

2017 Fall Invite Dairy Officials

Placing Classes

Class 1 – 4 yr old cows	Placing: 4-3-2-1	Cuts: 6-2-3
Class 2 – 2 yr old cows	Placing: 4-3-2-1	Cuts: 4-1-3
Class 3 – Holstein 3 yr olds	Placing: 4-1-2-3	Cuts: 2-2-5
Class 4 – Holstein 2 yr olds	Placing: 3-2-4-1	Cuts: 3-3-4
Classes 5-6-7 are one unit		
Class 5 – 4 yr olds- Type- 25 points	Placing: 2-4-1-3	Cuts: 2-2-4
Class 6 – Pedigree- 25 points	Placing: 2-4-3-1	Cuts: 2-4-2
Class 7 – Overall based on class 6 & 7	Placing: 2-4-1-3	Cuts: 4-5-1
Class 8 - Holstein 3 yr olds (reasons/ questions)	Placing: 4-1-3-2	Cuts: 2-6-4
Class 9 – Sire selection	Placing: 1-2-4-3	Cuts: 3-6-5

Questions on Class 8 (if not giving reasons)

35 pts max.

1. Which cow is carrying the most body condition? 3, 4
2. Which cow has the highest rear udder attachment? 4
3. Which cow excels in the frame category? 4
4. Which cow is the most open in the shoulders? 1
5. Which cow has the most dairy character? 2, 1
6. Which cow has the best udder? 4
7. Which cow has the worst udder? 2

Fall 2017 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?
- _____ 2. Which dry cow (non-lactating) had the shortest number of days dry to date?
- _____ 3. Which cow calved for the first time at 2 years, seven months of age?
- _____ 4. Which 3rd lactation cow is due to calve in December?
- _____ 5. Which cow has the lowest "Production Index"?
- _____ 6. Which cow has the highest mature equivalent dollar value?
- _____ 7. Which cow has the most days in milk?
- _____ 8. Which cow with more than 300 days in milk has average the highest % fat for her lactation to date?
- _____ 9. Which cow had a really long dry period?
- _____ 10. Which 1st lactation cow has the lowest somatic cell count?

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

- _____ 21. What % of the pregnant cows conceived at first service?
a. 77% b. 65% c. 50% d. 90% e. 44%
- _____ 22. What production / management trait showed the most variation over the last 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. May 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. 60 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. 22 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. 85%

Breed
HO

Type Test
31-DHI-AP

Prev. Test
08-01-2017

Test Date
09-08-2017

Herd Summary



Dry Period Summary

Avg Days	Cows by Days Dry
< 40	> 70
1	28
3%	85%
	12%

Based on 33 Cows

Service or Heat Intervals (Number)

< 18 Days	1
18-24 Days	5
36-48 Days	7
Other	24

Reproduction Summary

Breeding Herd	Cows	Heifers
Animals Served (%)	44	23
Waiting Period (days or mo)	86	87
First Served (<100 days or 15 mo) (%)	67	15
Time to First Services (days or mo)	55	13
Services per Animal	96	16
Open Period (<150 days or 17 mo) (%)	1.7	1.8
Min Calving Interval (months)	32	57
Heat Detection Index (%)	14.0	27.3
Pregnant Animals	Cows	Heifers
Animals	26	18
Conceived at First Service (%)	50	56
Services per Conception	2.1	1.8
Pregnancy Rate (%)	13	18
Open Period (days or mo)	155	18
Calving Interval (months)	14.3	27.1
CI - Standard Deviation (months)		

Management Calving Interval = 14.4 Months

Herd Genetic Profile (Source: CDCB)

Service Sires	Genomic		Group	Animal PTA			Sire PTA				
	Num Bred	%		NMS	% Rk	Num	NMS	% Rank	% AI	NMS	% Rank
Progeny Test			Calves	26	+484	83	96		+707		90
% NMS	30	+809	Yearlings	23	+441	74	100		+689		88
% Rk	31	+645	Lact 1	12	+401	88	100		+638		81
%	50	+654	Lact 2	17	+312	79	100		+400		51
	9	+715	Lact 3+	16	+249	71	100		+334		43
	34	+674	Cows	45	+314	79	100		+467		59

Yearly SCC Summary

Lact	% Infected by DIM		
	< 30	30 - 220	> 220
1	24	4	12
2	35	20	23
3+	38	28	35
All	32	15	22

Changes in SCC Status (Distribution of Cows Sampled)

Annual Fresh vs Dry Off (%)	Current vs Last Test (%)	
	Chronics	Chronics
Cures	3	5
Negatives	10	22
New Infections	68	New Infections
	17	70
		3

Production Averages

Rolling Herd	Quantity				Quality				
	Milk Cows	Fresh Cows	DM	Milk	Raw SCC	LS SCC	Number Infections	Fresh Infections	New Infections
29,371	45	8	189	87	292	3.0	12	3	1
29,156	45	4	207	90	384	3.1	12	1	3
29,038	48	4	202	91	298	2.8	12	2	3
28,905	49	6	187	97	389	3.3	15	1	7
29,014	46	2	191	97	256	2.9	9	2	3
29,149	47	3	186	98	216	2.6	9	1	4
29,029	47	2	177	100	113	2.1	6	1	2
28,728	49	3	171	94	189	2.1	6	1	3
28,463	48	6	160	90	82	1.8	4	1	2
28,287	45	6	158	86	142	2.3	9	2	5
28,145	44	7	164	84	115	2.2	5	2	2
28,099	45	6	194	83	157	2.2	8	1	6
Averages >	47	5	182	91	219	2.5	9	1	3

Data Collection Rating (Milk) = 97.7

Open Disclosure

Record Publication

LACTATION

Prev. Test
08-01-2017

Test Date
09-08-2017

Processed
09-11-2017

Index and	Permanent ID	Sire	Prev Milk	Sample Day Data				Index	Lct #	Age at Calving	Days Dry	Calving Date	Due Date	Lactation to Date						Prod Index	Remarks
				Milk	Fat	Pro	% Fat							% Pro	Inc Over Feed Cost	DIM	Milk	Fat	Pro		
201	HO 73698522	28HO18908	88	96	3.7	3.2	83	11.93	1	2-00	05-05-17	05-17-18	128	10735	3.8	411	3.1	334	5894	98	
202	HO 71616553	14HO08429	92	116	3.6	3.1	54	14.38	3	4-08	08-19-17		22	2144	4.0	86	3.5	76			
203	HO 73698510	28HO14142	80	71	3.7	3.5	22	7.78	1	1-11	10-05-16	11-27-17	340	30416	3.3	1016	3.0	821	5948	102	
204	HO 71616584	1HO10245	80	87	4.1	3.5	152	8.86	2	3-04	10-31-18	01-30-18	314	30091	4.1	1241	3.2	965	5897	103	
205	HO 73698508	20HO100402	100	88	3.7	3.3	38	10.81	1	2-00	10-28-16	02-18-18	317	27751	3.5	972	3.2	880	5883	101	
206	HO 73698520	7HO11351	78	98	4.4	3.1	18	12.81	1	2-03	06-16-17	08-04-17	86	6287	4.7	295	3.1	198	5888	101	
207	HO 71616572	14HO08429	88	83	4.2	4.0	115	8.24	2	3-01	10-19-16	11-27-17	328	28877	4.0	1207	3.6	1068	8108	105	
208	HO 89155098	14HO05880	88	108	3.1	3.2	23	12.78	6	7-02	08-04-17	08-04-17	98	9430	3.8	359	2.9	271	4715	81	V
209	HO 71616580	1HO09527	94	94	4.3	3.5	1131	11.07	3	4-05	09-02-17		8	572	4.5	26	3.7	21			
210	HO 71616543	14HO05839	98	98	3.9	3.1	132	11.55	3	4-08	05-24-17	08-02-17	109	10179	4.1	410	3.1	316	4730	81	
211	HO 71616584	14HO05880	96	83	3.8	3.5	27	9.43	2	2-11	02-14-17		208	19831	3.5	688	3.3	848	5448	94	
212	HO 73698525	28HO18955	74	85	4.2	3.3	71	10.32	1	1-11	07-10-17		62	4542	3.9	178	3.4	153	5853	97	
213	HO 71616581	1HO10218	92	53	3.8	3.7	373	4.78	1	2-08	08-07-16	11-27-17	399	34623	3.8	1281	3.1	1080	5872	97	V
214	HO 71616555	11HO10578	128	90	2.2	2.7	17	9.45	3	4-05	05-28-17		105	11498	3.5	405	2.7	311	4282	73	V
215	HO 71616550	1HO10245	124	112	4.2	3.0	18	14.05	2	3-02	10-11-16	11-27-17	332	37450	3.8	1386	3.1	1153	6712	115	
216	HO 71616574	28HO13685	100	85	4.8	3.3	800	9.77	3	3-11	06-17-17		24	1734	5.4	93	3.7	65	5373	82	X
217	HO 71616577	1HO10218	96	77	5.1	4.1	100	8.94	1	2-05	08-08-17	08-08-17	94	5887	3.9	231	3.1	185	4488	77	
218	HO 71616586	28HO13685	100	74	3.8	3.3	27	9.82	1	2-07	07-12-17		60	4368	4.1	177	3.3	148	5002	88	
219	HO 73698517	7HO10848	66	73	4.2	3.3	325	8.31	2	2-10	08-14-17		27	1987	4.2	84	3.3	88			
220	HO 73698516	1HO11022	74	83	3.8	3.3	27	9.82	1	2-07	07-12-17		60	4368	4.1	177	3.3	148	5002	88	
221	HO 73698508	14HO05434	84	88	3.8	2.9	15	9.93	2	2-10	08-14-17		27	1987	4.2	84	3.3	88			
222	HO 73698512	7HO11351	84	81	4.0	3.4	44	9.57	1	1-10	10-14-16	02-14-18	331	27082	4.1	1115	3.1	848	6088	105	
223	HO 73698505	28HO14422	118	71	6.0	3.8	1483	8.19	2	3-00	09-04-17		6	315	6.3	20	3.8	12			
224	HO 73698500	1HO10848	118	114	3.3	2.9	18	14.28	2	3-02	07-05-17		67	7444	3.9	288	3.0	227	5497	94	
225	HO 73698508	20HO100402	120	137	3.6	3.1	18	18.28	2	2-08	05-08-17	08-08-17	125	15080	3.7	558	2.9	441	7082	121	
226	HO 89155116	7HO10011	64					-4.77	4	5-10	10-11-16	10-17-17	307	31055	4.2	1295	3.1	971	5859	97	
227	HO 71616554	28HO13383	110	104	2.8	3.4	57	11.37	3	4-02	03-03-17	02-25-18	181	22004	3.6	801	3.0	669	5882	97	V
228	HO 89155135	7HO10848	80	79	3.9	3.3	123	8.36	3	3-11	12-03-15	12-09-17	647	87875	3.5	2404	2.9	1872	6048	104	
229	HO 71616573	14HO08429	80	57	4.6	4.1	152	5.35	2	3-00	08-18-16	11-27-17	358	33801	4.1	1378	3.5	1186	6518	112	
230	HO 73698502	28HO14422	104	83	4.2	3.0	800	9.80	2	2-10	05-17-17	08-08-17	116	10813	4.1	448	2.8	308	4988	88	
231	HO 73698511	20HO100402	118	90	3.8	3.3	586	10.88	1	2-01	11-17-16	12-25-17	287	32298	3.8	1229	3.1	986	7280	125	
232	HO 73698519	11HO09847	32	84	4.0	3.0	50	11.74	1	2-08	07-19-17		53	4583	4.3	197	3.1	140			
233	HO 73698515	1HO11022	88	104	4.7	3.7	71	13.78	1	2-01	01-18-17		235	22540	4.4	981	3.4	787	7288	125	
234	HO 73698507	28HO14422	70					-3.98	1	1-10	07-23-16	11-19-17	387	30150	3.9	1177	3.0	808	5856	102	

Remarks Codes: V = Fat < Protein X = Days Dry > 100

Fall 2017 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

- 214 1. Which cow had the lowest % protein on test day?
218 2. Which dry cow (non-lactating) had the shortest number of days dry to date?
220 3. Which cow calved for the first time at 2 years, seven months of age?
228 4. Which 3rd lactation cow is due to calve in December?
214 5. Which cow has the lowest "Production Index"?
231 6. Which cow has the highest mature equivalent dollar value?
228 7. Which cow has the most days in milk?
226 8. Which cow with more than 300 days in milk has average the highest % fat for her lactation to date?
215 9. Which cow had a really long dry period?
206 10. Which 1st lactation cow has the lowest somatic cell count?

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

- c 21. What % of the pregnant cows conceived at first service?
a. 77% b. 65% c. 50% d. 90% e. 44%
- b 22. What production / management trait showed the most variation over the last five months?
a. % protein test b. somatic cell count c. MLM
- c 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
- b 24. Which test month was worst for number of new mastitis infections?
a. January b. May c. June d. October e. August
- c 25. What group of animals was sired by the lowest net merit bulls?
a. 1st lactation b. 2nd lactation c. 3rd+ lactations d. yearlings
- a 26. What is the average days dry for the herd?
a. 60 b. 53 c. 85 d. 188 e. 154
- c 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
- c 28. Over the past year, what best describes the trend in rolling herd average milk production?
a. decreased b. remained the same c. increased
- a 29. At this time, what percent of the milking cows are chronically infected (according to SCC status)?
a. 22 b. 13 c. 7
- e 30. What percent of the cows are dry for the preferred 40-70 days?
a. 13% b. 52% c. 41% d. 68% e. 85%

2017 FFA Dairy Judging Contest

The cows on this pedigree sheet are placed 2-4-3-1 with cuts of 2-4-2.

2 and 4 are very close for Net Merit Dollars (NMS) and production levels. 2 places over 4 because of her advantage in calving interval, having calved every 12 months versus 4 having a 15 month calving interval on average.

4 places over 3 in an easy placing, being higher in NMS and all production records.

3 places over 1 because of slightly higher NMS and higher protein production records. Granted, 1 has higher lb. fat production in the last lactation.

**2017 Fall Invitational FFA
Dairy Judging Contest
Sire Selection Problem**

Situation:

Semen from the following four bulls is being considered for purchase to breed the 2 year-old cow on the left whose ME record is based on 90 days in milk.

The dairy farmer has a 250-cow grade herd that averages 25,000 lbs. of milk. Following criteria in order of importance are:

1. Net Merit Dollars is the main criteria that he selects for.
2. If a cow has serious faults for functional linear traits, the farmer likes to find bulls that will correct those faults.
3. He prefers to use bulls that are good for sire calving ease (average is 8% and a low number is better).
4. He also likes the bulls to have a reliability of at least 85%.

COWS TO BE MATED		BULLS TO CONSIDER			
2 YR OLD RECORD	TRAITS	1	2	3	4
2 Yr. 0 MO-ME					
	REL	97	90	78	90
26804	PTA:Milk	1835	2880	1063	827
3.6	F %	+.08	-.09	-.06	.02
965	Fat	89	80	54	36
3.4	P %	+.00	-.03	.02	-.03
912	Protein	56	79	37	25
	Type	1.95	1.61	.91	1.37
	Somatic Cell Score	2.54	2.87	2.94	2.57
	Productive Life	4.3	3.5	1.7	1.7
	Sire Calving Ease	8	8	17	6
	Net Merit \$	635	642	384	353
LINEAR SCORES					
35	Stature	1.19	.99	1.36	.54
33	Angularity	2.11	1.95	1.5	1.28
30	Strength	2.49	1.08	0.92	1.12
30	Body Depth	2.11	.75	.58	2.58
24	Pelvic Width	2.55	1.87	.48	2.52
30	Pelvic Angle	.81	.23	1.33	1.78
25	Legs-side view	.06	.31	-1.05	.78
06	Foot Angle	3.32	1.24	1.15	.85
25	Fore Udder	1.28	1.96	.29	2.32
33	R Udder Height	1.19	2.72	.98	1.62
32	R Udder Width	1.91	1.64	1.18	1.42
25	Udder Support	2.10	2.61	2.05	1.81
24	Udder Depth	1.64	1.98	1.28	.93
25	Teat Placement	1.25	1.32	1.00	1.40

1-2-4-3 is the official placing with cuts of 3-6-5.

Situation is that the farmer selects for Net Merit, to correct worst faults on cow, and avoids bad calving ease sires and would like a reliability of at least 85%. The cow has one serious fault with a linear of only 6 on foot angle.

1 and 2 go to the top because they are higher in Net Merit than 3 and 4.

1 goes over 2 because 1 of having a foot angle PTA of 3.32 versus 1.24..

2 over 4 because of 2's advantage in Net Merit and foot angle. Granted that 4 is slightly better for calving ease.

4 goes over 3 because of an advantage in calving ease and reliability.