

2018 Dairy Officials

Class 1 Winter Heifers	2-3-1-4	3-3-2
Class 2 Spring calves	4-3-2-1	3-1-1
Class 3 Holstein 3 yr. olds	2-3-4-1	2-4-2
Class 4 Holstein 4 yr. olds	4-3-1-2	3-1-4
Class 5 Holstein 2 yr. olds	1-4-2-3	1-3-4
Classes 6-7-8 are one unit		
Class 6 Aged Cows – 25 pts.	1-2-4-3	2-5-2
Class 7 Pedigree – 25 pts.	1-2-4-3	2-6-2
Class 8 Overall	1-2-4-3	3-7-3
Class 9 Sire Selection	1-2-3-4	3-6-4

Questions:

- 1. Which cow is carrying the most body condition? 3**
- 2. Which cow has the lowest, most narrow rear udder attachment? 3**
- 3. Which cow excels in the frame category? 4**
- 4. Which cow is the most open in the shoulders? 2 & 3**
- 5. Which cow has the most dairy character? 1**
- 6. Which cow has the best udder? 1**
- 7. Which cow looks to be the most mature? 3**

Breed
HO
Type Test
31-DHI-AP



LACTATION

Prev. Test 08-27-2018
Test Date 08-26-2018
Processed 10-01-2018

2018 Fall
Invitational

DHI-312
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Index	Permanent ID	Sire	Prev Mlk	Sample Day Data				Inc Over Feed Cost	Index	Lct #	Age at Calving	Days Dry	Calving Date	Due Date	DIM	Lactation to Date				ME\$	Prod Index	Remarks
				Mlk	Fat	Pro	SCC									Mlk	Fat	Pro	%			
201	7369533	28HO17553	96	102	3.5	3.2	28	12.58	201	1	2-02	01-25-18	Poss PG	244	28119	3.5	917	2.8	724	6287	118	
202	7369529	11HO09647	72	78	4.1	3.5	13	8.92	202	1	2-05	03-08-18		204	15908	4.3	889	3.2	507	5084	95	
203	7369537	28HO17553	74	88	5.3	4.0	41	7.85	203	1	2-00	12-09-17	11-26-18	291	23153	4.8	1058	3.5	799	5879	110	
204	7161653	14HO08429						-4.77	204	3	4-08	08-19-17	10-27-18	372	38084	4.0	1430	3.4	1239	6281	117	
205	7369524	7HO11700	58	71	4.2	3.5	162	7.41	205	1	2-04	5 11-07-17	11-26-18	318	23294	4.3	1005	3.3	769	5018	94	
206	7369510	28HO14142	82	104	4.5	3.2	47	13.29	206	2	3-01	45 11-15-17	12-20-18	315	34039	3.6	1229	3.0	1022	6033	113	
207	7161654	1HO10245	104	108	4.5	3.2	187	13.16	207	3	4-07	64 02-02-18		238	25008	4.2	1038	2.9	732	5712	107	
208	7369509	20HO00402	108	108	3.5	3.2	187	13.16	208	2	3-04	51 02-17-18	Poss PG	221	24900	3.4	844	2.9	728	5858	106	
209	7369542	7HO11314	86	49	5.6	3.0	93	4.50	209	1	2-07	08-13-18		13	484	6.0	29	3.3	18			&
210	7369520	7HO11351	86	108	4.8	3.0	13	13.87	210	2	3-03	50 08-03-18		115	10470	4.3	446	2.8	280	5235	98	
211	6915068	14HO06860	78	114	3.9	3.1	50	13.94	211	7	8-02	05-12-18	04-28-19	137	11000	3.8	414	2.8	310	4421	83	
212	7369539	7HO11314		84	4.8	3.9	35	9.86	212	2	2-09	91 08-18-18		8	511	5.3	27	4.1	21			
213	7161654	14HO05560	74	87	3.6	2.9	29	6.13	213	3	4-05	71 07-24-18		64	4370	3.5	155	2.9	128	3455	85	
214	7369525	28HO18955	118	78	4.9	3.0	29	8.85	214	2	2-11	58 08-30-18	Poss PG	88	8736	4.3	374	3.0	258	5071	95	
215	7369538	28HO17553	92	77	4.3	3.7	373	8.83	215	1	2-03	03-01-18	05-12-19	209	16814	4.4	741	3.2	535	5286	98	
216	7161651	1HO10218	72					-4.35	216	2	4-00	11 11-25-17	11-15-18	284	26662	3.8	959	2.9	774	4663	95	
217	7161650	1HO10245	128	131	3.6	2.8	86	16.54	217	4	5-08	83 08-05-18		52	6304	3.7	235	2.8	176	5030	94	
218	7161677	1HO10218	96	88	4.6	3.9	23	9.99	218	3	4-03	70 02-14-18	Poss PG	224	23980	4.3	1037	3.2	763	5738	107	
219	7369540	28HO17516	74	77	4.3	3.3	17	8.83	219	1	2-01	01-13-18		256	19259	4.2	803	3.1	802	5100	95	Y
220	7369518	1HO11022	100	116	4.1	3.1	13	14.81	220	2	3-07	64 07-17-18		71	7105	3.9	274	3.1	222	5324	99	
221	7369508	14HO06434						-4.35	221	2	2-10	37 08-14-17	10-18-18	371	32988	3.6	1188	3.1	1007	5812	109	
222	7369512	7HO11351	88	86	4.3	3.3	44	8.94	222	2	3-03	68 02-19-18	02-25-18	219	22038	4.0	882	3.0	654	5343	100	
223	7369500	1HO10848	134	118	3.8	3.2	800	14.21	223	3	4-02	75 08-28-18		90	10187	4.2	424	3.0	301	5219	96	
224	7369508	20HO00402	116	127	3.5	2.5	152	15.82	224	3	3-11	91 08-13-18		44	5021	3.6	183	2.7	134	4868	91	
225	7369531	7HO11700	84	86	3.1	3.3	2111	11.41	225	1	2-03	01-17-18		252	25930	3.6	942	2.9	755	5888	108	VY
226	69155135	7HO10848	88	82	3.8	2.9		8.58	226	4	5-11	53 12-08-17	05-24-19	294	29571	3.7	1080	2.7	813	4818	90	C
227	7161673	14HO08429	72					-4.77	227	3	4-02	19 11-27-17	11-07-18	284	28664	4.0	1158	3.4	983	5524	103	
228	7369541	7HO11314	86	88	4.5	3.4	162	10.42	228	1	2-01	03-08-18		202	16432	4.4	719	3.1	517	5840	105	
229	7369511	20HO00402	90	55	4.1	3.6	100	4.73	229	2	3-02	43 12-19-17	12-14-18	281	29020	4.1	1181	3.2	918	5958	111	
230	7369526	7HO10848	80	82	4.1	3.1	13	9.58	230	1	2-02	10-28-17		335	30178	3.8	1147	3.0	903	5716	107	Y
231	7369519	11HO09647		104	4.2	2.9	47	12.88	231	2	3-07	78 08-05-18		21	1813	4.7	85	3.4	61			
232	7369515	1HO11022	114	117	6.1	3.4	81	16.10	232	2	3-07	54 07-07-18		81	8807	4.5	398	3.3	289	6309	118	
233	7369543	28HO17553	82	75	4.0	3.3	44	8.39	233	1	1-11	02-08-18	02-21-19	230	20040	3.9	787	2.8	569	5493	102	
234	7369507	28HO14422	72	86	3.7	3.4	67	9.68	234	2	3-01	98 11-18-17	05-24-18	312	31229	4.0	1250	2.9	891	5711	107	

Remarks Codes: & = New Cow C = Estimated Components V = Fat < Protein Y = Days Open > 250

Fall 2018 FFA Dairy Judging - Team Quiz – Written Exam

- a___ 1. What does it mean if a breed association has a closed herd book?
a. registration is restricted to offspring of animals already registered in the herdbook
b. no more registrations are allowed
c. the breed has become extinct
- a___ 2. Which breed originated and was developed at high altitude in Europe?
a. Brown Swiss b. Holstein c. Angus d. Jersey
- _b___ 3. What disease outbreak in Europe restricted import of cattle into the U.S around 1900?
a. Rabies b. Foot and Mouth Disease c. Tuberculosis d. Pnuemonia
- c___ 4. How many chromosome are in each sperm produced by a bull?
a. 10 b. 20 c. 30 d. 60
- _c___ 5. What term is used the measures the accuracy of a dairy animal's genetic evaluation?
a. accuracy b. repeatablility c. reliability d. precision of estimate
- _c___ 6. For cows born in 2010, which breed produces the fewest pounds of milk and has the lowest productive life?
a. Brown Swiss b. Holstein c. Guernsey d. Jersey
- c___ 7. Which letter does not represent one of the nucleotide bases?
a. A b. T c. X d. C e. G
- a___ 8. Which one of the following is not part of the cow's reproductive tract?
a. prostate b. ovaries c. oviducts d. uterus d. cervix,
- c___ 9. What is a one celled embryo called?
a. follicle b. corpus luteum c. zygote d. gamete e. ovum
- b___ 10. Where is progesterone produced?
a. follicle b. corpus luteum c. pituitary gland d. adrenal gland
- b___ 11. About how long after calving should the dairy producers wait before rebreeding the cow?
a. 30 Days b. 70 days c. 120 days d. 180 days
- d___ 12. What is the percent of cows becoming pregnant that are eligible to become pregnant.?
a. heat detection rate b. Conception rate
c. days open d. Pregnancy rate
- c___ 13. What breed has the genetic recessive "white heifer disease"?
a. Brown Swiss b. Holstein c. Milking Shorthorn d. Jersey
- c___ 14. About how many hours a day does a cow spend chewing their cud?
a. 2 hours b. 4 hours c. 9 hours d. 15 hours
- a___ 15. How many sections are there to the small intestine?
a. 3 b. 4 c. 5 d. 6
- c___ 16. Under what nutrient category do you find starches?
a. protein b. fats c. carbohydrates d. sugars
- a___ 17. When is the best time to feed colostrum to the calf?
a. shortly after birth b. at 3 hours of age c. at 6 hours of age d. at 24 hours of age
- a___ 18. What interferes with vaccines if injected into the calf at two weeks of age?
a. maternal antibodies b. antibiotics c. iron d. vitamin A
- a___ 19. Which disease is the biggest animal welfare concern for cows in freestall barns?
a. lameness b. ring worm c. pneumonia d. scours
- d___ 20. Under what classification of milk does butter come under?
a. Class I b. Class II c. Class III d. Class IV

Fall 2018 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

- 203 1. Which cow had the highest % protein on test day?
205 2. Which dry cow (non-lactating) had the shortest number of days dry to date?
209 3. Which cow calved for the first time at 2 years, seven months of age?
211 4. Which cow is due to calve in April?
201,232 5. Which cow has the highest "Production Index"?
214 6. Which lactating cow had the biggest decrease in lb. milk from last month to this test?
204 7. Which cow has the most days in milk?
225 8. Which cow a protein test that was higher than the fat test?
234 9. Which cow had the longest dry period?
225 10. Which cow has the highest somatic cell count?

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

- b 21. What % of the pregnant cows conceived at first service?
a. 77% b. 64% c. 50% d. 90% e. 44%
- a 22. What is this herds biggest management problem?
a. high SCC b. low fat test c. low first service conception rate
- a 23. What group of animals is bred to the highest genomic Net Merit sires?
a. 1st lactation b. 2nd lactation c. 3rd and later lactations d. yearlings
- c 24. Which test month was worst for number of new mastitis infections?
a. January b. May c. July 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. 65 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
- a 28. Over the past year, what best describes the trend in rolling herd average milk production?
a. decreased b. remained the same c. increased
- b 29. At this time, what percent of the milking cows are chronically infected (according to "Changes in SCC status")?
a. 22 b. 15 c. 7
- d 30. What percent of the cows are dry for the preferred 40-70 days?
a. 13% b. 52% c. 41% d. 65% e. 85%

**2018 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 28,000 lbs. of milk. Net Merit Dollars is the main criteria that he selects for. If a cow has serious faults for functional linear traits, the farmer likes to find bulls that will correct those faults. He prefers to use bulls that are good for sire calving ease (average is 8% and a low number is better). He also likes the bulls to have a reliability of at least 90%.

COWS TO BE MATED		BULLS TO CONSIDER			
2 YR OLD RECORD	TRAITS	1	2	3	4
2 Yr. 0 MO-ME	REL	97	90	82	90
28804	PTA:Milk	1835	2880	1063	827
3.6	F %	+0.08	-.09	-.06	.02
1040	Fat	80	80	54	36
3.4	P %	+0.00	-.03	.02	-.03
980	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	6.3	5.5	2.7	2.7
	Sire Calving Ease	4	8	8	16
	Net Merit \$	735	742	404	410
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
30	Foot Angle	1.32	1.24	1.15	.85
25	Fore Udder	2.28	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
8	Udder Support	2.70	1.61	1.05	-.81
8	Udder Depth	2.64	1.38	1.28	-.93
18	Teat Placement	1.75	1.02	1.00	.40

2018 Fall Sire Selection

Placings 1-2-3-4 cuts 3-6-4

1 places over 2 because of advantages in PTA's for udder support, udder depth, and teat placement. 1 has better calving ease and a higher reliability.

2 places over 3 with the \$338 advantage in Net Merit, higher reliability, and slightly better udder PTA's.

3 places over 4 because 3 is much better on udder scores and has acceptable calving ease. I do grant that 4 has a higher reliability.

2018 Fall FFA Dairy Judging Contest

COW									SIRE				
1	<u>Comp num</u>	<u>Name</u>	<u>Identification</u>	<u>Birth Date</u>	<u>Code/Name</u>	<u>Identification</u>							
	134	Henrietta	1302008376	08/21/08	1HO3707	H 2080263							
	GENETIC EVALUATION						GENETIC EVALUATION						
	Milk	%fat	Fat	%prot	Protein	NMS	Rel	Milk	%fat	%prot	NMS	Rel	
ETA	1050	.10	53	.05	46	410	54	ETA	1326	.00	-.07	307	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	20269	3.7	743	3.2	643	398	26075	3.8	990	3.2	834	25826	952	824
3-05	2	24978	4.1	1013	3.3	813	365	29439	4.1	1209	3.3	967	27976	1146	923
4-06	3	24001	4.0	960	3.1	744	305	24001	4.0	960	3.1	744	26050	1056	850
5-06	4	21701	4.1	889	3.3	716	record in progress 180 days in milk					34101	1398	1125	

COW									SIRE				
2	<u>Comp num</u>	<u>Name</u>	<u>Identification</u>	<u>Birth Date</u>	<u>Code/Name</u>	<u>Identification</u>							
	210	Jane	126905412	04/14/08	1HO4638	H2195662							
	GENETIC EVALUATION						GENETIC EVALUATION						
	Milk	%fat	Fat	%prot	Protein	NMS	Rel	Milk	%fat	%prot	NMS	Rel	
ETA	1035	.02	55	.03	45	410	56	ETA	1651	-.09	-.03	405	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	20493	4.1	845	3.5	710	385	24924	4.1	1022	3.5	871	26027	1067	916
3-07	2	21328	4.0	853	3.1	660	365	24465	4.1	1003	3.1	758	24953	998	774
4-09	3	21918	4.1	904	3.2	690	305	21918	4.1	904	3.2	690	24999	975	800
5-09	4	22941	4.0	937	3.2	730	record in progress 250 days in milk					28536	1141	913	

COW									SIRE				
3	<u>Comp num</u>	<u>Name</u>	<u>Identification</u>	<u>Birth Date</u>	<u>Code/Name</u>	<u>Identification</u>							
	409	Ellen	122145544	05/28/08	1HO4164	H2149849							
	GENETIC EVALUATION						GENETIC EVALUATION						
	Milk	%fat	Fat	%prot	Protein	NMS	Rel	Milk	%fat	%prot	NMS	Rel	
ETA	581	-.05	10	.00	16	230	54	ETA	387	.20	.06	301	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	15605	3.8	600	3.2	506	323	16295	3.9	629	3.3	530	19819	727	634
3-03	2	19843	3.4	668	3.4	666	390	24555	3.4	918	3.4	835	23217	790	791
4-06	3	18359	3.8	706	3.0	595	323	19171	3.9	740	3.0	624	18370	713	575
5-06	4	18785	3.5	658	3.3	620	record in progress 300 days in milk					18885	666	622	

COW									SIRE				
4	<u>me</u>	<u>Identification</u>	<u>Birth Date</u>	<u>Code/Name</u>	<u>Identification</u>								
	19764524	08/10/08	1HO7324	H2174868	89								
	GENETIC EVALUATION						GENETIC EVALUATION						
	Milk	%fat	Fat	%prot	Protein	NMS	Rel	Milk	%fat	%prot	NMS	Rel	
ETA	559	-.04	11	.05	20	230	55	ETA	199	.04	.07	207	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	13431	4.0	533	3.2	546	387	16992	4.0	679	3.2	544	17003	672	537
3-05	2	19645	4.0	745	3.2	588	351	21293	4.0	852	3.2	673	20922	833	588
4-06	3	18345	3.9	715	3.2	584	305	18345	3.9	715	3.2	584	18900	747	608
5-06	4	19586	4.1	803	3.2	636	record in progress 200 days in milk					27004	1109	866	

Pedigree 2018  Fall FFA Dairy Judging Contest

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

The class sorts into two pairs 1 and 2 and then 3 and 4 based on difference in NM\$ and production.

1 over 2 based on 1's large superiority in the estimated 305-Day-ME for the current record (lactation 4). Granted that 2 had a higher 1st lactation but 1 continues to get better with age.

2 over 4 in an easy placing because 2 is higher in NM\$ and also all milk production categories,

4 over 3 because of 4's large superiority in the estimated 305-Day-ME for the current record (lactation 4). Granted that 3 had a higher 1st lactation but 4 continues to get better with age.