

2022 NC FFA Dairy Evaluation Test

1. According to the latest edition of NC Ag. Statistics, how many dairy cows were in NC as of Jan. 2021?
 - a. 14,000
 - b. 40,000
 - c. 140,000
 - d. 400,000
2. Based on the Dairy Cow Unified Scorecard, which trait is given the most priority points when evaluating the Udder?
 - a. Fore udder
 - b. Teat placement
 - c. Udder balance
 - d. Udder depth
3. Which “major trait” is considered 25% of the Dairy Cow Unified Scorecard?
 - a. Dairy strength
 - b. Frame
 - c. Rear feet and legs
 - d. Udder
4. What dairy breed is described as having “a shade of fawn and white markings throughout clearly defined.”
 - a. Ayrshire
 - b. Brown Swiss
 - c. Guernsey
 - d. Jersey
5. Grade A milk in Class I is:
 - a. Milk used to produce cheese
 - b. Milk eligible for fluid use
 - c. Milk used to produce butter
 - d. Manufacturing milk
6. The best hay for dairy cattle use is:
 - a. Alfalfa
 - b. Coastal Bermudagrass
 - c. Oats
 - d. Red clover

7. The flow of milk from a cow's udder is controlled by the:
 - a. Alveoli
 - b. Gland cistern
 - c. Milk ducts
 - d. Sphincter muscle
8. A condition in which the afterbirth is not discharged with 12-24 hours after calving is known as:
 - a. Displaced abomasum
 - b. Ketosis
 - c. Metritis
 - d. Retained placenta
9. After calving, it is recommended that most cows be bred again in:
 - a. 20-30 days
 - b. 30-40 days
 - c. 40-50 days
 - d. 50-60 days
10. Isolation in a dark place and the use of antibiotics or sulfa drugs are treatments for cows infected with:
 - a. Brucellosis
 - b. Conjunctivitis
 - c. Founder
 - d. Trichomoniasis
11. When compared to hay that is more mature when harvested, early cut hay has a:
 - a. Higher feed value
 - b. Higher dust content
 - c. Lower moisture content
 - d. Lower nutritional value
12. A highly palatable feed that yields more energy per acre than any other forage is:
 - a. Coastal Bermuda silage
 - b. Corn silage
 - c. Small grain silage
 - d. Sorghum silage

13. Dairy Herd Improvement testing requires a DHIA supervisor to visit the farm:
- Once a year
 - Once every three months
 - Once a month
 - Twice a year
14. Milk is manufactured in the udder by:
- Alveoli
 - Milk ducts
 - Sphincter muscles
 - Teats
15. The major cost of the actual milking process is:
- Barns
 - Equipment
 - Labor
 - Medicine
16. A shortage of which component in the blood can lead to milk fever?
- Calcium
 - Iron
 - Magnesium
 - Sugar
17. Which of the following is a non-cash expense in the budget of a dairy farm?
- Calf sales
 - Depreciation
 - Feed purchased
 - Hired labor
18. A majority of milk produced in the United States is marketed through:
- Cooperatives
 - Direct farm sales
 - Ice cream vendors
 - Pet food contracts
19. Which of the following is not a reason for raising dairy replacements?
- Greater control of genetics and pedigrees
 - Income from sale of extra heifers
 - Less chance of bringing disease into the herd
 - More expensive than buying replacements

20. Fluid milk consumption is typically at its lowest during which month?
- a. January
 - b. June
 - c. October
 - d. December

Use the attached Dairy Herd Summary to answer questions 21-25.

21. During which quarter does this herd have the greatest difficulty with conception?
- a. Jan - Mar
 - b. Apr - Jun
 - c. July - Sept
 - d. Oct - Dec

22. What is the actual average somatic cell count for this herd?
- a. 124,000
 - b. 230,000
 - c. 267,000
 - d. 300,000

23. Which group of cows had the highest number of culls due to breeding issues?
- a. 1st Lactation
 - b. 2nd Lactation
 - c. 3rd Lactation
 - d. 4th Lactation

24. For this herd, what is the predetermined time between parturition and the time at which the cow is first eligible for insemination.
- a. 32
 - b. 70
 - c. 72
 - d. 76

25. If you want to compare the average milk production of this herd from one month to the next and remove the effects of days in milk, breed, and number of lactations which vary from test to test, which column of data would you use?
- a. Test Day Averages (Milking Cows) Milk
 - b. 150 Day Milk
 - c. Rolling Yearly Average Herd Milk
 - d. Projected 305 Day Milk Equivalent

HERD SUMMARY**55-99-9999****DHI-202**Test Date
03-24-2020Samples at Lab
03-27-2020Processed
03-27-2020**HENRY SMITH**

Electronic Meters

Breed

HO

Type Test

DHIR-APCS

Assoc.

300

Supv.

261

String

All Strings

Production, Income & Feed Cost Summary

	Daily Average per Cow on Test Day		Rolling Yearly Herd Averages	
Total Cows	106		117.1	
Cows in Milk	Number	%	Number	%
	103	97	105.4	90
Milk Lbs (All Cows)	75.7		24724	
Fat Lbs (All Cows)	3.34		1013	
Fat %	4.4		4.1	
Protein Lbs (All Cows)	2.58		824	
Protein %	3.4		3.3	
Milk Lbs (Milking Cows)	77.9			
	Milking Cows	All Cows		
Silage	Lbs Consumed		Lbs Consumed	%ENE
Other Succulents or Blended Rations	Lbs Consumed		Lbs Consumed	%ENE
Dry Forage	Lbs Consumed		Lbs Consumed	%ENE
Other Feeds	Lbs Consumed		Lbs Consumed	%ENE
Pasture			Days	%ENE
Concentrates	Lbs Consumed		Lbs Consumed	%ENE
Value of Product \$	15.82	15.22	4832	
Cost of Concentrates \$				
Total Feed Cost \$				
Income Over Feed Cost \$				
Feed Cost per CWT Milk \$				
Milk Blend Price	Per CWT	% Fat	% Pro	% ENE
	18.00	3.7	3.0	18.00
			% Fat	% Pro
			3.7	3.0

Miscellaneous Herd Information

	Shipped-Test Day Comparison		Milking Times	Wgh	Spl
	Test Day	Yearly Avg.			
Sum of Test Day Wts	8008	7687	1st 4:30am	Y	N
Reported Avg. Daily Bulk Tank Wts	8083	7641	2nd 3:30pm	Y	Y
% Deviation	-.9	+6	3rd		

Reproductive Summary Of Current Breeding Herd

Total Cows Breeding Herd	Voluntary Waiting Period (VWP)	Days to 1st Service	Cows With No Service Dates or Diag. Open			Cows Bred But Not Diag. Preg.			
			Open VWP to 100 Days	Open Over 100 Days	Number Diag. Open	Days Open at Last Service			
42	70	72				Under VWP	VWP to 100 Days	101 to 130 Days	Over 130 Days
			10	6	Number Cows	6	11	6	9
			24	14	% of Breeding Herd	14	26	14	21

Reproductive Summary Of Total Herd

	Days Open at 1st Service			Avg. Days to 1st Service	Services per Pregnancy		Projected Minimum		Service or Heat Interval		Services for Past 12 Months			
	Number Under VWP	Number VWP to 100	Number Over 100		Preg. Cows	All Cows	Calving Interval	Days Open	Interval Length	Number Intervals	Service Number	Number Services	Conception Rate	Service Sire Ment \$
1st Lact	5	12	2	87	2.1	3.3	13.8	139	< 18	7	1st	139	29	+510
2nd Lact	8	18		70	2.5	4.2	13.6	133	18 - 24	18	2nd	69	25	+505
3+ Lacts	6	17		73	2.9	3.6	13.5	129	36 - 48	44	3rd +	86	26	+509
All Lacts	19	47	2	76	2.6	3.7	13.6	133	Other	32	Total	294	27	+508
% of All 1st Services	28	69	3		Current Actual Calving Interval		12.4				Abortions	This Test	Past Year	
											Actual		1	
											Apparent		8	

Birth Summary

Dam's Lact Num	Offspring Born									
	Males		Females		Calving Difficulty Score					
	Alive	Dead	Alive	Dead	1	2	3	4-5	%4-5	
1	3	1	21	2	17	6	4			
2+	47	4	39	2	68	14	5	1	1	
Total	50	5	60	4	85	20	9	1	1	

Cows To Be Milking, Dry, Calving By Month

	Apr	May	Jun	Jul	Aug	Sep
* Milking	103	95	92	95	92	94
Dry	4	11	13	11	15	13
Cows to Calve	2	1	3	10	7	7
Heifers to Calve	4	1	1	3	3	2

* Assumes 2.5% per month culling rate.

Yearly Reproductive Summary

Test Date	% Heats Obs.	Conception Rate	Preg Rate	Number Services	Number Confirm Preg	Number Calving	Total Preg Cows
Test Dropped	78	31	38	32	6	20	68
4-25-19	69	34	36	44	16	19	62
5-20-19	51	32	23	19	7	9	63
6-16-19	65	32	29	22	8	11	63
7-11-19	76	11	15	19	6	6	58
8-08-19	34	14	8	14	4	6	58
9-12-19	60	17	10	18	4	12	55
10-20-19	80	35	28	31	5	10	47
11-17-19	65	30	23	20	8	6	49
12-30-19	60	23	19	35	11	17	46
1-28-20	58	13		23	6	9	44
2-21-20	63			18	5	9	40
3-24-20	59			28	3	7	36
Averages	62	24	24	24	7	10	52
Totals				291		121	

Remarks:

Cows milked 3 times daily for all or part of this yearly period.

Herd Code	55-99-9999	Test Date	03-24-2020	Breed	HO	String	All Strings
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Identification And Genetics (Genetic Data Source: CDCB)

Stage Of Lactation Profile								Identification And Genetics (Genetic Data Source: CDCB)																																	
Stage of Lactation (Days)								Age Group		Number Animals		Avg. Age (Yr-Mo)		Num. Ident. By		Number ID Changes		No. Animals with Merit \$		Average Merit \$		Herd Merit \$ Option	Genetic Profile of Service Sires																		
																							A.I. Progeny Tested		A.I. Genomic Tested		All Other A.I. Bulls		Non A.I. Bulls												
								0 - 12		53		0-05		53		53		53		+338			+580																		
								13+		50		1-06		50		50		49		+317			+488																		
								Replacements		103		0-11		103		103		102		+327			+535																		
								1st Lact		24		1-11		24		24		23		+259			+400																		
Number Milking	2nd Lact	3	9	10	9	2	33	2nd Lact		34		2-11		34		34		1		33		+253		+333																	
	3+ Lacts	3	8	26	7	2	46	3+ Lacts		48		5-01		47		48		5		46		+237		+380																	
	All Lacts	7	21	41	25	8	102	All Lacts		106		3-08		105		106		6		102		+247		+369																	
Average Daily Milk	1st Lact	63	76	71	66	62	68	1st Lact		100																															
	2nd Lact	100	96	77	56	38	76	2nd Lact		107																															
	3+ Lacts	107	108	83	65	41	84	3+ Lacts		98																															
% Fat & Pro	All Lacts	98	97	80	62	51	78	All Lacts		99																															
	% Identified (Producing Females)									99		100						No. Heifers Age Over 30 Months		3																					
	Avg. Percentile Rank (Net Merit)																										62		85												
Production By Lactation Summary																		Somatic Cell Summary																							
				Number of Cows		Avg. Age (Mo)		Peak Milk		Summit Milk		Proj 305 Day ME				Difference From Herdmates				Avg. Body Wt.		% Cows SCC Score																			
												Milk		Fat		Pro		Milk		Fat		Pro		0,1,2,3		4		5		6		7,8,9									
																								Below 142,000		142,000 283,000		284,000 565,000		566,000 1.13 M		Over 1.13 M									
1st Lact	24		23		82		74		25232		1060		833		+1330		+61		+50		1250		87		9		4														
	2nd Lact	34		35		101		95		25198		1082		854		+1155		+81		+53		1510		70		3		12		6		9									
	3+ Lacts	48		61		126		120		24753		1039		820		+765		+35		+26		1630		67		13		11		2		7									
All Lacts	106		44		109		102		25006		1057		834		+1015		+55		+40		1510		73		9		10		3		6										
Dry Cow Profile																		Yearly Summary Of Cows Entered And Left The Herd																							
Lact.		Number Dry Periods		Avg. Days Dry		Number Dry by Days			Cows Entered		Cows Left		Number of Cows Left the Herd																												
						< 40			40-70			> 70		Num.		%		Num.		%		Dairy		Low Prod		Repro		Mast		Udder		Feet & Legs		Injury Other		Disease		Died		Not Rptd	
1																						9		2		6		1		1				2							

Production By Lactation Summary

Somatic Cell Summary

	Number of Cows	Avg. Age (Mo)	Peak Milk	Summit Milk	Proj 305 Day ME			Difference From Herdmates			Avg. Body Wt.	% Cows SCC Score				
					Milk	Fat	Pro	Milk	Fat	Pro		0,1,2,3	4	5	6	7,8,9
												Below 142,000	142,000 283,000	284,000 565,000	566,000 1.13 M	Over 1.13 M
1st Lact	24	23	82	74	25232	1060	833	+1330	+61	+50	1250	87	9	4		
2nd Lact	34	35	101	95	25198	1082	854	+1155	+81	+53	1510	70	3	12	6	9
3+ Lacts	48	61	126	120	24753	1039	820	+765	+35	+26	1630	67	13	11	2	7
All Lacts	106	44	109	102	25006	1057	834	+1015	+55	+40	1510	73	9	10	3	6
Herd Production Lost From SCC This Test Period																
Milk		2966		Dollars (\$)		534										

KEY

1. B
2. D
3. A
4. C
5. B
6. A
7. D
8. D
9. D
10. B
11. A
12. B
13. C
14. A
15. C
16. A
17. B
18. A
19. D
20. B
21. C
22. C
23. A
24. B
25. B