36	Lact 1	2-00	28	100	100
18	Lact 2	3-03	14	100	100
45	Lact 3+	5-06	35	100	100
	Cows	3-10	77	100	100

Reproduction Summary

Breeding Herd		Cows	Heifers
Animals	Animals	64	27
Animals Served (%)	Animals Served (%)	72	56
Waiting Period (days or mo)	Waiting Period (days or mo)	43	15
First Served (<100 days or 15 mo) (%)	First Served (<100 days or 15 mo) (%)	50	4
Time to First Services (days or mo)	Time to First Services (days or mo)	91	16
Services per Animal	Services per Animal	1.7	1.2
Open Period (<150 days or 17 mo) (%)	Open Period (<150 days or 17 mo) (%)	28	4
Min Calving Interval (months)	Min Calving Interval (months)	12.9	27.0
Heat Detection Index (%)	Heat Detection Index (%)	30	
Pregnant Animals	Pregnant Animals	Cows	Heifers
Animals	Animals	27	3
Conceived at First Service (%)	Conceived at First Service (%)	63	33
Services per Conception	Services per Conception	1.6	1.7
Pregnancy Rate (%)	Pregnancy Rate (%)	17	20
Open Period (days or mo)	Open Period (days or mo)	123	20
Calving Interval (months)	Calving Interval (months)	13.3	28.8
CI - Standard Deviation (months)	CI - Standard Deviation (months)		
Management Calving Interval = 11.4 Months			

Breed
HO
Type Test
23-DHR-AP



LACTATION

Prev. Test 03-13-2014
Test Date 04-10-2014
Processed 04-11-2014

Brd	Index	Site	Prev Milk	Sample Day Data				Inc Over Feed Cost	Index	Lct #	Age at Calving	Days Dry	Calving Date	Due Date	Lactation to Date								Prod Index	Remarks
				Milk	Fat	Pro	SCC								DIM	Milk	Fat	Pro	Pro	MES\$				
				%	%	%	%								%	%	%	%	%	%				
1498 JE	201	138JED2399	45	3.8	3.6	985		201	11	12-06	61	03-11-14		31	1228	4.2	52	4.0	49	3511	102			
1499 HO	202	200HO03205	62	78	3.3	2.8	14	202	3	5-03	86	02-25-14		45	2853	3.4	97	2.8	80	3380	99			
1363 BS	203	138BS03036	42	53	4.0	3.4	13	203	2	3-01	38	05-03-13	05-04-14	3C5	21192	3.9	819	3.3	700	4093	119			
1447 BS	204	298S03769	42	53	4.0	3.4	13	204	1	1-11		03-06-14		36	1655	4.6	76	3.7	62					
1370 BS	205	138BS03036	48	37	4.9	4.2	62	205	3	3-09	61	04-09-14												
1401 BS	206	298S03769	42	45	4.3	3.7	132	206	1	2-03		07-04-13	06-29-14	281	13099	4.5	585	3.7	480	3510	102			
1311 BS	207	138BS03036	77	55	4.3	4.1	76	207	2	4-01	138	04-08-13	08-05-14	368	24476	3.9	953	3.2	776	3511	102		X	
1302 BS	208	298S03769	68	57	3.5	3.4	303	208	3	4-05	65	07-17-13	08-11-14	268	16300	3.7	608	3.6	592	3380	99			
1303 BS	209	298S03769	54	53	3.8	3.3	31	209	3	4-01	50	03-17-13	04-18-14	340	23858	3.8	917	3.5	835	3600	105			
1525 BS	210	78S00796	68	57	3.5	3.4	303	210	1	2-03		03-02-14		40	2036	4.2	86	3.5	72	3025	88			
1519 BS	211	298S03781	71	72	3.6	3.5	76	211	1	2-00		01-07-14		94	6305	3.5	221	3.2	202	3443	100			
1374 HO	212	200HO07030	26	29	3.6	3.8	141	212	2	3-01	62	10-10-13	Poss PG	183	14480	3.4	486	3.2	461	3368	98			
1310 HO	213	70HO00806	99	120	3.0	2.5	13	213	2	3-07	79	10-02-12	Poss PG	555	34717	3.6	1247	3.2	1102	3483	102		VY	
1199 HO	214	70HO05157	71	63	3.6	3.5	17	214	8	10-02	139	02-05-14		65	6577	3.1	201	2.8	186	3576	104		X	
1406 HO	215	29HO13162	79	65	4.3	3.6	132	215	1	2-00	50	05-06-13	04-18-14	293	17796	4.1	725	3.3	594	3752	109			
1313 HO	216	29HO11111	64	74	3.1	2.8	76	216	3	4-05	53	08-09-13	08-16-14	245	19459	3.9	750	3.2	628	3859	112			
1337 HO	217	70HO07872	42	42	3.6	3.5	17	217	3	4-01	83	10-15-13	09-26-14	173	13061	3.4	444	3.2	415	2869	84			
1331 HO	218	70HO07615	74	74	3.6	3.2	35	218	3	3-10	15	05-17-13	05-23-14	314	24931	3.8	936	3.1	770	3969	116			
1440 HO	219	70HO09030	64	74	3.6	3.2	35	219	1	2-00	58	02-20-14	11-25-14	57	3092	3.6	112	3.3	103	3394	99			
1356 HO	220	14HO04929	91	74	3.1	2.8	76	220	3	3-09	58	11-20-13		142	13628	3.3	447	2.7	369	3159	92			
1256 HO	221	70HO05157	109	94	3.3	2.6	35	221	5	6-03	57	01-18-14		83	7473	3.4	253	2.5	188	2869	94			
1301 HO	222	29HO12209	83	65	3.9	2.6	400	222	4	4-11	62	12-28-13	Poss PG	104	9183	3.4	309	2.8	258	2691	78			
1409 HO	223	29HO13162	56	39	4.4	3.9	44	223	1	1-11		04-02-13	06-26-14	374	24390	3.7	895	3.2	786	3944	115			
1416 HO	224	70HO07872	62	53	4.0	3.8	2599	224	1	2-00		06-26-13	11-02-14	289	17825	3.4	614	3.4	603	3615	105			
1431 HO	225	147HO01231	71	57	4.2	3.3	27	225	1	1-11		12-05-13		12*	8704	3.7	319	3.0	261	3224	94			
1318 HO	226	11HO08342	73	59	4.5	3.5	47	226	3	4-04	51	08-02-13	08-20-14	252	18912	4.1	784	3.1	585	3728	109			
1427 HO	227	29HO14744	73	82	4.3	3.2	54	227	1	2-04		02-23-14		4*	3309	5.8	193	3.3	109	3767	110			
1129 HO	228	70HO05157	97	90	3.2	2.9	66	228	7	9-06	107	12-04-13		128	13243	3.2	428	2.7	364	3444	100		X	
1230 HO	229	70HO07004	95	94	3.5	3.0	13	229	5	6-04	60	02-01-14	Poss PG	69	5872	3.6	224	3.0	177	3041	89			
1379 HO	230	70HO08190	87	86	4.3	3.1	27	230	2	3-02	52	02-09-14	Poss PG	6*	4973	4.8	238	3.6	178	3567	104			
1463 HO	231	70HO10506	87	82	4.0	3.2	13	231	2	3-05	60	12-13-13	Poss PG	119	10557	3.7	392	2.9	308	3383	99			
1448 HO	232	94HO13666	87	72	3.6	3.1	13	232	1	2-00		03-18-14		24	1417	4.0	57	3.5	49					
1261 HO	233	94HO11020	87	82	3.6	3.4	23	233	4	5-10	61	10-03-13	Poss PG	190	18822	3.4	645	3.1	580	3747	109			
1263 HO	234	14HO04026	85	72	3.9	3.2	44	234	5	6-00	55	01-10-14	Poss PG	9-	8203	4.3	350	3.1	254	2973	87			

Remarks Codes: & = New Cow V = Fat < Protein X = Days Dry > 100 Y = Days Open > 250

Breed HO	Sample Date	Process Date
	4/10/14	4/11/14

SONNEK FARMS

REPRODUCTION



MONTHS	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR
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MONTHLY REPRODUCTIVE CYCLES

Est Num Heats	29	28	29	29	31	31	28		27	26	26	25	28
Reported Heats	37	34	15	35	29	25	7			6	8	18	33
Num Breedings	16	16	8	13	9	8	3		5	6	5	12	13
Num Conceived	38	39	40	41	46	47	40		41	39	35	31	27

MONTHLY CALVING PATTERN

Cows Calved Last	4	3	1	3	3	5	7	3	8	5	8	5	3
Heifers Calved Last	4	2	6	1		4	2	2	4	6	3	4	1
Cows to Calve	3	5	4	1	4	5							
Heifers to Calve		1	3	1		2							

Index	COW'S SIRE		DATE CALVED	L A N C U T M	DAYS TO 1ST HEAT	DAYS OPEN	X's	LAST BREEDING OR HEAT			Index	DATE TO DRY	DUE DATE	DAYS IN MILK	PROD INDEX
	ID	NMS						DATE	SERVICE SIRE						
									ID	NMS					
301	138JE02399	-200	3/11/14	1	31								31		
302	200HO03205	+312	2/25/14	3	45								45	73	
303	138BS03036	+165	5/03/13	2	76	76	1	7/18/13	14BS00356	+282	303	DRY	5/04	305	121
304	29BS03769	+101	3/06/14	1	36						304			36	
305	138BS03036	+165	4/09/14	3	2						305				
306	29BS03769	+101	7/04/13	1	28	70	2	9/12/13	14BS00367	+399	306	4/30	6/29	281	104
307	138BS03036	+165	4/08/13	2	105	194	2	10/19/13	7HO12042	+359	307	6/06	8/05	368	103
308	29BS03769	+101	7/17/13	3	69	100	2	10/25/13	54BS00438	+315	308	6/12	8/11	268	100
309	29BS03769	+101	3/17/13	3	68	107	2	7/02/13	54BS00500	+134	309	DRY	4/18	340	106
310	7BS00796	+98	3/02/14	1	40						310			40	89
311	29BS03781	+39	1/07/14	1	94						311			94	101
312	200HO07030	-38	10/10/13	2	173	173	1	4/01/14	7HO12042	+359	312	11/07	POSS PG	183	99
313	70HO00806	-134	10/02/12	2	92	543	8	3/29/14	29HO13366	+556	313	11/04	POSS PG	556	102
314	7HO05157	+15	2/05/14	8	65						314			65	104
315	29HO13162	+464	5/06/13	1	67	67	1	7/12/13	14HO07063	+649	315	DRY	4/18	290	110
316	29HO11111	+366	8/09/13	3	92	92	1	11/09/13	29HO16698	+832	316	6/17	8/16	245	113
317	7HO07872	+48	10/15/13	3	66	66	1	2/20/13	7HO10506	+219	317	7/28	9/26	178	84
318	7HO07615	+323	5/17/13	3	67	91	2	8/16/13	11HO11310	+331	318	DRY	5/23	314	116
319	7HO09030	+468	2/20/14	1	50						319			50	100
320	14HO04929	+584	11/20/13	3	90	90	1	2/18/14	11HO11310	+331	320	9/26	11/25	142	92
321	7HO05157	+15	1/18/14	5	83						321			83	83
322	29HO12209	+382	2/28/13	4	68	68	1	3/06/14	11HO11310	+331	322	10/12	POSS PG	104	79
323	29HO13162	+464	4/02/13	1	170	170	1	9/19/13	7HO11926	+752	323	4/27	6/26	374	115
324	7HO07872	+48	6/26/13	12	214	214	1	1/26/14	200HO10024	+849	324	9/03	11/02	289	106
325	147HO01231	+321	12/05/13	1	127						325			127	95
326	11HO08342	+301	8/02/13	3	103	103	1	11/13/13	200HU06480	+660	326	6/21	8/20	252	110
327	29HO14744	+431	2/23/14	1	47						327			47	111
328	7HO05157	+15	2/04/13	7	128						328			128	101
329	7HO07004	-113	2/01/14	5	42	42	1	3/15/14	7HO10506	+219	329	10/21	POSS PG	69	89
330	7HO08190	+82	2/09/14	2	34	53	2	4/03/14	7HO09420	+321	330	11/09	POSS PG	61	105
331	7HO10506	+219	12/13/13	2	41	109	4	4/01/14	11HO08195	+452	331	11/07	POSS PG	119	99
332	94HO13666	+309	3/18/14	1	24						332			24	
333	94HO11020	-275	10/03/13	4	142	142	1	2/22/14	29HO17553	+919	333	9/30	POSS PG	190	110
334	14HO04026	+201	1/10/14	5	64	64	1	3/15/14	7HO11835	+283	334	10/21	POSS PG	91	87
335	14HO04026	+201	2/19/12	4	49	257	3	9/02/13	200HO07030	-38	335	4/10	6/09	478	110
336	29HO13366	+556	4/07/14	3	4						336				
337	29HO13366	+556	2/22/14	2	48						337			48	89
338	29HO13162	+464	3/13/13	1	159	159	1	8/19/13	14HO07063	+649	338	DRY	5/26	384	104
339	200HO03205	+312	1/20/13	1	87	87	1	2/15/14	7HO10506	+219	339	9/23	11/22	142	78
340	29HO11614	+507	4/09/14	4	2						340				

FLEX REPORT

DHI-370

Test Date: 04-10-2014

Processed: 04-11-2014

Page 1 of 2

Test Type and Description 23 DHIR-AP	Breed HO
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Test Day Milk		Actual SCC		Index		% of Tank	Days in Milk	Lact #	Log SCC	Lact Avg		#> 200K	#SCC Tests	Prod Index
Actual	Expected	Prev	Current							This	Last			
41	54	23	2786	101	N	14%	211	1	7.8	1.7		1	7	97
53	59	35	2599	102	N	17%	289	1	7.7	2.4		1	9	106
61	71	54	1600	103	N	12%	86	1	7.0	3.6		1	3	92
45			985	104	N	6%	31	11	6.3	6.3	6.8	1	1	
86	82	50	919	105	N	10%	196	4	6.2	2.2	4.0	1	6	121
74			429	106	N	4%	27	3	5.1	5.1	4.7	1	1	
78			400	107	N	4%	16	3	5.0	5.0	0.8	1	1	
65	82	492	400	108	P	3%	104	4	5.0	3.6	2.4	2	4	79
57	72	13	303	109	N	2%	94	1	4.6	1.6		1	3	101
72	86	3430	283	110	P	3%	50	3	4.5	6.3	1.6	2	2	82
61	91	492	283	111	P	2%	79	2	4.5	4.7	1.0	3	3	80
88	86	13	200	112		2%	127	3	4.0	1.2	1.5		4	100
43	62	100	187	113		1%	478	4	3.9	1.9	1.0	1	16	110
78	81	57	141	114		1%	186	5	3.5	3.2	4.2	2	6	96
29	32	123	141	115		1%	556	2	3.5	1.1	0.9		18	102
45	53	200	132	116		1%	368	2	3.4	1.7	2.9		12	103
65	71	107	132	117		1%	245	3	3.4	4.0	2.3	4	8	113
43	45	31	123	118		1%	142	1	3.3	3.0		1	5	78
67	70	44	100	119		1%	70	1	3.0	2.6			3	90
72	75	71	76	120		1%	189	3	2.6	3.1	3.9	1	6	103
74	81	13	76	121		1%	142	3	2.6	1.0	4.3		5	92
78	67	66	76	122		1%	262	4	2.6	3.2	2.5	1	8	113
55	55	107	76	123		1%	268	3	2.6	1.5	1.4		9	100
72	67	66	76	124		1%	183	2	2.6	1.5	2.2		6	99
90	93	35	66	125		1%	128	7	2.4	2.0	3.1		4	101
37	45	66	62	126			281	1	2.3	1.4			9	104
84	97	14	57	127		1%	176	4	2.2	1.0	2.3		6	103
82	80	1213	54	128		1%	47	1	2.1	4.4		1	2	111
59	64	19	47	129			252	3	1.9	0.7	3.3		8	110
39	54	29	44	130			374	1	1.8	1.2			12	115
72	90	800	44	131			91	5	1.8	2.6	2.1	1	3	87
69			41	132			8	1	1.7	1.7			1	
53	59	29	38	133			415	2	1.6	0.9	1.5		14	111
69	76	162	35	134			52	1	1.5	2.6			2	91
94	93	13	35	135			83	5	1.5	0.8	1.6		3	83
74	69	115	35	136			50	1	1.5	2.4			2	100
45	72	22	33	137			221	1	1.4	1.2			7	99
51	55	13	33	138			165	1	1.4	0.9			5	92
37	48	38	33	139			484	1	1.4	1.3		1	16	121
53	60	66	31	140			40	1	1.3	1.9			2	89
92	65	29	31	141			47	2	1.3	1.3	1.5		2	91
78	86	15	29	142			234	6	1.2	0.8	1.8		7	147
57	64	13	27	143			127	1	1.1	0.5			4	95
86	89	1493	27	144			61	2	1.1	4.0	3.6	1	2	105
82	78	141	23	145			190	4	0.9	1.5	1.2		6	110

TF = Too Fresh to Test

N Cow SCC > 200,000 this test
P Cow SCC > 200,000 this test and last

2014 State FFA Dairy Management Group Activity

To answer the questions below, put the correct three digit "Index" or "computer" number in the "Herd Record" part of the answer sheet of contestant 11. Each correct answer is worth 4 points for a total of 100 points.

Lactation Report (use "Index" number)

- _____ 1. Which cow is a Jersey?
- _____ 2. Which is the oldest cow in the herd?
- _____ 3. Which cow has the most days in milk in the current lactation?
- _____ 4. Which cow was most recently fresh?
- _____ 5. Which cow has the lowest "Production Index"?
- _____ 6. Which cow is expected to calve next?
- _____ 7. Which cow has lowest fat to protein ratio?
- _____ 8. Which Brown Swiss cow had the highest SCC?
- _____ 9. Which lactating cow had the biggest increase in milk lbs. from last month to this month?
- _____ 10. Which cow was the oldest when she last freshened?
- _____ 11. Which 3rd lactation cow has the highest production index?
- _____ 12. Which currently dry cow has the most days dry to date?
- _____ 13. Which cow has the highest Standardized Mature Equivalent Milk?
- _____ 14. Which cow contributed the greatest amount of somatic cells to the bulk tank?
- _____ 15. Which cow had the lowest fat test for the lactation to date?

Reproduction Report (use "computer number")

- _____ 16. Which cow was sired by the bull with the lowest NM\$?
- _____ 17. Which cow was bred the most times during this lactation?
- _____ 18. Which cow is bred to a bull with the highest Net Merit Dollar?
- _____ 19. Which cow, with a due date, had the fewest days open?
- _____ 20. Which cow had the most days to first heat?
- _____ 21. Which dry cow had the most day's open?

FLEX Report (use "Index" number)

- _____ 22. Which cow had the highest somatic cell count on the previous test day?
- _____ 23. Which cow had the most tests over 200,000 somatic cells?
- _____ 24. Which cow has the lowest average Log SCC this lactation?
- _____ 25. Which 1st lactation cow had the biggest decrease in somatic cell count from last month?

2014 State FFA Dairy Management Group Activity Key

To answer the questions below, put the correct three digit "Index" or "computer" number in the "Herd Record" part of the answer sheet of contestant 11. Each correct answer is worth 4 points for a total of 100 points.

Lactation Report (use "Index" number)

- 201 1. Which cow is a Jersey?
- 201 2. Which is the oldest cow in the herd?
- 213 3. Which cow has the most days in milk in the current lactation?
- 205 4. Which cow was most recently fresh?
- 202 5. Which cow has the lowest "Production Index"?
- 209/215 6. Which cow is expected to calve next?
- 213 7. Which cow has lowest fat to protein ratio?
- 211 8. Which Brown Swiss cow had the highest SCC?
- 214 9. Which lactating cow had the biggest increase in milk lbs. from last month to this month?
- 201 10. Which cow was the oldest when she last freshened?
- 218 11. Which 3rd lactation cow has the highest production index?
- 205 12. Which currently dry cow has the most days dry to date?
- 203 13. Which cow has the highest Standardized Mature Equivalent Milk?
- 224 14. Which cow contributed the greatest amount of somatic cells to the bulk tank?
- 201 15. Which cow had the lowest fat test for the lactation to date?

Reproduction Report (use "computer number")

- 333 16. Which cow was sired by the bull with the lowest NMS?
- 313 17. Which cow was bred the most times during this lactation?
- 333 18. Which cow is bred to a bull with the highest Net Merit Dollar?
- 317 19. Which cow, with a due date, had the fewest days open?
- 324 20. Which cow had the most days to first heat?
- 338 21. Which dry cow had the most day's open?

FLEX Report (use "Index" number)

- 110 22. Which cow had the highest somatic cell count on the previous test day?
- 117 23. Which cow had the most tests over 200,000 somatic cells?
- 145 24. Which cow has the lowest average Log SCC this lactation?
- 128 25. Which 1st lactation cow had the biggest decrease in somatic cell count from last month?

2014 FFA Dairy Judging - Team Quiz – Written Exam

- ___ 1. Who is responsible for the breed's herdbook?
a. breed association b. DHIA c. USDA d. dairy farmers
- ___ 2. Which breed was established by monks that crossed the Fromont du Leo Brittany and Norman Brindles?
a. Holstein b. Montbeliarde c. Ayrshire d. Guernsey e. Brown Swiss
- ___ 3. Which dairy breed is describe as "docile, slower moving cows"?
a. Holstein b. Jersey c. Ayrshire d. Guernsey e. Brown Swiss
- ___ 4. If a black and white Holstein that is a carrier for the red gene is mated to a cow of similar genetics what is the probability of getting a black and white calf?
a. 0 b. .25 c. .50 d. .75 e. 1.00
- ___ 5. Which breed has the highest average pregnancy rate?
a. a. Holstein b. Jersey c. Ayrshire d. Guernsey
- ___ 6. What connects the epididymis to the urethra?
a. vas deferens b. seminal vesicles c. rectum d. vagina
- ___ 7. Which one of the following hormones is produced by the pituitary gland?
a. testosterone b. estrogen c. progesterone d. luteinizing hormone e. GnRH
- ___ 8. Which hormone causes cows to exhibit heat?
a. oxytocin b. estrogen c. progesterone d. testosterone e. GnRH
- ___ 9. What is the circumference right behind the shoulders called?
a. barrel b. heart girth c. chine d. thurl e. crops
- ___ 10. What is the viable life time of sperm in the female reproductive tract?
a. 1 hour b. 6 hours c. 10 hours d. 24 hours e. 3 days
- ___ 11. What is the toxic substance that cottonseed may contain that may decrease fertility?
a. gossypol b. mycotoxin c. linoleic acid d. ketones
- ___ 12. Which gas is not present in the rumen?
a. methane b. oxygen
c. carbon dioxide
- ___ 13. What is another name for rednose?
a. BVD b. brucellosis c. trichomoniasis d. IBR
- ___ 14. What does IVF refer to?
a. fiber level in feed b. calfhood disease c. reproductive technique d. intra-vaginal fluid
- ___ 15. What provides the majority of energy to the cow?
a. carbohydrates b. lignin c. Vitamin B₁₂ d. lipids
- ___ 16. How many macro-minerals are there?
a. 7 b. 12 c. 16 d. 21
- ___ 17. Which one of the following would not be considered an energy grain?
a. corn b. oats c. rye d. barley e. soybeans
- ___ 18. What % of body weight will a 15 month old heifer consume in dry matter each day?
a. 1% b. 2.5% c. 5.5% d. 8%
- ___ 19. What characteristic of a cow would predict lower quality colostrum?
a. Old cow b. vaccinated cow c. cow that leaks milk d. low milk production

- ___ 20. What is the most likely cause of mortality in a scouring calf?
a. pneumonia b. Over feeding c. fever d. starvation e. dehydration
- ___ 21. What category of organism causes ringworm?
a. bacteria b. virus c. protozoa d. fungus e. varmint
- ___ 22. Feeding too much of this may worsen udder edema?
a. fiber b. Potassium c. Oats d. Vitamin A
- ___ 23. How often should compost bedded barns be tilled?
a. twice a day b. once per day c. twice a week d. once a week e. monthly
- ___ 24. What is the recommended freestall width for a 1600 lb. cow?
a. 36" b. 47" c. 51" d. 60" e. 84"
- ___ 25. What is the recommended air exchange rate per hour for warm housing in the winter?
a. 2 b. 4 c. 10 d. 14 e. 20
- ___ 26. What is the waxy substance inside the streak canal called?
a. peptide b. coccidiosis c. alveoli d. keratin e. acetate
- ___ 27. What % of Mastitis losses is caused by subclinical mastitis?
a. 2% b. 6% c. 10% d. 24% e. 70%
- ___ 28. What is it called when the milk fat % is adjusted at the milk plant to meet plant standards?
a. standardization b. pasteurization c. clarification d. homogenization
- ___ 29. How many lbs. of whole milk does it take to produce a lb. of cheese?
a. 2.1 b. 7.4 c. 10.0 d. 21.2
- ___ 30. What class of milk would yogurt belong to?
a. Class I b. Class II c. Class III d. Class IV
- ___ 31. What is added as cream is whipped to make whipped cream?
a. sugar b. salt c. vanilla d. whole milk e. flour
- ___ 32. What is the most common way to identify cows?
a. freeze brands b. photos
c. tattoos d. eartags
- ___ 33. What is the largest single cost in producing milk?
a. housing b. labor c. insurance d. energy e. feed
- ___ 34. In what city was the first national dairy show in 1906?
a. Chicago b. Madison, Wis. c. St. Paul, MN
- ___ 35. What does the Bacillus stearothermophilus disc assay do?
a. test for mastitis b. test for antibiotic residues c. measures protein content of milk
- ___ 36. When was BST first approved by the FDA?
a. 1993 b. 2003 c. 2013
- ___ 37. How many gallons of waste (feces and urine) does a 1,400 cow produce each day?
a. 2.3 b. 6.5 c. 13.6
- ___ 38. Which one of the following is an inorganic bedding?
a. straw b. sand c. wood shavings

2014 State FFA Dairy Management Group Activity

Questions from the DHIA Herd Summary (Put answers on Written Exam).

- ___ 39. What percent of the 1st lactation cows were bred AI ?
a. 13 b. 75 c. 45 d. 100
- ___ 40. Which group of cows had the highest peak milk production?
a. 1st lactation b. 2nd lactation c. 3rd lactation and older
- ___ 41. What percent of cows were dry more than 70 days?
a. 8 b. 16 c. 40 d. 49
- ___ 42. Which age of cows had the highest mastitis infection rate?
a. 1st lactation b. 2nd lactation c. 3+ lactations
- ___ 43. Relative to raw somatic cell count over the last year, which statement best applies?
a. SCC has decreased over the last year
b. SCC has increased over the last year
c. SCC has not changed
- ___ 44. What percent of the cows both dried off with a high SCC and then freshened with the SCC still high?
a. 5 b. 17 c. 19 d. 60
- ___ 45. What percent of the 1st lactation cows were bred AI ?
a. 13 b. 75 c. 45 d. 100
- ___ 46. What was the average age at first calving?
a. 24 months b. 26 months c. 28 months d. 30 months
- ___ 47. What is the minimum calving interval (months) of the breeding herd?
a. 12.9 b. 13.3 c. 14.6 d. 15.8
- ___ 48. What % of the cows that left the herd had died?
a. 2 b. 10 c. 15 d. 22
- ___ 49. Approximately, what % of the calvings were classified as difficult?
a. 7 b. 25 c. 38
- ___ 50. In what month did the most cows leave the herd?
a. January b. February c. June d. October

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- a___ 31. What is added as cream is whipped to make whipped cream?
 a. sugar b. salt c. vanilla d. whole milk e. flour
- _d_ 32. What is the most common way to identify cows?
 a. freeze brands b. photos
 c. tattoos d. eartags
- e___ 33. What is the largest single cost in producing milk?
 a. housing b. labor c. insurance d. energy e. feed
- a___ 34. In what city was the first national dairy show in 1906?
 a. Chicago b. Madison, Wis. c. St. Paul, MN
- b___ 35. What does the Bacillus stearothermophilus disc assay do?
 a. test for mastitis b. test for antibiotic residues c. measures protein content of milk
- a___ 36. When was BST first approved by the FDA?
 a. 1993 b. 2003 c. 2013
- c___ 37. How many gallons of waste (feces and urine) does a 1,400 cow produce each day?
 a. 2.3 b. 6.5 c. 13.6
- b___ 38. Which one of the following is an inorganic bedding?
 a. straw b. sand c. wood shavings

2014 State FFA Dairy Management Group Activity Key

Questions from the DHIA Herd Summary (Put answers on Written Exam).

- d 39. What percent of the 1st lactation cows were bred AI ?
a. 13 b. 75 c. 45 d. 100
- c 40. Which group of cows had the highest peak milk production?
a. 1st lactation b. 2nd lactation c. 3rd lactation and older
- b 41. What percent of cows were dry more than 70 days?
a. 8 b. 16 c. 40 d. 49
- c 42. Which age of cows had the highest mastitis infection rate?
a. 1st lactation b. 2nd lactation c. 3+ lactations
- b 43. Relative to raw somatic cell count over the last year, which statement best applies?
a. SCC has decreased over the last year
b. SCC has increased over the last year
c. SCC has not changed
- a 44. What percent of the cows both dried off with a high SCC and then freshened with the SCC still high?
a. 5 b. 17 c. 19 d. 60
- d 45. What percent of the 1st lactation cows were bred AI ?
a. 13 b. 75 c. 45 d. 100
- a 46. What was the average age at first calving?
a. 24 months b. 26 months c. 28 months d. 30 months
- a 47. What is the minimum calving interval (months) of the breeding herd?
a. 12.9 b. 13.3 c. 14.6 d. 15.8
- b 48. What % of the cows that left the herd had died?
a. 2 b. 10 c. 15 d. 22
- a 49. Approximately, what % of the calvings were classified as difficult?
a. 7 b. 25 c. 38
- d 50. In what month did the most cows leave the herd?
a. January b. February c. June d. October