

2019 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 has over 1600 lb. fat this lactation?
- _____ 2. Which is the oldest cow in the herd?
- _____ 3. Which lactating 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 cow had the highest SCC?
- _____ 9. Which lactating cow had the biggest increase in milk lbs. from last month to this month (lactating both months)?
- _____ 10. Which second lactation cow was the oldest when she freshened for the second time?
- _____ 11. Which cow had the highest lb. milk for the March test?
- _____ 12. Which cow had the longest dry period?
- _____ 13. Which cow has the highest Mature Equivalent Dollar Value 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 2nd lactation 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 3rd lactation cow, with a due date, had the fewest days open?
- _____ 20. Which cow had the most days to first heat?
- _____ 21. Which cow was most recently fresh?

FLEX Report (use "Index" number)

- _____ 22. Which cow had the highest somatic cell count on the previous test day?
- _____ 23. Which 3rd lactation cow had the most tests over 200,000 somatic cells?
- _____ 24. Which cow has the highest average Log SCC this lactation?
- _____ 25. Which 2nd lactation cow had the biggest decrease in somatic cell count from last month?

2019 FFA Dairy Judging - Team Quiz – Written Exam

- ___ 1. Which best describes most U.S. dairy breed policies relative to registering animals?
a. closed herd book b. open herd book c. need 6 generation pedigrees d. must be 99% pure
- ___ 2. Which breed was formed by crossing Fromont du Leo Brittany and Norman Brindles from Normande?
a. Ayrshire b. Guernsey c. Holstein d. Milking Shorthorn
- ___ 3. Cows of which breed weigh the least?
a. Jersey b. Montbeliarde c. Ayrshire d. Guernsey e. Charolais
- ___ 4. Which breed would have the heaviest muscled steers?
a. Jersey b. Montbeliarde c. Ayrshire d. Guernsey e. Holstein
- ___ 5. Which one of the following is not a linear type traits for Holsteins?
a. udder depth b. stature c. loin strength d. body depth
- ___ 6. What structure holds sperm in the bull?
a. prostate b. cowpers c. seminal vesicles d. epididymis
- ___ 7. What is the cell called after an egg and sperm unite?
a. zygote b. fetus c. ovum d. oocyte e. morula
- ___ 8. Which hormone causes the mature follicle to ovulate?
a. oxytocin b. estrogen c. progesterone d. luteinizing hormone e. GnRH
- ___ 9. Which one of the following would have the smallest effect on pregnancy rate?
a. semen fertility b. heat detection rate c. conception rate d. voluntary waiting period
- ___ 10. Which one of the following is not part of the small intestine?
a. cecum b. ileum c. duodenum d. jejunum
- ___ 11. In which stomach compartment would you find the greatest number of microbes?
a. small intestine b. rumen c. omasum d. abomasum
- ___ 12. Which one of the following is not a carbohydrate?
a. cellulose b. starch c. sugar d. triglyceride
- ___ 13. What percent of the crude protein consumed by the cow is broken down in the rumen to ammonia?
a. 10% b. 25% c. 35% d. 60%
- ___ 14. Which mineral is associated with thyroxin?
a. iron b. iodine c. calcium d. sulfur e. zinc
- ___ 15. What nutrient is required in the largest quantity by dairy cows?
a. water b. protein c. starch d. fiber e. fat
- ___ 16. Which one of the following is considered an energy by-product feed?
a. oats b. corn c. rye d. cotton seed
- ___ 17. What is the recommended protein level for calf starter?
a. 5% b. 12% c. 18% d. 25% e. 40%
- ___ 18. What is the more common name for vitamin B3?
a. choline b. niacin c. ascorbic acid d. propylene
- ___ 19. What is a symptom cryptosporosis?
a. pneumonia b. scours c. lameness d. bloat
- ___ 20. What organism causes Blackleg?
a. bacteria b. virus c. fungi d. protozoa e. algae
- ___ 21. What organism causes IBR?
a. bacteria b. virus c. fungi d. protozoa e. algae

- ___ 22. What method is used to identify calves as they come into a robotic feeder?
a. face recognition b. RFID tag or collar c. By weight d. By color markings
- ___ 23. In which area of the U.S. would you most likely see cows housed in open corrals?
a. Midwest b. Northeast c. Southwest d. Southeast e. Northwest
- ___ 24. Where would you find keratin on a dairy cow?
a. rumen b. cecum c. salivary glands d. streak canal e. nose
- ___ 25. How many alveoli are there per inch of mammary tissue?
a. one b. 50 c. 100 d. 1,000,000
- ___ 26. What gland releases oxytocin?
a. hypothalamus b. ovary c. posterior pituitary d. adrenal
- ___ 27. What ordinance regulates grade A milk and its products?
a. PMO b. FDA c. PETA d. HTST
- ___ 28. What is a recommended vacuum level at the teat-end?
a. 8" b. 12" c. 15" d. 18"
- ___ 29. What type of organism causes most mastitis cases?
a. bacteria b. Virus c. fungi d. protozoa e. algae
- ___ 30. What vitamin is most often added to milk?
a. A b. niacin c. C d. D e. E
- ___ 31. Which product consumes a little less than 30% of the nation's milk supply?
a. fluid milk b. cottage cheese c. cheese d. yogurt
- ___ 32. When did dairy cows first come to the western hemisphere?
a. 1493 b. 1620 c. 1776 d. 1888
- ___ 33. Which vitamin helps maintain normal vision and skin and is also important for bone growth?
a. A b. niacin c. C d. D e. E
- ___ 34. Which one of the following dairy products is a cultured product?
a. cottage cheese b. yogurt c. butter d. ice-cream
- ___ 35. Which one of the following would have the most calories per serving?
a. whole milk b. 2% milk c. nonfat milk d. chocolate milk
- ___ 36. Which was the first dairy breed association organized in the U.S. in 1868?
a. Ayrshire b. Brown Swiss c. Holstein d. Jersey
- ___ 37. What does the Babcock test measure in milk?
a. somatic cells b. fat c. protein d. urea e. bacteria
- ___ 38. Which one of the following was invented first?
a. condensed milk b. sexed semen c. plastic coated milk cartons
d. frozen semen

2019 State FFA Dairy Management Group Activity

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

- ___ 39. What percent of the cows are identified by sire ?
a. 13 b. 75 c. 53 d. 100
- ___ 40. Which group of cows had the highest 305 ME milk?
a. 1st lactation b. 2nd lactation c. 3rd lactation and older
- ___ 41. What percent of cows were dry more than 70 days or dry less than 40 days?
a. 6 b. 10 c. 15 d. 94
- ___ 42. Which age of cows had the highest yearly average mastitis infection rate?
a. 1st lactation b. 2nd lactation c. 3+ lactations
- ___ 43. Relative to lb. protein per cow over the last year, which statement best applies?
a. lb. protein has decreased over the last year by about 50 lb.
b. lb. protein has increased over the last year by about 50 lb.
c. lb. protein has bounced up and down with no trend
- ___ 44. What percent of the cows both dried off with a high SCC and then freshened with the SCC still high?
a. 5 b. 10 c. 19 d. 60
- ___ 45. What percent of the cows that left the herd left because of mastitis?
a. 13 b. 23 c. 38 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) for cows in the breeding herd?
a. 12.4 b. 13.3 c. 14.0 d. 15.8
- ___ 48. What % of the cows that left the herd had died?
a. 2 b. 6 c. 15 d. 22
- ___ 49. Fro first calf heifers, what percent of calvings resulted in calving difficulty scores of 4 an 5's?
a. 1 b. 4 c. 10 d. 35
- ___ 50. In what month did the highest number of cows leave the herd?
a. January b. February c. June d. December

2019 U of MN FFA State Dairy Judging Contest

1

COW									SIRE						
Comp num	Name	Identification		Birth Date		Code/Name		Identification							
534	Jeannett	1302008376		05/21/09		7HO9707		H 2080263							
GENETIC EVALUATION									GENETIC EVALUATION						
		Milk	%fat	Fat	%prot	Protein	NMS	Rel			Milk	%fat	%prot	NMS	Rel
ETA		1650	.10	83	.05	76	609	84	ETA		1226	.00	-.07	557	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	23846	3.7	874	3.2	756	398	30676	3.8	1165	3.2	981	30384	1120	969
3-05	2	32652	4.1	1325	3.3	1064	365	38482	4.1	1580	3.3	1263	36570	1498	1207
4-07	3	34156	4.1	1380	3.3	1094	365	36156	4.1	1460	3.3	1194	34472	1390	1103
5-09	4	Projected ME for record in progress										28837	1181	961	

2

COW									SIRE						
Comp num	Name	Identification		Birth Date		Code/Name		Identification							
110	Anna	126905412		4/14/09		7HO9638		H2195662							
GENETIC EVALUATION									GENETIC EVALUATION						
		Milk	%fat	Fat	%prot	Protein	NMS	Rel			Milk	%fat	%prot	NMS	Rel
ETA		1635	.02	65	.03	55	606	66	ETA		1751	-.09	-.03	535	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
3-03	2	25092	4.0	1004	3.1	777	305	25092	4.0	1004	3.1	777	29357	1174	911
4-03	3	32125	4.0	1285	3.2	1028	335	33731	4.1	1383	3.2	1113	35338	1413	1131
5-04	4	project ME for record in progress										34472	1356	1098	

3

COW									SIRE						
Comp num	Name	Identification		Birth Date		Code/Name		Identification							
509	Marcia	122145544		4/28/09		7HO9164		H2149849							
GENETIC EVALUATION									GENETIC EVALUATION						
		Milk	%fat	Fat	%prot	Protein	NMS	Rel			Milk	%fat	%prot	NMS	Rel
ETA		1181	-.05	30	.00	36	333	60	ETA		187	.20	.06	411	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
3-04	2	23345	3.4	786	3.4	783	390	28888	3.4	1080	3.4	982	27314	929	930
4-06	3	22100	3.5	774	3.3	729	370	25415	3.5	890	3.3	839	24310	851	802
5-09	4	project ME for record in progress										26314	909	900	

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COW									SIRE						
Comp num	Name	Identification		Birth Date		Code/Name		Identification							
99	Jasmine	19764524		2/10/09		29HO1024		H2174868							
GENETIC EVALUATION									GENETIC EVALUATION						
		Milk	%fat	Fat	%prot	Protein	NMS	Rel			Milk	%fat	%prot	NMS	Rel
ETA		859	-.04	21	.05	30	331	55	ETA		99	.04	.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
2-02	1	15801	4.0	627	3.2	642	387	19991	4.0	799	3.2	640	20004	790	632
3-04	2	21935	4.0	877	3.2	692	351	25051	4.0	1002	3.2	792	24614	980	692
4-04	3	28925	4.1	1186	3.2	926	305	28925	4.1	1186	3.2	926	28817	1205	928
5-04	4	project ME for record in progress										27514	934	920	

**2019 State FFA
Dairy Judging Contest
Sire Selection Problem**

Situation:

Semen from the following four bulls is being considered for purchase to breed the 4 year-old cow on the left.

The dairy farmer has a 150-cow grade herd that averages 28,000 lbs. of milk and 1100 lbs. fat. 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 high for PTA fat %. Because some of his cows are too big for his stalls, he prefers smaller cows.

COW TO BE MATED		BULLS TO CONSIDER			
3 YR OLD RECORD	TRAITS	1	2	3	4
3 Yr. 0 MO-ME					
	REL	97	90	80	90
26804	PTA:Milk	1835	1880	1063	727
4.1	F %	+.08	+.09	-.06	.02
1089	Fat	89	80	44	26
3.4	P %	+.00	+.08	.02	-.03
912	Protein	56	79	57	25
	Type	0.95	1.61	2.91	2.37
	Somatic Cell Score	2.54	2.87	2.94	3.07
	Productive Life	4.3	4.5	4.7	0.7
	Sire Calving Ease	8	4	9	7
	Net Merit \$	835	832	429	423
LINEAR SCORES					
20	Stature	1.69	.39	3.36	0.54
23	Angularity	2.11	2.95	1.50	1.28
20	Strength	1.49	.08	2.92	1.12
20	Body Depth	2.11	.75	3.58	1.58
24	Pelvic Width	1.55	1.87	2.48	0.52
30	Pelvic Angle	.81	.23	-.33	.78
25	Legs-side view	.06	- .31	-1.05	-.78
30	Foot Angle	1.32	.74	.15	1.33
17	Fore Udder	1.28	1.96	1.29	1.32
28	R Udder Height	1.19	1.72	1.98	1.62
29	R Udder Width	1.01	1.64	2.18	1.42
10	Udder Support	1.10	2.60	1.05	1.81
10	Udder Depth	1.64	1.98	1.68	1.93
08	Teat Placement	0.95	1.32	1.00	1.40

Peak and Persistence
Peak Milk Lact 1 is Yellow if Peak Ratio (1st/Other) is < .70 (Indicates under performance versus older cows)
Peak Milk Lact 2 is Yellow if Peak Ratio (1st/Other) is > .85 (Indicates under performance versus younger cows)

Yearly SCC Summary
Lact 1 DIM < 30 is Yellow if >= 34% (Ideally should be < 20%)

Changes in SCC Status
Cures >= 20% are Green if at least 8% higher than New Infections
New Infections >= 15% are Yellow if at least 8% higher than Cures
(New Infections Ideally should be < 8%)

Production Averages
MLM is Green if 10+% increase from previous test and is Yellow if 10+% decrease from previous test.
Fresh Infections are Yellow if >= 30% of Fresh Cows (Min. 10 Fresh Cows. Fresh Infections should be < 20%)

Highlighting Legend (Number of Cows in Highlighting must be Greater than 40)

Dry Period Summary	
Avg Days	Cows by Days Dry
60	< 40 40 - 70 > 70
	3 5% 85% 10%

Based on 60 Cows

305 ME		Prod Index		Lact Cows		Peak DIM		MILM	
Milk	\$ Value			Lact	Cows	DIM	Milk	Current	C-L
25,901	4,631	101		1	39	144	80	83	+2.2
27,068	4,718	103		2	32	146	103	86	+2.9
25,935	4,314	94		3+	28	138	108	87	+0.8
26,302	4,579	100		All	99	143	93	85	+2.1

Peak and Persistence
Peak Ratio (1st/Other) is 0.76

Monthly SCC Production Loss is 2058 Lbs with a \$ Loss of 322

Annual Summary				Current Test			
Days in Milk		Lact Cows		Days in Milk		Lact Cows	
< 100	100 - 200	> 200	All Cows	< 100	100 - 200	> 200	All Cows
55	61	86	82	83	85	83	81
89	87	89	87	86	88	84	90
68	63	66	88	87	89	88	80
84	85	90	85	88	88	84	83

Based on 12 Tests

Based on 1039 Samples

Management Level Milk									
Annual Summary				Current Test					
Days in Milk		Lact Cows		Days in Milk		Lact Cows			
< 100	100 - 200	> 200	All Cows	< 100	100 - 200	> 200	All Cows	% Shipped	% Fat
55	61	86	82	83	85	83	81	106	9.73
89	87	89	87	86	88	84	90	101	9.63
68	63	66	88	87	89	88	80	101	9.61
84	85	90	85	88	88	84	83	104	9.63
								101	9.55
								104	9.47
								104	9.56
								102	9.65
								101	9.66
								101	9.67
								106	9.73
								107	9.78
								103	9.78

Based on 80 Cows Sampled

Based on 91 Cows Sampled

Production Averages									
Quantity					Quality				
Milk Cows	DIM	Milk	MLM	Fat	Raw SCC	LS SCC	Number Infections	Fresh Infections	New Infections Number
98	143	86	85	4.1	266	2.5	20	1	10
94	123	84	82	3.9	209	2.4	14	2	6
94	99	85	83	4.0	148	2.5	17	3	4
98	108	83	83	3.8	198	2.8	25	6	8
94	123	78	83	4.1	366	3.2	28	5	2
77	151	78	84	3.9	438	3.4	28	6	5
64	204	75	88	3.8	330	3.5	24	8	4
65	259	73	90	3.8	242	3.2	21	5	5
76	243	76	89	3.6	275	3.4	27	7	7
99	223	72	83	3.7	351	3.5	32	1	8
98	197	76	83	3.7	357	3.5	34	8	11
98	170	82	85	3.8	154	2.7	25	1	8
88	170	79	85	3.8	278	3.1	25	3	7

Based on 1039 Samples

Record Publication Limited Disclosure Data Collection Rating (Milk) = 80.3

Breed XX
Type Test 40-DH-OS

Minnesota
DHIA

Consultant Summary
41-62-7001
ST. PAUL DAIRY

DHI-302
Siring = HERD
FRep = 19RE

Prev. Test 03-06-2019
Test Date 04-03-2019
Days 28
Processed 04-04-2019

Inventory		% Herd	Group	Age	Num	% Identified	
Num	%					Sire	Dem
47	100	39	Calves	0-04	61	100	100
34	82	32	Yearlings	1-05	53	100	100
26	92	28	Lact 1	0-10	114	100	100
15	93		Lact 2	2-00	39	100	100
75	88		Lact 3+	3-00	32	100	100
			Cows	4-07	28	100	100
				3-01	99	100	100

Herd Genetic Profits (Source: CDCB)															
Num Bred	Progeny Test			Service Sires			Group			Animal PTA			Sire PTA		
	%	NM\$	% Rk	%	NM\$	% Rk	Num	NM\$	% Rank	% AI	NM\$	% Rank	% Rank	NM\$	% Rank
47	100	+718	89	89	+0	80	61	+544	80	98	+752	89	89		
34	82	+789	92	18	+378	70	53	+452	70	100	+633	75	75		
26	92	+838	95	8	+359	84	36	+459	84	100	+631	73	73		
15	93	+720	79	7	+359	70	32	+352	70	100	+508	54	54		
75	88	+792	90	12	+372	74	28	+329	65	100	+396	41	41		
							96	+385	74	100	+524	58	58		

Reproduction Summary		Breeding Herd		Cows		Heifers	
Animals Served (%)	88	Animals	88	Animals	53	Animals Served (%)	89
Waiting Period (days or mo)	92	Animals Served (%)	71	Waiting Period (days or mo)	13	First Served (<100 days or 15 mo) (%)	66
First Served (<100 days or 15 mo) (%)	91	Waiting Period (days or mo)	91	First Served (<100 days or 15 mo) (%)	66	Time to First Services (days or mo)	14
Time to First Services (days or mo)	75	Time to First Services (days or mo)	75	Time to First Services (days or mo)	14	Services per Animal	1.7
Services per Animal	1.3	Services per Animal	1.3	Services per Animal	1.7	Open Period (<150 days or 17 mo) (%)	62
Open Period (<150 days or 17 mo) (%)	48	Open Period (<150 days or 17 mo) (%)	48	Open Period (<150 days or 17 mo) (%)	62	Min Calving Interval (months)	24.2
Min Calving Interval (months)	12.4	Min Calving Interval (months)	12.4	Min Calving Interval (months)	24.2	Heart Defection Index (%)	39
Heart Defection Index (%)	39	Heart Defection Index (%)	39	Heart Defection Index (%)	39	Pregnant Animals	
Pregnant Animals		Pregnant Animals		Pregnant Animals		Animals	33
Animals	47	Animals	47	Animals	33	Conceived at First Service (%)	73
Conceived at First Service (%)	79	Conceived at First Service (%)	79	Conceived at First Service (%)	73	Services per Conception	1.4
Services per Conception	1.3	Services per Conception	1.3	Services per Conception	1.4	Pregnancy Rate (%)	18
Pregnancy Rate (%)	18	Pregnancy Rate (%)	18	Pregnancy Rate (%)	18	Open Period (days or mo)	15
Open Period (days or mo)	95	Open Period (days or mo)	95	Open Period (days or mo)	15	Calving Interval (months)	23.9
Calving Interval (months)	12.3	Calving Interval (months)	12.3	Calving Interval (months)	23.9	CI - Standard Deviation (months)	
CI - Standard Deviation (months)		CI - Standard Deviation (months)		CI - Standard Deviation (months)		Management Calving Interval = 11.4 Months	

Cows Entering and Leaving Herd											
Number Entered	Number Left	Lact	Reason for Leaving						% Turnover		
			Daily	Low Milk	Repro	Sick	Mastitis	FT/Lgs		Died	Other
43	9	1	2	3	1	1	2	1	2	9	
	12	2	3	1	1	4	4	4	3	12	
	26	3+	13	2	2	5	2	2	3	26	
43	47	All	18	4	4	11	2	7	5	47	
		Left Herd	38%	9%	23%	4%	15%	11%			

Monthly Herd Turnover													
	History						Planning						
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
Total Cows	100	109	110	107	103	99	95	91	87	83	80	82	85
Cows Milking	74	93	93	94	94	96	95	91	87	69	56	54	56
Heifers Calving	11	11	11	5	4	8	1					5	17
Cows Calving	10	16	7	8	4	1				14	10	18	14
Cows Dried Off	11	6	9	4	1	1				14	24	28	39
Cows Dry	26	16	17	13	9	4	4	4	4	4	3	3	4
Cows Left	3	2	10	8	4	4	4	4	4	4	3	3	4

% Left Non-Dairy by 60 DIM												
Lact	1 Month			3 Months			6 Months			12 Months		
	25	0	4	15	4	9	9	9	9	7	10	
1	25	0	4	15	4	9	9	9	9	7	10	
2	0	0	0	0	0	0	0	0	0	0	0	
3+	0	0	0	0	0	0	0	0	0	0	0	
All	8	8	8	8	8	8	8	8	8	8	8	

Birth Summary				
Dem's Lact Num	Males		Females	
	Alive	Dead	Alive	Dead
1	15	2	26	1
2+	33	1	39	1
Total	48	3	65	1

Calving Difficulty Score						
Calving Difficulty Score	4 & 5		3		2	
	%	4+5	%	3	%	2
1	35	4	10	1	4	1
2	59	1	1	5	5	1
3	94	7	6	5	5	4

Service or Heat Intervals (Number)		
< 18 Days	18-24 Days	36-48 Days
15	18	15

Breed
XX
Type Test
40-DH-OS



LACTATION

41-62-7001
ST. PAUL DAIRY

Prev. Test
03-06-2019

Test Date
04-03-2019

Processed
04-04-2019

DHI-312
Page 1 of 4

X Index	Permanent ID	Sire	Prev Milk	Sample Day Data				Index	Lct #	Age at Calving	Days Dry	Calving Date	Due Date	Location to Date						Prod Index	Remarks	
				Milk	Fat	Pro	SCC							DM	Milk	Fat	Pro	% Fat	% Fat			% Pro
201	XX 51476845	7HO08381	114	108	3.5	2.9	71	201	5	6-08	55	10-30-18	11-30-18	156	17798	3.5	618	2.7	485	4822	100	
202	HO 51476860	28HO13848	132	130	3.3	2.7	14	202	5	6-03	53	02-09-18		54	6657	4.5	300	3.8	257	5338	118	
203	XX 51476864	253MO06008	76	82	4.3	3.8	428	203	5	5-10	51	09-06-18	09-14-18	210	17345	4.1	703	3.4	582	4340	94	
204	HO 51476708	1HO08784	80	74	3.8	3.0	93	204	4	4-11	51	09-06-18	10-31-18	210	18492	4.0	745	2.8	520	4144	90	
205	HO 51476710	7HO11314	100	116	3.6	3.0	15	205	4	5-03	44	01-10-18	Poss PG	84	8350	4.0	336	3.1	261	4536	96	
206	XX 51476721	249SR01804	112	114	3.1	2.8	25	206	4	5-03	80	01-11-18	Poss PG	83	8579	3.9	336	2.8	244	3950	96	
207	XX 51476722	249SR01804	102	104	3.2	2.8	14	207	4	5-03	119	01-23-18	Poss PG	71	9603	3.5	234	2.9	183	3570	77	X
208	HO 51476733	28HO13848	84	72	2.7	2.7	13	208	4	5-01	49	11-27-18	Poss PG	128	10228	3.3	336	2.9	294	3118	88	
209	HO 51476738	7HO08361	78	76	4.1	3.2	57	209	3	4-01	60	12-23-17		467	47716	3.5	1674	2.8	1341	5464	118	D
210	XX 51476742	253MO01528	108	110	3.8	3.0	373	210	4	5-02	41	02-04-19		58	5946	3.8	227	3.2	193	3998	87	
211	HO 51476769	14HO05638	122	120	3.8	2.7	44	211	4	5-00	37	01-24-19		70	7630	3.8	288	2.7	209	4450	96	
212	XX 51476772	14HO08033	112	110	4.3	2.9	14	212	4	4-10	47	12-03-18	Poss PG	122	13639	3.9	539	2.9	388	4654	101	
213	HO 51476793	1HO09527	108	96	3.2	2.9	68	213	3	4-00	63	10-02-18	09-19-18	184	20071	3.4	884	2.8	559	4848	101	
214	HO 51476795	1HO09167	114	114	3.2	2.5	81	214	3	4-04	87	03-09-18		26	2548	3.5	90	2.8	72			
215	XX 51476803	249SR02488	68	74	5.0	3.3	78	215	3	4-04	59	03-21-19		14	829	5.4	45	3.7	31			
216	XX 51476805	253MO03576	68	58	4.0	3.4	400	216	3	3-10	55	09-10-18	09-14-18	208	17342	3.8	657	3.3	584	3935	85	
217	HO 51476807	1HO09167	112	116	3.3	2.8	400	217	3	3-11	48	10-29-18		157	17380	3.7	644	3.0	514	4959	107	D
218	HO 51476810	1HO09167	82	78	3.5	3.2	214	218	3	3-10	65	09-20-18	09-12-18	198	17298	3.5	607	3.0	518	4078	86	
219	HO 51476813	28HO14335	86	86	3.1	3.1	152	219	3	3-10	57	09-12-18	09-12-18	204	18587	3.4	635	3.0	549	4259	92	
220	HO 51476818	1HO09527	82	80	3.9	3.5	57	220	2	3-05	82	04-26-18	10-31-18	343	36474	3.4	1251	3.0	1098	5818	128	
221	HO 51476819	28HO14335		102	4.6	3.0	38	221	3	4-03	59	03-14-18		21	1778	5.1	81	3.5	62			
222	XX 51476823	253MO07588	98	90	4.5	3.7	985	222	3	3-10	70	10-23-18	10-12-18	163	15928	4.2	865	3.2	505	4710	102	
223	XX 51476825	253MO01528	76	70	6.0	3.8	50	223	3	3-10	36	10-24-18	10-12-18	162	12745	4.5	572	3.7	477	4421	96	
224	HO 51476828	1HO09167	100	94	3.7	2.9	35	224	3	3-11	29	12-13-18	11-28-18	112	10582	3.8	397	3.0	317	4174	80	
225	XX 51476829	249SR02488		90	5.7	3.2	31	225	3	4-01	87	03-19-18		16	1168	6.3	73	3.6	42			X
226	HO 51476832	1HO09527		80	6.2	3.0	82	226	3	4-01	148	03-20-18		15	960	6.8	65	3.4	33			
227	XX 51476833	253MO06008	108	108	3.5	3.0	44	227	3	3-10	47	12-18-18	12-07-18	107	11119	3.6	403	3.0	336	4276	93	
228	XX 51476837	249SR02488	54	48	4.1	4.4	71	228	2	2-10	56	02-20-18	11-02-18	408	30032	4.0	1194	3.4	1027	4918	107	V
229	HO 51476840	1HO09167		130	7.0	3.7	7880	229	3	3-10	46	03-10-18	09-12-18	25	2793	7.7	214	4.2	117			B
230	HO 51476845	1HO09527	84	80	3.5	3.5	284	230	2	3-00	57	09-12-18	09-12-18	204	20313	3.5	712	3.2	645	5018	108	
231	HO 51476848	28HO14335	106	110	3.1	3.1	107	231	2	3-03	52	01-05-18	Poss PG	88	8942	3.8	344	3.2	286	4739	103	
232	HO 51476853	1HO09800	52	94	3.8	3.2	123	232	2	3-00	60	10-27-18	10-17-18	158	13968	3.7	524	3.1	438	4580	98	
233	XX 51476856	1HO10085	88	86	4.2	3.4	44	233	2	3-00	58	11-08-18	10-26-18	148	11545	4.7	541	3.3	384	4085	88	
234	HO 51476857	200HO03753	88	86	4.0	3.1	141	234	2	3-01	58	11-15-18	10-31-18	140	12532	4.2	523	3.0	382	4625	88	

Remarks Codes: B = Fat > 6.5% D = Do Not Breed V = Fat < Protein X = Days Dry > 100

DHI Herdcode 41627001	Test Type & Description 40 DHI-OS	Breed XX	Sample Date 4/03/19	Process Date 4/04/19
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ST. PAUL DAIRY

REPRODUCTION



MONTHS	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR
MONTHLY REPRODUCTIVE CYCLES													
Est Num Heats	62	64	59	59	58	49	46	46	40	59	60	60	61
Reported Heats	54	76	48	61	63					93	75	58	71
Num Breedings	17	31	12	13	10					34	27	23	25
Num Conceived	51	56	65	68	73	71	56	42	28	19	31	42	47
MONTHLY CALVING PATTERN													
Cows Calved Last	4		2		1	14	10	16	7	8	4	8	
Heifers Calved Last					1	4	11	11	11	5			
Cows to Calve	1					14							
Heifers to Calve						5							

COWS WITH HIGHEST DAYS OPEN					
BARN NAME	DAYS OPEN	BARN NAME	DAYS OPEN	BARN NAME	DAYS OPEN
2940	180	2722	71		
2922	175	2769	70		
2471	164	2899	62		
2881	149				
2888	125				
2856	116				
2889	111				
2948	72				

Index	COW'S SIRE		DATE CALVED	L AN CUM T M	DAYS TO 1ST HEAT	DAYS OPEN	P%	LAST BREEDING OR HEAT		
	ID	NMS						DATE	SERVICE SIRE	
									ID	NMS
301	7H008361	+377	10/30/18	5	72	114	2	2/21/19	253M003576	+338
302	29H013846	+350	2/09/19	5		54				
303	253M006009	+92	9/06/18	5	91	91	1	12/06/18	7H011946	+749
304	1H008784	+352	9/06/18	4	91	140	2	1/24/19	7H012421	+859
305	7H011314	+587	1/10/19	4	77	77	1	3/28/19	1H010396	+873
306	249SR01804	+696	1/11/19	4	76	76	1	3/28/19	253M003576	+338
307	249SR01804	+696	1/23/19	4		71				
308	29H013846	+350	1/27/18	4	72	72	1	2/07/19	1H010396	+873
309	7H008361	+377	12/23/17	3	95	467				
310	253M001529	+274	2/04/19	4		59				
311	14H005639	+377	1/24/19	4		70				
312	14H006033	+428	2/03/18	4	73	115	2	3/28/19	253M003576	+338
313	1H009527	+423	10/02/18	3	72	72	1	12/13/18	7H011946	+749
314	1H009167	+315	3/09/19	3		26				
315	249SR02488	+570	3/21/19	3		14				
316	253M003576	+338	9/10/18	3	87	87	1	12/06/18	7H012165	+680
317	1H009167	+315	10/29/18	3		157				
318	1H009167	+315	9/20/18	3	77	77	1	12/06/18	29H017553	+973
319	29H014335	+527	9/12/18	3	85	85	1	12/06/18	7H012165	+680
320	1H009527	+423	4/26/18	2	71	273	3	1/24/19	7H012421	+859
321	29H014335	+527	3/14/19	3		21				
322	253M007588	+560	10/23/18	3	72	72	1	1/03/19	249SR07555	+359
323	253M001529	+274	10/24/18	3	71	71	1	1/03/19	1H010396	+873
324	1H009167	+315	12/13/18	3	70	70	1	2/21/19	7H012266	+879
325	249SR02488	+570	3/19/19	3		16				
326	1H009527	+423	3/20/19	3		15				
327	253M006009	+92	12/18/18	3	72	72	1	2/28/19	7H012266	+879
328	249SR02488	+570	2/20/18	2	72	338	5	1/24/19	1H010396	+873
329	1H009167	+315	3/10/19	3		25				
330	1H009527	+423	9/12/18	2	85	85	1	12/06/18	7H011946	+749
331	29H014335	+527	1/05/19	2	75	75	1	3/21/19	7H012266	+879
332	1H009800	+690	10/27/18	2	75	75	1	1/10/19	1H010396	+873
333	1H010085	+428	11/06/18	2	72	72	1	1/17/19	236SR07121	+776
334	200H003753	+450	11/15/18	2	70	70	1	1/24/19	1H010396	+873
335	1H010085	+428	9/14/18	2	83	83	1	12/06/18	7H012165	+680
336	1H009800	+690	2/03/19	2		60				
337	200H003753	+450	11/06/18	2	72	114	2	2/28/19	7H012421	+859
338	253M006009	+92	12/19/18	2	71	71	1	2/28/19	1H010396	+873
339	253M007588	+560	11/12/18	2	73	73	1	1/24/19	249SR07555	+359
340	1H009800	+690	1/11/19	2	76	76	1	3/28/19	1H010396	+873

Index	DATE TO DRY	DUE DATE	DAYS IN MLK	PHO INDEX
302			54	91
303	7/16	9/14	210	14
304	9/01	10/31	210	19
305	11/03	POSS PG	84	17
306	11/05	POSS PG	83	17
307			71	10
308	9/15	POSS PG	128	13
309		DNB	467	12
310			59	18
311			70	14
312	11/05	POSS PG	122	18
313	7/21	9/19	184	18
314			26	
315			14	
316	7/16	9/14	206	16
317		DNB	157	14
318	7/14	9/12	196	19
319	7/14	9/12	204	12
320	9/01	10/31	343	18
321			21	
322	8/13	10/12	163	19
323	8/13	10/12	162	15
324	9/29	11/28	112	10
325			16	
326			15	
327	10/08	12/07	107	12
328	9/03	11/02	408	13
329			25	
330	7/14	9/12	204	15
331	10/27	POSS PG	89	10
332	8/18	10/17	159	17
333	8/27	10/26	149	18
334	9/01	10/31	140	16
335	7/14	9/12	202	17
336			60	17
337	10/06	POSS PG	149	14
338	10/08	12/07	106	15
339	9/03	11/02	143	10
340	11/03	POSS PG	83	13

FLEX REPORT

DHI-370

41-62-7001

ST.PAUL DAIRY

Test Date: 04-03-2019

Processed: 04-04-2019

Page 1 of 3

Test Type and Description	Breed
40 DHI-OS	XX

TestDay	Milk	Actual SCC	Index	% of Tank	DIM	Lact #	Log SCC	Lact Avg	# 200K	# SCC Tests	Prod Index	MUN	Pro %	Total Solids		
Actual	Expected	Prev	Current					This	Last							
108	102	100	71			158	5	2.5	3.6	2.1	2	8	101	7	2.9	11.9
130	140	429	14			54	5	0.2	2.7	4.2	1	2	117	8	2.7	11.8
82	74	15	429	N	2%	210	5	5.1	5.3	3.8	5	7	95	11	3.8	13.8
74	74	13	93			210	4	2.9	3.9	5.0	3	7	90	12	3.0	12.0
116	98	50	15			84	4	0.3	1.4	1.7	3	3	99	8	3.0	12.3
114	104	23	25			83	4	1.0	1.7	2.5		3	88	10	2.8	11.4
104	98	13	14			71	4	0.2	0.3	4.2		3	78	8	2.8	11.7
72	74	13	13			128	4	0.1	0.7	2.1		5	68	11	2.7	11.0
76	73	44	57			467	3	2.2	1.8	1.2	1	16	119	9	3.2	12.9
110	110	141	373	N	2%	59	4	4.9	4.2	1.1	1	2	87	8	3.0	12.8
120	114	86	44			70	4	1.8	2.9	4.5	1	3	97	13	2.7	12.3
110	105	13	14			122	4	0.2	1.0	1.5		4	102	10	2.9	12.8
98	94	100	66			184	3	2.4	2.4	3.1		6	102	12	2.9	11.8
114			81			26	3	2.7	2.7	2.7		1		12	2.5	11.1
74			76			14	3	2.6	2.6	4.3		1		12	3.3	14.2
58	60	746	400	P	1%	206	3	5.0	5.8	5.4	7	7	86	11	3.4	12.5
116	100	187	400	N	2%	157	3	5.0	5.0	4.5	4	6	108	11	2.8	11.9
78	74	107	214	N	1%	196	3	4.1	4.8	3.8	4	7	89	11	3.2	12.3
86	80	115	152		1%	204	3	3.6	3.7	3.6	1	7	93	11	3.1	11.8
80	76	174	57			343	2	2.2	2.2	2.2		12	127	14	3.5	13.1
102			38			21	3	1.6	1.6	2.7		1		8	3.0	13.3
90	89	746	985	P	4%	163	3	6.3	5.6	2.3	5	6	103	7	3.7	13.8
70	70	35	50			162	3	2.0	1.9	1.3		6	97	14	3.8	15.3
94	93	54	35			112	3	1.5	2.8	0.9	1	4	91	7	2.9	12.4
90			31			16	3	1.3	1.3	1.5		1		8	3.2	14.7
80			62			15	3	2.3	2.3	2.8		1		12	3.0	15.0
106	103	62	44			107	3	1.8	3.6	6.8	2	4	93	11	3.0	12.1
48	48	66	71			408	2	2.5	1.7	2.3		14	107	11	4.4	13.8
130			7880	N	46%	25	3	9.3	9.3	2.4	1	1		18	3.7	14.9
80	79	66	264	N	1%	204	2	4.4	2.3	3.0	1	7	110	10	3.5	12.7
110	100	87	107		1%	89	2	3.1	3.3	2.3		3	103	10	3.1	12.0
94	69	100	123		1%	159	2	3.3	3.2	4.2	1	6	100	10	3.2	12.8
66	62	44	44			149	2	1.8	1.6	1.1		5	89	10	3.4	13.4
86	82	152	141		1%	140	2	3.5	3.9	2.1	2	5	99	9	3.1	12.6
86	85	123	162		1%	202	2	3.7	3.5	1.7	1	7	113	12	3.1	12.5
120	120	71	33			60	2	1.4	2.0	2.2		2	100	11	2.5	11.4
76	77	44	174		1%	149	2	3.8	1.8	2.5		5	96	11	3.3	13.7
84	92	44	66			108	2	2.4	3.3	3.2	1	4	96	13	3.5	13.9
90	87	123	35			143	2	1.5	2.2	3.3		5	90	11	2.8	11.9
70	87	6860	162		1%	83	2	3.7	5.0	1.0	1	3	82	6	3.1	13.0
90	93	1393	566	P	2%	121	2	5.5	5.1	2.3	3	4	100	10	2.9	13.1
86	83	87	76			194	2	2.6	2.4	1.6		7	112	13	3.3	13.1
80	61	71	71			192	2	2.5	2.6	2.1		7	89	14	3.4	12.9
108	102	87	44			88	2	1.8	1.8	3.0		3	111	12	2.9	12.7
94	103	303	283	P	1%	100	2	4.5	4.3	4.4	3	4	93	8	3.3	12.3

TF = Too Fresh to Test

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

2019 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)

- 209 1. Which cow has over 1600 lb. fat this lactation?
- 201 2. Which is the oldest cow in the herd?
- 209 3. Which lactating cow has the most days in milk in the current lactation?
- 215 4. Which cow was most recently fresh?
- 208 5. Which cow has the lowest "Production Index"?
- 230, 218, 219 6. Which cow is expected to calve next?
- 228 7. Which cow has lowest fat to protein ratio?
- 229 8. Which cow had the highest SCC?
- 232 9. Which lactating cow had the biggest increase in milk lbs. from last month to this month (lactating both months)?
- 220 10. Which second lactation cow was the oldest when she freshened for the second time ?
- 202 11. Which cow had the highest lb. milk for the March test?
- 226 12. Which cow had the longest dry period?
- 220 13. Which cow has the highest Mature Equivalent Dollar Value Milk?
- 229 14. Which cow contributed the greatest amount of somatic cells to the bulk tank?
- 208 15. Which cow had the lowest fat test for the lactation to date?

Reproduction Report (use "computer number")

- 338 16. Which 2nd lactation cow was sired by the bull with the lowest NMS\$?
- 328 17. Which cow was bred the most times during this lactation?
- 318 18. Which cow is bred to a bull with the highest Net Merit Dollar?
- 324 19. Which 3rd lactation cow, with a due date, had the fewest days open?
- 309 20. Which cow had the most days to first heat?
- 315 21. Which cow was most recently fresh?

FLEX Report (use "Index" number)

- 140 22. Which cow had the highest somatic cell count on the previous test day?
- 122 23. Which 3rd lactation cow had the most tests over 200,000 somatic cells?
- 129 24. Which cow has the highest average Log SCC this lactation?
- 140 25. Which 2nd lactation cow had the biggest decrease in somatic cell count from last month?

2019 FFA Dairy Judging - Team Quiz – Written Exam

- b___ 1. Which best describes most U.S. dairy breed policies relative to registering animals?
a. closed herd book b. open herd book c. need 6 generation pedigrees d. must be 99% pure
- b___ 2. Which breed was formed by crossing Fromont du Leo Brttany and Norman Brindles from Normande?
a. Ayrshire b. Guernsey c. Holstein d. Milking Shorthorn
- a___ 3. Cows of which breed weigh the least?
a. Jersey b. Montbeliarde c. Ayrshire d. Guernsey e. Charolais
- b___ 4. Which breed would have the heaviest muscled steers?
a. Jersey b. Montbeliarde c. Ayrshire d. Guernsey e. Holstein
- c___ 5. Which one of the following is not a linear type traits for Holsteins?
a. udder depth b. stature c. loin strength d. body depth
- d___ 6. What structure holds sperm in the bull?
a. prostate b. cowpers c. seminal vesicles d. epididymis
- a___ 7. What is the cell called after an egg and sperm unite?
a. zygote b. fetus c. ovum d. oocyte e. morula
- d___ 8. Which hormone causes the mature follicle to ovulate?
a. oxytocin b. estrogen c. progesterone d. luteinizing hormone e. GnRH
- d___ 9. Which one of the following would have the smallest effect on pregnancy rate?
a. semen fertility b. heat detection rate c. conception rate d. voluntary waiting period
- a___ 10. Which one of the following is not part of the small intestine?
a. cecum b. ileum c. duodenum d. jejunum
- b___ 11. In which stomach compartment would you find the greatest number of microbes?
a. small intestine b. rumen c. omasum d. abomasum
- d___ 12. Which one of the following is not a carbohydrate?
a. cellulose b. starch c. sugar d. triglyceride
- d___ 13. What percent of the crude protein consumed by the cow is broken down in the rumen to ammonia?
a. 10% b. 25% c. 35% d. 60%
- b___ 14. Which mineral is associated with thyroxin?
a. iron b. iodine c. calcium d. sulfur e. zinc
- a___ 15. What nutrient is required in the largest quantity by dairy cows?
a. water b. protein c. starch d. fiber e. fat
- d___ 16. Which one of the following is considered an energy by-product feed?
a. oats b. corn c. rye d. cotton seed
- c___ 17. What is the recommended protein level for calf starter?
a. 5% b. 12% c. 18% d. 25% e. 40%
- b___ 18. What is the more common name for vitamin B3?
a. choline b. niacin c. ascorbic acid d. propylene
- b___ 19. What is a symptom cryptosporiosis?
a. pneumonia b. scours c. lameness d. bloat
- a___ 20. What organism causes Blackleg?
a. bacteria b. virus c. fungi d. protozoa e. algae
- b___ 21. What organism causes IBR?
a. bacteria b. virus c. fungi d. protozoa e. algae

- b___ 22. What method is used to identify calves as they come into a robotic feeder?
a. face recognition b. RFID tag or collar c. By weight d. By color markings
- c___ 23. In which area of the U.S. would you most likely see cows housed in open corrals?
a. Midwest b. Northeast c. Southwest d. Southeast e. Northwest
- d___ 24. Where would you find keratin on a dairy cow?
a. rumen b. cecum c. salivary glands d. streak canal e. nose
- d___ 25. How many alveoli are there per inch of mammary tissue?
a. one b. 50 c. 100 d. 1,000,000
- c___ 26. What gland releases oxytocin?
a. hypothalamus b. ovary c. posterior pituitary d. adrenal
- a___ 27. What ordinance regulates grade A milk and its products?
a. PMO b. FDA c. PETA d. HTST
- b___ 28. What is a recommended vacuum level at the teat-end?
a. 8" b. 12" c. 15" d. 18"
- a___ 29. What type of organism causes most mastitis cases?
a. bacteria b. Virus c. fungi d. protozoa e. algae
- d___ 30. What vitamin is most often added to milk?
a. A b. niacin c. C d. D e. E
- a___ 31. Which product consumes a little less than 30% of the nation's milk supply?
a. fluid milk b. cottage cheese c. cheese d. yogurt
- a___ 32. When did dairy cows first come to the western hemisphere?
a. 1493 b. 1620 c. 1776 d. 1888
- a___ 33. Which vitamin helps maintain normal vision and skin and is also important for bone growth?
a. A b. niacin c. C d. D e. E
- b___ 34. Which one of the following dairy products is a cultured product?
a. cottage cheese b. yogurt c. butter d. ice-cream
- d___ 35. Which one of the following would have the most calories per serving?
a. whole milk b. 2% milk c. nonfat milk d. chocolate milk
- d___ 36. Which was the first dairy breed association organized in the U.S. in 1868?
a. Ayrshire b. Brown Swiss c. Holstein d. Jersey
- b___ 37. What does the Babcock test measure in milk?
a. somatic cells b. fat c. protein d. urea e. bacteria
- a___ 38. Which one of the following was invented first?
a. condensed milk b. sexed semen c. plastic coated milk cartons
d. frozen semen

2019 State FFA Dairy Management Group Activity

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

- D 39. What percent of the cows are identified by sire ?
a. 13 b. 75 c. 53 d. 100
- B 40. Which group of cows had the highest 305 ME milk?
a. 1st lactation b. 2nd lactation c. 3rd lactation and older
- C 41. What percent of cows were dry more than 70 days or dry less than 40 days?
a. 6 b. 10 c. 15 d. 94
- C 42. Which age of cows had the highest yearly average mastitis infection rate?
a. 1st lactation b. 2nd lactation c. 3+ lactations
- A 43. Relative to lb. protein per cow over the last year, which statement best applies?
a. lb. protein has decreased over the last year by about 50 lb.
b. lb. protein has increased over the last year by about 50 lb.
c. lb. protein has bounced up and down with no trend
- B 44. What percent of the cows both dried off with a high SCC and then freshened with the SCC still high?
a. 5 b. 10 c. 19 d. 60
- B 45. What percent of the cows that left the herd left because of mastitis?
a. 13 b. 23 c. 38 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) for cows in the breeding herd?
a. 12.4 b. 13.3 c. 14.0 d. 15.8
- C 48. What % of the cows that left the herd had died?
a. 2 b. 6 c. 15 d. 22
- C 49. Fro first calf heifers, what percent of calvings resulted in calving difficulty scores of 4 an 5's?
a. 1 b. 4 c. 10 d. 35
- D 50. In what month did the highest number of cows leave the herd?
a. January b. February c. June d. December

2019 U of MN FFA State Dairy Judging Contest

Placing is 2-1-4-3. With cuts of 2-4-2.

2 and 1 are higher in NMS\$ and production than 4 and 3.

2 places over 1 because of the much higher projected ME for the record in progress and 2 has shorter calving intervals on average. Granted 1 has a higher 2nd lactation production record.

1 places over 4 because of 1's higher NMS\$ and higher production records. Granted 4 has shorter calving intervals.

4 places over 3 for the shorter calving intervals and slightly higher projected ME.

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

Situation is that the farmer's main criteria is Net Merit, next important is to correct worst faults on cow. The cow has three linear type faults: udder support, udder depth, and teat placement. He prefers to use bulls that a plus for 5 fat. Lastly, the farmers prefers bulls that sire cows smaller in size.

Upon analyzing the bulls available, 1, 2 are fairly identical for Net Merit. 3 and 4 are inferior for Net Merit.

2 goes over 1 because 2 is higher in the linear traits for udder support, udder depth, and teat placement. 2 will also sire a slightly smaller cow.

1 places over 4 because of a higher NM\$ and higher fat percent. Granted 4 is better on the udder traits needing help.

4 places over 3 because 4 will sire a smaller cow and is just slightly higher on the needed udder traits.