

Fall 16

Breed XX
Type Test 40-DHI-06
Minnesota DHIA
Herd Summary
 Prev. Test 08-25-2015
 Test Date 08-22-2016

Dry Period Summary
 Cows by Days Dry

AVG Days	< 40	40 - 70	> 70
53	7	47	3
	12%	82%	5%

Based on 57 Cows

Service or Heat Intervals (Number)

< 18 Days	5
18-24 Days	24
36-46 Days	92
Other	

Reproduction Summary

Breeding Herd	Cows	Heifers
Animals	94	105
Animals Served (%)	99	69
Waiting Period (days or mo)	60	14
First Served (<100 days or 15 mo) (%)	98	57
Time to First Services (days or mo)	69	14
Services per Animal	2.2	1.7
Open Period (<150 days or 17 mo) (%)	57	63
Min Calving Interval (months)	13.6	24.4
Heat Detection Index (%)	43	
Pregnant Animals	Cows	Heifers
Animals	72	68
Conceived at First Service (%)	44	49
Services per Conception	1.9	1.6
Pregnancy Rate (%)	17	15
Open Period (days or mo)	117	15
Calving Interval (months)	13.1	24.3

CI - Standard Deviation Interval = 16.9 Months

Herd Genetic Profile

Group	Service Sires			Animal PTA			Sire PTA			
	Num Bred	%	NMS	% Rk	%	NMS	% Rk	% AI	NMS	% Rk
Calves	72	100	+523	87	59	+314	78	100	+435	76
Yearlings	50	100	+439	75	103	+273	66	100	+368	65
Lact 1	20	100	+453	78	37	+152	70	100	+334	63
Lact 2	22	100	+495	82	26	+278	82	100	+381	68
Lact 3+	92	100	+456	78	27	+247	79	97	+316	57
Cows	92	100	+456	78	90	+217	76	99	+342	62

Yearly SCC Summary

Lact	% Infected by DIM		
	< 30	30 - 220	> 220
1	23	16	12
2	7	11	32
3+	34	15	25
All	22	14	22

Changes in SCC Status (Distribution of Cows Sampled)

Fresh vs Last Dry Off (%)	Current vs Last Test (%)	
	Cures	Chronics
Cures	31	4
Chronics	4	20
Chronics		7
Negatives	49	16
Negatives		73

Production Averages

Rolling Herd	Test Day			Quantity			Quality										
	Milk	Fat	Pro	All Cows	Fresh Cows	Dim	Milk	MLM	% Fat	% Pro	Raw SCC	LS SCC	Number Infections	Fresh Infections	New Infections Number	%	
24,011	954	771	771	107	78	50	83	231	65	79	3.8	3.3	62	1.8	5	25	26
23,899	945	766	766	108	90	58	98	240	65	79	4.3	3.3	436	3.2	31	7	7
23,858	936	763	763	115	92	67	106	214	73	83	4.0	3.1	247	2.6	14	3	6
23,666	923	755	755	118	100	76	118	193	76	84	4.1	3.1	367	2.7	22	3	7
23,550	915	748	748	119	96	72	114	171	76	81	3.9	3.2	139	2.5	18	3	6
23,636	915	747	747	120	93	72	112	159	77	81	3.9	3.2	216	2.4	14	2	5
23,701	913	748	748	115	97	75	111	157	78	82	3.7	3.2	119	2.4	15	1	5
23,503	903	739	739	108	94	73	101	145	78	79	3.7	3.2	138	2.3	16	1	6
23,275	895	732	732	110	97	76	107	129	79	78	3.8	3.1	142	2.2	16	1	7
23,055	884	725	725	111	97	73	108	122	75	75	3.9	3.1	181	2.3	19	6	5
23,017	881	724	724	113	88	67	100	118	76	78	4.0	3.1	189	2.6	21	2	8
22,747	867	716	716	118	92	61	108	136	67	76	4.3	3.4	187	2.6	23	4	7
Averages >				114	93	68	106	168	74	79	3.9	3.2	202	2.5	18	2	8

Data Collection Rating (Milk) = 74.5

Limited Disclosure

Record Publication

Breed
XX



LACTATION

Prev. Test Date 09-23-2015
Test Date 09-25-2015
Processed 09-25-2015

DHI-312
Page 2 of 6

Type Test
40-DHI-OS

Index	Brd	Permanent ID	Site	Prev Milk	Sample Day Data				Index	Lct #	Age at Calving	Days Dry	Calving Date	Due Date	DIM	Lactation to Date				ME\$	Prod Index	Remarks		
					Milk	Fat	Pro	SCC								% Fat	% Pro	% Fat	% Pro				Milk	Fat
201	HO	51476552	1HO08778	80	64	3.9	3.4	47	201	3	3-11	54	10-19-14	01-21-16	339	34421	3.7	1285	3.0	1027	4776	122		
202	XX	51476557	1HO08831	82	86	3.7	3.5	47	202	3	4-02	50	01-22-15	01-08-16	244	23569	3.6	858	3.1	739	4122	105		
203	XX	51476558	1HO08858	64					203	3	3-11	27	11-10-14	10-28-15	280	30721	3.2	995	2.8	882	4356	111		
204	XX	51476566	249SR01433	40					204	3	3-11	26	11-12-14	10-29-15	269	22727	4.4	968	3.5	788	3955	101		
205	HO	51476576	7HO08165	82	78	3.7	3.1	13	205	2	4-00	69	01-07-15	05-05-16	259	22305	3.9	883	2.9	652	3877	98		
206	XX	51476579	249SR01922	64	66	4.2	3.5	18	206	3	4-00	113	01-04-15	12-19-15	282	20546	4.2	859	3.4	704	3856	98	X	
207	XX	51476582	1HO08778	66	56	3.4	3.2	38	207	3	3-10	49	11-11-14	11-28-15	316	25113	3.5	884	3.1	776	3634	93		
208	XX	51476593	249SR01804	58	46	4.0	3.5	107	208	2	3-00	54	10-19-14	03-28-16	339	27741	4.3	1191	3.3	912	4827	118		
209	XX	51476595	249SR01604	58	50	4.2	3.5	54	209	2	3-00	52	11-14-14	12-19-15	313	24350	4.2	1018	3.1	787	4120	105		
210	HO	51476601	1HO08858	12					210	2	3-00	28	11-15-14	10-27-15	284	18444	3.9	637	3.5	583	2881	74		
211	HO	51476603	1HO08784	88	94	3.5	3.4	18	211	2	3-02	25	01-10-15	03-24-16	258	24533	3.5	861	3.2	782	4816	118		
212	XX	51476608	249SR02263	56	52	4.5	3.7	107	212	2	2-11	45	10-10-14	02-27-16	348	23332	4.6	1063	3.5	815	3942	101		
213	XX	51476612	249SR01922	36					213	1	2-05	12	05-10-14	11-12-15	488	33701	4.3	1444	3.3	1124	4357	111		
214	XX	51476613	1HO08784	88	92	3.1	3.0	15	214	2	3-04	49	03-23-15	05-07-16	184	20406	3.8	779	2.9	583	4535	116		
215	HO	51476614	7HO08361						215	2	2-11	42	10-22-14	10-06-15	284	23249	3.8	803	3.2	750	4086	104		
216	HO	51476620	1HO08784	64					216	2	2-10	12	10-13-14	11-10-15	333	28283	3.5	998	3.2	898	4315	110		
217	XX	51476625	249SR02385	90	86	3.2	3.2	13	217	2	3-04	21	05-10-15	Poss PG	136	10774	4.2	454	3.2	344	3808	92		
218	HO	51476626	1HO08784	58	28	3.9	3.6	528	218	2	2-10	42	11-04-14	02-11-16	323	23530	3.7	860	3.0	718	3688	94		
219	XX	51476630	249SR01433	72	92	3.6	3.4	16	219	2	3-08	10	08-01-15		53	3849	4.5	174	3.5	136	3502	90	A	
220	HO	51476638	1HO08784	62	56	3.9	3.2	41	220	1	2-09		12-17-14	11-26-15	280	20917	3.8	796	3.1	639	3759	98		
221	XX	51476639	249SR02104	38					221	1	2-06	12	08-30-14	11-12-15	346	17410	5.1	886	3.7	649	3342	95		
222	HO	51476640	1HO08784	54	64	4.5	3.8	132	222	1	2-08		10-07-14	01-07-16	351	21833	3.7	815	3.5	787	3448	88		
223	XX	51476644	1HO08784						223	1	2-06	42	10-23-14	10-08-15	293	18033	4.2	784	3.3	589	3480	89		
224	XX	51476645	7HO08361						224	2	3-04	61	08-21-15											
225	HO	51476647	1HO08784	68	64	3.3	2.9	19	225	1	2-05		03-17-15	Poss PG	190	13332	3.6	478	2.9	385	3367	86		
226	HO	51476648	7HO08361	64	56	4.4	3.6	18	226	1	1-11		10-02-14	01-07-16	356	22780	4.5	1014	3.4	773	4101	105		
227	HO	51476649	1HO08784	54	50	3.7	3.5	13	227	1	1-11		08-27-14	01-21-16	361	22262	3.5	772	3.3	724	3635	93		
228	XX	51476652	249SR02104	54					228	1	2-00	26	11-02-14	10-29-15	299	18884	3.6	691	3.2	608	3576	91		
229	HO	51476654	7HO08361	70	70	3.5	3.0	187	229	1	2-03		01-31-15	Poss PG	235	18666	3.8	653	2.9	498	3773	97		
230	XX	51476655	249SR02263	52	56	4.2	3.8	23	230	1	1-11		10-02-14	03-28-16	356	21850	3.8	832	3.3	723	3673	94		
231	HO	51476656	7HO08361	38					231	1	2-00	28	11-10-14	10-27-15	289	17844	3.7	698	3.0	544	3392	87		
232	HO	51476657	29HO13846		74	4.4	4.0	31	232	2	2-10	56	09-16-15		7	369	4.6	18	4.1	16				
233	HO	51476659	1HO10000	50					233	1	2-00	4	11-19-14	11-18-15	304	19430	3.2	625	3.0	566	3371	86		
234	HO	51476660	29HO13846	56	56	3.9	3.1	29	234	1	1-11		10-28-14	01-21-16	332	21703	3.8	828	3.1	686	3605	87		

Remarks Codes: A = Abortion Started Lact. X = Days Dry > 100

Fall 2015 State FFA Dairy Management Group Activity

To answer the questions below, put the three digits of the "Index" number in the "Herd Record" part of the answer sheet of contestant 11. Each correct answer is worth 2 points for a total of 20 points.

Lactation Report

- _____ 1. Which cow had the lowest % protein on test day?
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Questions from the DHIA Herd Summary (Put answers on Written Exam).

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a. 77% b. 65% c. 13% d. 90% e. 44%
- _____ 22. What production / management trait showed the most variation over the five months?
a. % protein test b. somatic cell count c. MLM
- _____ 23. What group of animals is bred to the highest Net Merit sires?
a. 1st lactation b. 2nd lactation c. 3rd and later lactations d. yearlings
- _____ 24. Which test month was worst for number of new mastitis infections?
a. January b. April c. June d. October e. August
- _____ 25. What group of animals was sired by the lowest net merit bulls?
a. 1st lactation b. 2nd lactation c. 3rd+ lactations d. yearlings
- _____ 26. What is the average days dry for the herd?
a. 68 b. 53 c. 85 d. 188 e. 154
- _____ 27. What age group of cows is most likely to freshen with a high somatic cell count?
a. 1st lactation b. 2nd lactation c. 3rd+ lactation
- _____ 28. Over the past year, what best describes the trend in rolling herd average milk production?
a. decreased b. remained the same c. increased
- _____ 29. At this time, what percent of the milking cows are chronically infected (according to SCC status)?
a. 21 b. 13 c. 7
- _____ 30. What percent of the cows are dry for the preferred 40-70 days?
a. 13% b. 52% c. 41% d. 68% e. 82%

Fall 2015 FFA Dairy Judging - Team Quiz – Written Exam

- ___ 1. Which country is the Isle of Guernsey closest to?
a. France
b. Canada
c. Italy
d. Switzerland
- ___ 2. Which breed association is located in Brattleboro, Vermont?
a. Brown Swiss b. Holstein c. Guernsey d. Jersey
- ___ 3. Which is the only breed with a separate and full-time organization devoted to milk marketing?
a. Brown Swiss b. Milking Shorthorn c. Guernsey d. Jersey
- ___ 4. How many chromosome pairs do cattle have?
a. 10 b. 20 c. 30 d. 60
- ___ 5. What percentage of her genetics does a calf get from her maternal grandmother?
a. 12.5% b. 25% c. 50% d. 75%
- ___ 6. Which one of the following is not a linear type trait?
a. dairy form b. rump width c. udder cleft d. tail setting
- ___ 7. What are the tubes that connects the epididymis to the urethra called?
a. Vas Deferens b. Prostrates c. Cowpers d. Seminal Vesicles
- ___ 8. Which breed has the longest gestation period?
a. Brown Swiss b. Holstein c. Guernsey d. Jersey
- ___ 9. What structure on the ovary produces progesterone?
a. follicle b. corpus luteum c. hypothalamus
- ___ 10. For about how many hours do sperm survive in the female reproductive tract.?
a. 2 hours b. 8 hours c. 12 hours d. 24 hours
- ___ 11. What is the average heat detection rate in Minnesota DHIA herds?
a. 10% b. 30% c. 85% d. 92%
- ___ 12. What percent of dairy cattle births results in twins?
a. 1% b. 5%
c. 13% d. 22%
- ___ 13. What another name for afterbirth?
a. metritis b. nuclear transfer c. bulbus d. placenta
- ___ 14. About how many hours a day does a cow spend chewing her cud?
a. 2 b. 4 c. 10 d. 20
- ___ 15. Which plant component below is hardest to digest?
a. sugar b. starch c. protein d. cellulose
- ___ 16. What term describes the portion of feed protein broken down by rumen microbes?
a. rumen degradable protein b. soluble protein c. by-pass protein
- ___ 17. Which feed is not required by the dairy calf until after weaning?
a. milk b. hay c. grain d. water
- ___ 18. What is the idea body condition score of a cow at drying off?
a. 1.5 b. 2.25 c. 3.25 d. 4.0
- ___ 19. What is the most costly disease in dairy cattle?
a. mastitis b. ring worm c. pneumonia d. scours
- ___ 20. What bedding type is considered the "gold standard" for free stall housing?
a. straw b. Dried manuew solids c. sawdust d. sand

**2015 Minnesota State FFA
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.

The dairy farmer has a very profitable 300 cow grade herd that averages 25,000 lbs. of milk. Net Merit Dollars is the main criteria that he selects for. If cows have serious linear faults, the farmer likes to find bulls that will correct those faults especially in udders and feet and legs. He prefers the sires to have at least 80% reliability.

COWS TO BE MATED		BULLS TO CONSIDER			
3 YR OLD RECORD	TRAITS	1	2	3	4
3 Yr. 1 MO-ME					
	REL	98	89	72	89
27052	PTA:Milk	1229	1460	1411	1039
3.5	F %	.05	+.04	-.11	.07
947	Fat	59	63	22	56
3.1	P %	.02	.00	.00	.04
839	Protein	40	45	43	42
	Type	1.69	1.65	1.94	1.46
	Somatic Cell Score	2.61	2.80	2.74	2.70
	Productive Life	7.9	4.3	6.4	8.0
	Net Merit \$	818	592	615	827
LINEAR SCORES					
28	Stature	1.57	.92	1.20	1.00
20	Angularity	2.38	2.19	.90	-1.20
20	Strength	-.45	.09	.80	.20
33	Body Depth	.09	.61	.70	-.70
20	Pelvic Width	2.32	1.24	.40	.20
25	Pelvic Angle	1.21	.57	-.90	1.40
44	Legs-side view	1.0	1.29	1.70	1.40
25	Foot Angle	1.18	-.11	1.20	1.90
25	Fore Udder	2.34	1.91	2.70	2.60
27	R Udder Height	4.20	1.85	1.72	1.30
32	R Udder Width	3.26	2.07	1.40	1.00
12	Udder Support	2.25	2.62	0.33	1.60
26	Udder Depth	2.82	1.27	2.20	1.20
08	Teat Placement	2.81	1.15	1.40	1.30

2015 U of MN Invitational FFA Dairy Judging Contest

1

COW								SIRE					
Comp num	Name	Identification	Birth Date		Code/Name		Identification						
100	Joann	53425868	06/10/12		Boone		2296354						
GENETIC EVALUATION								GENETIC EVALUATION					
ETA	Milk	%fat	Fat	%prot	Protein	NM\$	Rel	Milk	fat	prot	NM\$	Rel	
ETA	856	.06	48	-.02	21	395	50	ETA	1461	69	53	529	98

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	
2-00	1	20228	3.9	789	3.0	606	300	20228	3.9	789	3.0	606	25689	1002	770	
3-00	2												Project ME	24418	903	732

2

COW								SIRE					
Comp num	Name	Identification	Birth Date		Code/Name		Identification						
103	Sassy	51660440	01/14/12		Heavenly		60122361						
GENETIC EVALUATION								GENETIC EVALUATION					
ETA	Milk	%fat	Fat	%prot	Protein	NM\$	Rel	Milk	fat	prot	NM\$	Rel	
ETA	985	.00	35	.00	29	495	52	ETA	726	38	30	237	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	21918	4.1	904	3.2	690	385	26658	4.1	1093	3.2	852	27837	1141	891	
3-01													Project ME	27314	929	930

3

COW								SIRE					
Comp num	Name	Identification	Birth Date		Code/Name		Identification						
111	Babe	122123999	05/30/12		Onyx		128385690						
GENETIC EVALUATION								GENETIC EVALUATION					
ETA	Milk	%fat	Fat	%prot	Protein	NM\$	Rel	Milk	fat	prot	NM\$	Rel	
ETA	152	.31	84	.11	34	534	53	ETA	-283	46	11	354	96

Summary of Lactations

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2-00	1	23846	3.7	874	3.2	756	398	30676	3.8	1165	3.2	981	30384	1120	969	
3-00	2												Project ME	29357	1174	911

4

COW								SIRE					
Comp num	Name	Identification	Birth Date		Code/Name		Identification						
107	Darcy	52560449	03/28/12		Bryce		127955364						
GENETIC EVALUATION								GENETIC EVALUATION					
ETA	Milk	%fat	Fat	%prot	Protein	NM\$	Rel	Milk	fat	prot	NM\$	Rel	
ETA	2223	-.07	61	-.04	55	398	56	ETA	970	42	28	281	90

Summary of Lactations

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		Milk	%fat	Fat	%prot	Protein	DIM	Milk	%fat	Fat	%prot	Protein	Milk	Fat	Protein	
2-03	1	21988	3.5	770	2.9	637	365	23757	3.6	840	2.9	688	26385	924	764	
3-07	2												Project ME	25870	880	750

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- e 30. What percent of the cows are dry for the preferred 40-70 days?
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This class of bulls is placed 1-4-2-3 with cuts of 2-4-2.

The scenario is:

1. Select for Net Merit Dollars
2. Correct faults of cow which are wide teat placement and poor udder support
3. Would like above 80% reliability (REL)

1 places over 4 for the advantage in teat placement and udder support. 1 and 4 are about equal in Net Merit \$.

4 places over 2 because of the advantage in Net Merit Dollars which is of most importance. Granted that 2 is higher in udder support.

2 places over 3 because of 2's advantage in udder support and 3 has a REL of only 72%.

2015 U of MN Invitational FFA Dairy Judging Contest

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

3 places over 2 being a little higher in NM\$ and also being quite a bit higher for the Projected ME for milk, fat, and protein.

2 places over 1 for being \$100 higher in NM\$ and quite a bit higher for the Projected ME for milk, fat, and protein. 2 also had higher production in 1st lactation.

1 places over 4 because 1 freshened at 2-00 and 3-00 while 4 did not freshen for the second time until the age of 3-07. Granted the 1 has slightly higher milk fat production.