

Dairy Cattle Career Development Event

Mark the best answer in the proper blank on the Scantron sheet.

25 Objective Questions – 2 pts. each

1. The best source of fat for milk replacer is from _____
 a. soy oil b. artificial fate c. canola oil d. animal fat
2. Washing the udder prior to milking stimulates the release of _____ which induces milk letdown.
 a. adrenaline b. testosterone c. oxytocin d. estrogen
3. Baby calves should be weaned at what age?
 a. 3 days b. 5-7 days c. 4-6 weeks d. 13-15 months
4. This substance forms in the tip of each teat when the cow is dry. It aids in sealing the teats to prevent infection of the udder.
 a. mucus b. keratin c. skin d. opaque
5. In the udder, the milk is formed in tiny sacs known as _____
 a. alveoli b. mammary sacs c. lobules d. udder cisterns
6. bST (bovine Somatropin) has been shown to increase milk production.....
 a. however injections of bST have also been shown to increase bST levels in the milk.
 b. and does not affect the chemical composition of the milk.
 c. and dramatically increase profitability.
 d. improve a cow's ability to breed back.
7. Soybeans are often heat-treated (roasted or extruded) in order to.....
 a. kill any bacteria that might be present on the outside of the beans.
 b. improve digestibility.
 c. provide a source of antibodies for the immune system.
 d. boil off excess fat or oil that is present in the beans.
8. What nutrient supplies the majority of energy in a cow's ration?
 a. minerals b. water c. protein d. carbohydrate
9. Ruminants are unique because of their ability to utilize cheaper sources of roughage as
 a. protein supplements b. nitrogen c. protein d. energy
10. Proteins are composed of carbon, hydrogen, oxygen and _____. Bacteria in the ruminant gut can utilize sources of this chemical element to build protein. This helps explain why ruminants can utilize non-protein feedstuffs, such as urea, which are of low value to monogastrics.
 a. Carbon b. Sulfur c. Nitrogen d. Phosphorus
11. Dystocia refers to ...
 a. herd health b. energy consumption c. calving difficulty d. mastitis
12. Off-flavors in milk can be caused because odors can be absorbed by.....
 a. fat globules in the milk.
 b. teat sphincter muscles.
 c. casein in the milk.
 d. tissue linings of the teat cistern.
13. Which of the following is not an effective means of controlling off-flavors in milk?
 a. provide clean, dry bedding for cows.
 b. control mastitis
 c. provide adequate ventilation in dairy facilities
 d. select sires which are low in this trait

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14. How soon after calving should cows be re-bred?
a. 21-30 days b. 50-70 days c. 305 days d. 365 days
15. Body condition scoring of dairy cattle is best used to...
a. decide which animals to cull.
b. decide when to dry off a cow.
c. decide which cows to breed
d. evaluate the overall nutrition and feed program.
16. The primary reason for high bacteria counts in milk is...
a. cows with mastitis
b. dirty stalls and lots
c. poor cleaning of equipment
d. dirty milker's hands
17. To optimize milk let down and maximize milk production, milker units should be attached _____ after the start of udder and teat stimulation>
a. 0-15 seconds b. 45-60 seconds c. 3 min. d. 5 min.
18. Which part of the body secretes bovine somatotropin?
a. pituitary
b. liver
c. lymph nodes
d. none, it must be injected.
19. White muscle disease of calves is caused by a deficiency of which mineral?
a. calcium b. phosphorus c. selenium d. potassium
20. Heifers should be bred so they calve at what age?
a. 13-15 months b. 21-24 months c. 27-30 months d. 30-33 months
21. Cattle can make their own Vitamin _____ if they are exposed to direct sunlight.
a. A b. B c. C d. D
22. This compartment of the ruminant stomach is called a "true" stomach and functions similarly to a monogastric's stomach.
a. rumen b. reticulum c. abomasum d. omasum
23. Retained placenta (retained fetal membranes) can lead to ...
a. mastitis b. metritis c. hardware disease d. displaced abomasum
24. Which of the following best describes an ovarian cyst?
a. pituitary b. viral c. follicular d. pancreatic
25. What is the first milk secreted after calving called?
a. clostridia b. coliform c. collagen d. colostrum

DHIA Questions – 5 pts. Each

26. What is the current rolling herd average milk production for this herd?
a. 18,286 b. 182.5 c. 21,766 d. 20716
27. During what month was the average SCC score the lowest?
a. January b. February c. April d. June
28. How many cows are expected to calve in September?
a. 19 b. 6 c. 12 d. 18

Dairy Cattle Career Development Event

29. Over the past year, what percent of breeding services were successful the first time?
 a. 29 % b. 34 % c. 37 % d. 39 %
30. Which cow has the highest 305 production record for total pounds of milk?
 a. cow # 14555872 b. cow # 14789616 c. cow # 14789621 d. cow # 14696589

Dairy Management Problems – 5 pts. Each

31. A load of hay consisting of small square bales averaging 60 lbs./bale costs \$2.40 per bale. What is the cost of one ton of this hay?
 a. \$50.00 b. \$80.00 c. \$100.00 d. \$144.00
32. You can purchase corn from four different producers. The following information shows the cost per bushel and the respective protein contents:
- | | | |
|------------------|----------------|---------------|
| Farmer A's Corn: | \$2.00 per bu. | 8 % protein |
| Farmer B's Corn: | \$2.10 per bu. | 9 % protein |
| Farmer C's Corn: | \$1.95 per bu. | 7.5 % protein |
| Farmer D's Corn: | \$1.75 per bu. | 7 % protein |
- If protein is your most expensive nutritional input, which corn is a better value?
 a. Farmer A's Corn b. Farmer B's Corn c. Farmer C's Corn d. Farmer D's Corn
33. A 1400 pound cow is fed a total mixed ration that is 35 % moisture. Assuming she can physically consume 3.5 % of her body weight in dry matter, how much of this ration can she consume daily?
 a. 17.15 lbs. b. 31.85 lbs. c. 75.38 lbs. d. 490 lbs.
34. You grind a 14 % protein ration by grinding 7% protein corn and 44 % protein soybean meal. Assuming that corn is \$2.00 per bushel and SBM is \$150 per ton, what is the cost per ton of this ration?
 a. \$75.70 b. \$116.30 c. \$95.35 d. \$86.30
35. How much additional income would be generated for a producer selling 150,000 lbs. of milk if they decrease their average SCC from 400,000 SCC to 200,000 SCC?
Assume an adjustment of \$0.01 per cwt. for every 10,000 SCC below 400,000.
 a. \$3 b. \$30 c. \$300 d. \$3000

Sire Evaluation Questions – 5 pts. Each

36. If a herd owner's primary selection objective was to increase pounds of protein produced then the first choice of sire service would be:
 a. Hol-Steins Be Dennis
 b. 250 Swind Gimmick-ET
 c. 250 Gibbon
 d. Green Aero
37. If herd owners are primarily interested in increasing pounds of milk produced then their first choice of service sire would be:
 a. Hol-Steins Be Dennis
 b. Dixie-Lee Leadman Sid-ET
 c. Markwell Twomar-ET
 d. 250 Fatal
38. Which sire has the greatest number of daughters?
 a. Long-Haven Sambo-ET
 b. Del Santo Corsaro
 c. Markwell Twomar-ET
 d. Rothrock Lennon-ET

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39. Daughters of which sire would be expected to generate the most income?
- Hol-Steins Be Dennis
 - Dixie-Lee Leadman Sid-EI
 - Markwell Twomar-ET
 - 250 Fatal
40. Which bull would be the least likely to reduce calving difficulties in heifers?
- Long Haven Sambo-ET
 - Startmore Rudolph-ET
 - 528 Bernard
 - Markwell Twomar-ET

Pedigree Questions – 5 pts. Each

If a herd owners primary selection objective was to increase pounds of protein produced then the first choice of service sire would be:

41. Who is the maternal grandsire of Ames Berretta Sparkle?
- Mason Boomer Sooner Berretta
 - Soldierboy Boomer Sooner of CJF
 - Molly Brook Brass Major
 - Ames Silver Saint Sparkle
42. What is Ames Dunker Della's maternal granddam's greatest one-time production record for pounds of milk produced?
- 17,850
 - 16,750
 - 10,660
 - 1610 M
43. Which heifer has the dam with the highest one-time production record for pounds of milk produced?
- a 1 b. 2 c. 3 d 4
44. What breed of cattle are these four heifers?
- Guernsey
 - Jersey
 - Holstein
 - Brown Swiss
45. Which of the four sires represented on the pedigrees would probably generate the greatest herd improvement if you were selling milk on component pricing to a cheese processing plant.
- sire of heifer #1
 - sire of heifer #2
 - sire of heifer #3
 - sire of heifer #4

HERD SUMMARY DHI-202

HERD CODE A		DATE TESTED	
ST.	CO.	MO.	DAY
42	85	8	4
DHIRAPCS ALL STRINGS			

UNIVERSITY DAIRY FARM
123 KILDEE HALL
AMES IA 50011

REPRODUCTIVE SUMMARY OF CURRENT BREEDING

TOTAL COWS IN BREEDING HERE	51
VOLUNTARY WAITING PERIOD (WVP)	50
NUMBER COWS	15
% OF BREEDING HERD	29

COWS WITH NO SERVICE DATES OR DIAO. OPEN	OPEN OVER 100 DAYS	NUMBER DIAO. OPEN
4	15	

COWS BRED BUT NOT DIAG. PREG.	11	4	10
22	8	31	

DAYS TO 1ST SERVICE	79
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PRODUCTION, INCOME, & FEED COST SUMMARY

DESCRIPTION	DAILY AVERAGE PER COW ON TEST DAY	HOLLING YEARLY HERD AVERAGES
TOTAL COWS	195	182.5
COWS IN MILK	160	160.6
MILK LBS. (ALL COWS)	44.2	18,286
FAT LBS. (ALL COWS)	1.54	740
FAT PERCENT	3.5	4.0
PROTEIN LBS. (ALL COWS)	1.39	598
PROTEIN PERCENT	3.2	3.3
MILK LBS. (MILKING COWS)	54.4	
LBS. CONSUMED		
SLRAGE		
OTHER SUPPLEMENTS OR BLENDED RATIONS		
DRY FORAGE		
OTHER FEEDS		
PASTURE		
CONCENTRATES		
VALUE OF PRODUCT	6.77	2,937
FEED COST		
INCOME OVER FEED COST		
PER CWT	12.85	3.7
MILK BLEND PRICE	3.2	15.91

MISCELLANEOUS HERD INFORMATION

SHIPPED-TEST DAY COMPARISON	8526	9082
SUM OF TEST DAY WTS. LBS.	7680	8669
REPORTED AV. DAILY BULK TANK WTS. LBS.		
% DEVIATION	+11.0	+4.8

REPRODUCTIVE SUMMARY OF TOTAL HERD

SERVICES FOR PAST 12 MONTHS	SERVICE NUMBER	% SUCCESSFUL SERVICE	SERVICE PERCENT	SERVICES OR HEAT INTERVALS	
				INTERVAL LENGTH	NUMBER INTERVALS
1ST	174	39	+243		
2ND	107	37	+244		
3RD+	167	29	+329		
TOTAL	459	34	+302		
ABORTIONS					
ACTUAL					
APPARENT					13

SERVICES PER PREGNANCY	ALL COWS	PROJECTED MINIMUM	
		AVG. DAYS TO 1ST SERVICE	ALL COWS
2.0	2.4	13.2	122
2.3	3.0	13.2	121
2.2	2.8	13.6	134
2.2	2.7	13.3	125
			13.0

YEARLY REPRODUCTIVE SUMMARY

DATE OF TEST	% HEATS OBS.	NUMBER SERVICES	% SUCCESSFUL	NUMBER CONFIRMED	NUMBER CALVING	TOTAL PREGNANT COWS
8-27-98	49	34	18	9	30	70
10-05-98	72	79	22	3	25	55
11-05-98	69	55	44	18	11	63
12-10-98	56	51	33	27	16	80
1-05-99	51	33	52	14	8	90
2-03-99	57	37	38	21	8	102
3-12-99	47	36	33	20	19	107
4-07-99	47	22	41	9	19	103
5-06-99	63	31	45	12	6	112
6-09-99	57	35	43	17	15	120
7-07-99	57	27	43	8	14	115
8-04-99	30	11	10	10	34	103
AVERAGES	55	38	34	14	17	93
TOTALS		451			205	

BIRTH SUMMARY

DAM'S LACT NUM.	MALES		FEMALES		CALVING DIFFICULTY SCORE					
	ALIVE	DEAD	ALIVE	DEAD	1	2	3	4	5	4+5
1	40		39		32	14	13	5	10	20
2+	62		59		84	18	7	1	5	5
TOTAL	102		98		116	32	20	6	15	11

COWS TO BE MILKING, DRY, CALVING, BY MONTH

MONTH	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR
* MILKING	174	181	184	184	189	191	190	212
DRY	32	22	21	26	27	30	29	11
COWS TO CALVE TO CALVE	19	11	12	12	11	10	18	18
HEIFERS TO CALVE	6	3	8	9	12	9	4	14

* ASSUMES 3.0% PER MONTH CULLING RATE.

REMARKS:

MILKING TIMES		
1ST ON	2ND	3RD
4:00 PM	4:40 AM	

HERDCODE 42-85-0273 DATE TESTED 8-04-99

STAGE OF LACTATION PROFILE

STAGE OF LACTATION (DAYS)	300		300		300	
	THRU	THRU	THRU	THRU	THRU	THRU
1ST LACT	13	7	18	13	10	61
2ND LACT	13	9	14	8	8	52
3+ LACTS	12	5	10	11	9	47
ALL LACTS	38	21	42	32	27	160

PRODUCTION BY LACTATION SUMMARY

AGE GROUP		NUMBER ANIMALS		AVG. AGE YR-MO		NUM. IDENTIFIED BY DAM		NUMBER WITH CHANGES		AVERAGE PTAS / PAB		SIRE	
0-12	13+	107	93	0-06	1-07	102	92	106	93	+118	+158	106	93
1ST LACT	2ND LACT	66	66	3-01	5-03	66	66	65	65	+98	+130	65	65
3+ LACTS	ALL LACTS	195	195	3-04	5-03	195	195	58	58	+86	+100	58	58
% IDENTIFIED (PRODUCING FEMALES)		100	100			100	100			+95	+127		

PRODUCTION BY LACTATION SUMMARY (CONTINUED)

AVERAGE AGE MONTHS	NUMBER OF COWS	SUMMIT MILK		PROJ ME 305 DAY		DIFFERENCE FROM HERDMATES		BODY WEIGHT		% COWS SCC SCORE			
		FAT	MILK	FAT	PROTEIN	MILK	FAT	PROTEIN	FAT	MILK	4	5	6
1ST LACT	71	24	65	21020	841	+187	-37	71	1210	43	25	21	3
2ND LACT	66	37	80	21323	848	+1558	+45	66	1230	51	13	13	8
3+ LACTS	58	63	87	20804	826	+52	+7	58	1380	32	15	13	20
ALL LACTATIONS	195	40	76	21059	661	+578	+2	195	1270	43	18	16	9

SCC ACT

DATE OF TEST	DAYS IN TEST PERIOD	NUMBER OF COWS IN HERD ON TEST DAY	TEST DAY AVERAGES (MILKING COWS)		STANDARDIZED 150 DAY MILK
			DAYS IN MILK	MILK	
8-27-98	34	192	141	55.9	58.7
10-05-98	39	184	149	60.6	63.8
11-05-98	31	179	159	60.3	63.4
12-10-98	35	178	163	62.1	65.4
1-05-99	26	179	172	59.8	63.6
2-03-99	29	176	186	55.5	60.0
3-12-99	37	175	195	57.0	61.9
4-07-99	26	182	194	56.5	61.8
5-06-99	29	180	202	54.7	60.4
6-09-99	34	183	197	55.4	62.4
7-07-99	28	185	194	56.1	65.9
8-04-99	28	195	165	54.4	62.2

WEIGHTED SCC (NEAREST 1,000)

31	182	176	57.4	62.5
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GENETIC PROFILE OF SERVICE Sires

HERD PTA \$ OPTION		GENETIC PROFILE OF SERVICE Sires		ALL OTHER Sires	
PROVEN ALL Sires	YOUNG Sires	PROVEN ALL Sires	YOUNG Sires	PROVEN ALL Sires	YOUNG Sires
85	12	85	12	85	12
35	9	35	9	35	9
+186	+182	+186	+182	+186	+182
79		79		79	

YEARLY PRODUCTION AND MASTITIS SUMMARY

TEST PERIOD	PERIOD	% IN MILK		TEST DAY AVERAGES (ALL COWS)		TEST PERIOD AV. MILK LBS. ADDED
		MILK	FAT	MILK	FAT	
8-27-98	98	85	47.7	4.0	3.1	900
10-05-98	108	92	55.4	4.2	3.3	872
11-05-98	99	92	55.2	4.1	3.3	882
12-10-98	102	92	56.8	4.0	3.3	858
1-05-99	95	89	53.1	4.4	3.3	852
2-03-99	93	88	48.5	4.1	3.3	838
3-12-99	100	93	52.8	4.3	3.3	815
4-07-99	99	93	52.3	4.0	3.1	801
5-06-99	95	89	48.7	4.0	3.3	786
6-09-99	96	79	43.5	3.7	3.2	764
7-07-99	99	78	43.7	3.7	3.2	752
8-04-99	94	82	44.2	3.5	3.2	740

AVERAGES

98	88	4.0	3.2	54	16	366
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YEARLY SUMMARY OF COWS ENTERED AND LEFT THE HERD

DATE OF TEST	DAYS IN TEST PERIOD	COWS ENTERED		COWS LEFT		DIED	DIS-EASE	INJURY OR OTHER	FEET & LEGS	MAST.	REPO.	LOW PROD.	DAIRY	AVG. SCC	WGT. AV. ACTUAL	NUMBER LEFT	
		NUM.	%	NUM.	%												
8-27-98	34	77	42	20	11												
10-05-98	39			19	10												
11-05-98	31			27	15												
12-10-98	35			77	42												
1-05-99	26																
2-03-99	29																
3-12-99	37																
4-07-99	26																
5-06-99	29																
6-09-99	34																
7-07-99	28																
8-04-99	28																

SCC SCORE > 2.5

2	5	16
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IDENTIFICATION AND GENETIC SUMMARY

AGE GROUP	NUMBER ANIMALS	NUM. IDENTIFIED BY DAM	NUMBER WITH CHANGES	AVERAGE PTAS / PAB	SIRE
0-12	107	102	106	+118	106
13+	93	92	93	+121	93
REPLACE-MENTS	200	194	199	+118	199
1ST LACT	71	71	71	+106	71
2ND LACT	66	66	66	+98	66
3+ LACTS	58	58	58	+86	58
ALL LACTS	195	195	195	+95	195
% IDENTIFIED (PRODUCING FEMALES)	100	100			

SCC PROFILE

NUMBER OF COWS	AVG. AGE MONTHS	NUMBER DRY PERIODS	DAYS DRY	NUMBER OF COWS ENTERED	NUMBER OF COWS LEFT	NUM. ENTERED	NUM. LEFT	% ENTERED	% LEFT
71	24	66	57	77	42	77	42	36	36
66	37	58	63						
58	63	124	60						

GENETIC PROFILE OF SERVICE Sires

PROVEN ALL Sires	YOUNG Sires	ALL OTHER Sires
85	12	3
35	9	8
+186	+182	+182
79		9

SCC ACT

DATE OF TEST	DAYS IN TEST PERIOD	NUMBER OF COWS IN HERD ON TEST DAY	TEST DAY AVERAGES (MILKING COWS)	STANDARDIZED 150 DAY MILK	
8-27-98	34	192	141	55.9	58.7
10-05-98	39	184	149	60.6	63.8
11-05-98	31	179	159	60.3	63.4
12-10-98	35	178	163	62.1	65.4
1-05-99	26	179	172	59.8	63.6
2-03-99	29	176	186	55.5	60.0
3-12-99	37	175	195	57.0	61.9
4-07-99	26	182	194	56.5	61.8
5-06-99	29	180	202	54.7	60.4
6-09-99	34	183	197	55.4	62.4
7-07-99	28	185	194	56.1	65.9
8-04-99	28	195	165	54.4	62.2

AVERAGES

98	88	4.0	3.2	54	16	366
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LA-

SOMATIC CELL COUNT PROFILE DHI-520

IA-99

11/96

HERDCODE
42850273

UNIVERSITY DAIRY FARM

SCC OPTION SCORE/ACTUAL
ACTUAL (NEAREST 1000)

DATE OF TEST
08/04/99

PAGE 1

SCC SCORE TO ACTUAL CONVERSION CHART

SCC	SCC (1000)	ACTUAL
0-12	1	1-12
13-25	2	13-25
26-50	3	26-50
51-100	4	51-100
101-200	5	101-200
201-400	6	201-400
401-800	7	401-800
801-1600	8	801-1600
1601-3200	9	1601-3200
3201-6400	10	3201-6400
6401-12800	11	6401-12800
12801-25600	12	12801-25600

↓ SORTED BY % OF BULK TANK SCC

HERD AVG. SCC COUNT
536

BARN NAME OR COW INDEX	TEST DAY MILK		SOMATIC CELL COUNT					MASTITIS INFECT #	% BULK TANK SCC	AV. SCC W/ THIS COW & COWS ABOVE THE COW	LACT. AVG. SCC SCORE	#SCC TESTS THIS LACT.	#TESTS OVER 3.9 SCC SCORE	DAYS IN MILK	DUE DATE	LACT NO.	
	PREVIOUS	CURRENT	TEST DATE	TEST DATE	TEST DATE	TEST DATE	TEST DATE										THIS TEST
			03-12	04-07	05-06	06-09	07-07										
1607	80	74			54	50	857	7352	CHR	11	474	4.9	4	2	117		1
1334	57	41	230	2111	4223	6860	650	6860	CHR	5	443	7.3	6	6	183	1-19-00	3
9988								6400	NEW	5	443	9.0	1	1	0		7
1332	33	32	1300	1213	1393	1715	1300	6400	CHR	4	419	7.1	6	6	302	12-09-99	3
1553		56						3940	NEW	4	394	8.3	1	1	18		2
1473	62	61	1715	606	746	919	1213	3200	CHR	4	373	6.2	6	6	239	4-24-00	2
1597	68	72	1056	303	650	283	2986	2785	CHR	4	351	5.8	6	6	254	3-03-00	1
1661		58						2599	NEW	3	334	7.7	1	1	23		1
1493	110	79					2111	2425	CHR	3	313	7.5	2	2	58		2
1462	83	67		264	606	400	985	2263	CHR	3	296	5.8	5	5	128		2
1570								5199	NEW	2	296	8.7	1	1	0		2
1356	104	55	14	22	606	857	400	1970	CHR	2	284	4.2	6	4	174	1-18-00	3
1513	80	87					3430	1213	CHR	2	273	7.4	2	2	41		2
1501		99					2111	1056	CHR	2	263	6.9	2	2	34		2
1504	18	16	492	2599	4851	4223	5572	4526	CHR	1	254	6.1	6	6	486	8-30-99	1
1324	25	22	1970	857	857	429	3676	2425	CHR	1	247	7.1	6	6	299	11-23-99	3
1328		61						1493	NEW	1	237	6.9	1	1	9		4
1427		47						1393	NEW	1	230	6.8	1	1	19		3
1572	51	39	27	29	47	33	230	1300	CHR	1	224	2.7	6	2	286	12-10-99	
1225	52	44	93	62	4851	246	187	1213	CHR	1	218	4.0	6	3	391		
1400	48	45	800	566	696	1300	1131	1213	CHR	1	212	6.9	6	6	393		2
1388	78	55	132	50	100	29	264	1131	CHR	1	204	3.4	6	2	167	2-01-00	3
1569		61						1131	NEW	1	196	6.5	1	1	18		2
9911	58	49	400	283	857	985	696	1056	CHR	1	190	5.2	6	6	278	11-09-99	7
1221	80	60	400	919	2425	1493	919	985	CHR	1	184	5.4	6	6	320	4-02-00	4
1342	61	67	246	187	283	373	857	919	CHR	1	176	4.4	6	5	245		3
1048	45	19	460	325	460	13	650	985	CHR	0	174	4.5	6	5	415	10-09-99	5
1283								985	NEW	0	174	6.3	1	1	0		4
1292	29	36	57	13	174	696	857	985	CHR	0	170	4.0	6	3	183	2-17-00	4
1434	28	22	1715	606	696	606	857	800	CHR	0	168	6.4	6	6	379	12-19-99	2
9921	37	29	746	264	528	264	2425	800	CHR	0	165	5.7	6	6	335	12-31-99	7
1045	63	50	5972	2599	2986	429	325	746	CHR	0	161	6.9	6	6	264	11-09-99	6
1675								746	NEW	0	161	5.9	1	1	0		1
1289		36						696	NEW	0	158	5.8	1	1	16		4
1555		66						650	NEW	0	153	5.7	1	1	13		2
1449	52	33	246	746	566	303	400	606	CHR	0	151	4.8	6	6	343	10-23-99	2
1563	45	40	174	325	115	123	566	566	CHR	0	148	4.0	6	3	373	10-28-99	1
1234	56	51	857	1838	606	325	429	528	CHR	0	145	5.7	6	6	352	3-13-00	4
1505	36	29	132	38	71	44	41	528	NEW	0	143	1.8	6	1	440	11-28-99	1
1535	17	23	71	187	246	152	1838	528	CHR	0	142	3.5	6	3	378	10-12-99	1
1575	51	52	174	1300	303	2111	2425	528	CHR	0	139	5.7	6	5	253	12-01-99	
1632	70	67				174	214	528	CHR	0	135	4.4	3	2	91		1
1657								528	NEW	0	135	5.4	1	1	0		1
1404		61						492	NEW	0	131	5.3	1	1	18		3
1549								492	NEW	0	131	5.3	1	1	0		2

INTERBULL/USDA GENETIC EVALUATIONS

NAAB CODE	SIRE NAME	%RHA	PREDICTED TRANSMITTING ABILITIES										SAMPLING INFO.			BREED ASSOC TYPE DATA		NAAB C.E.				
			NM \$	RK	MILK LBS	FAT %	FAT LBS	PRO LBS	PRO %	YD R	MF \$	MFP \$	SCS R	PL R	HRDS	NO. DAUS	PTAT R	TPI ^M DB R	%	DB R		
97HO52	HOL-STIENS BE DENNIS.....*TL	96.1	228	97	2291	82	-0.01	79	0.03	82	283	295	3.25	41	96	102	M	0.91	58	1477		
2200	DIXIE-LEE LEADMAN SID-ET.....*TL	100	208	94	2791	53	0.21	79	-0.04	84	308	287	3.25	41	100	107	M	0.54	60	1378		
180HO9606	HONDO AERO-ET.....*TL	100	199	92	1598	77	0.08	73	0.10	82	213	257	3.25	18	98	103	M	0.99	59	1468		
97HO34	528 DELTA LUXEMBURG.....*TL	100	195	90	1883	64	-0.02	74	0.07	85	230	258	3.25	18	158	185	M	0.85	62	1388		
2139	250 W-M-DRW NB ELMSPRING-ET.....	100	193	90	2553	59	-0.15	82	0.01	83	290	290	3.18	36	106	115	M	-0.66	59	1277		
220HO9602	BEACHLAWN GELPRO TOBEY-ET.....*TL	100	192	89	2292	57	-0.12	72	0.00	84	263	261	3.34	41	129	140	M	1.54	62	1442		
199HO2	S FERMO AEOSTAR RAVEN.....	100	190	88	1087	80	0.08	50	-0.01	86	250	245	3.06	53	82	150	M	1.72	71	1430		
73HO1745	HONG-HAVEN SAMBO-ET.....*TL	100	189	88	2268	49	-0.15	65	-0.03	90	255	240	3.06	53	280	374	M	1.21	75	1314	10	92
220HO9601	HELDOSTAR.....	99.1	188	87	1424	80	0.13	67	0.10	82	199	242			93	96	M	1.60	57	1481		
180HO9607	HAKONA LEA.....	100	186	86	1756	56	-0.04	70	0.07	81	212	239	3.08	36	85	88	M	1.47	59	1409		
2139	280 LESTER-ET.....	100	186	86	2092	59	-0.07	64	-0.01	74	216	240	3.08	36	40	108	M	1.31	65	1351		
199HO3	DEL SANTO CORSARO.....	96	183	83	1674	72	0.05	63	0.05	90	217	235			215	267	M	1.64	79	1395		
97HO51	ETAZON WALLACE.....*TL	100	183	83	2073	49	-0.12	66	0.00	84	236	235			139	144	M	1.48	64	1359		
74HO175	MEADOW BRIDGE MEGABUCK-ET.....*TL	100	180	81	2007	49	-0.11	72	0.04	87	230	245	3.16	34	129	251	M	1.43	71	1387		
2200	JO-WAL PRELUDE MATRIX-ET.....*TL	100	179	80	1695	89	0.12	57	0.02	84	232	238	3.26	42	133	138	M	0.34	54	1284		
180HO9605	GREEN AERO.....	100	177	79	1401	76	0.11	62	0.08	79	194	228			70	72	M	1.24	58	1395		
198HO1	VALMADRE UMBRO-ET.....	100	174	77	1819	59	-0.03	61	0.01	82	220	226			68	80	M	1.23	65	1299		
20HO9603	250 GIBBON.....	100	172	75	1934	49	-0.09	81	0.09	82	223	261	3.25	31	91	95	M	1.01	59	1415		
73HO2371	DUNCAN PROGRESS-ET.....	100	169	73	1994	71	-0.01	47	-0.07	84	246	213	3.14	37	94	102	M	2.86	69	1392		
2139	250 GRAZER-ET.....	100	168	72	1668	56	-0.02	58	0.02	81	203	213	3.10	38	83	87	M	-0.18	50	1139		
72HO837	CRESCENTMEAD-A KIRBY-ET.....	100	168	72	2152	45	-0.15	66	-0.01	79	240	235	3.17	42	54	58	M	0.24	62	1223		
2200	DUPASQUIER SYMPHONY-ET.....	100	167	70	1778	53	-0.05	68	0.05	84	211	234	3.18	36	102	110	M	0.78	66	1316		
2139	250 RUSSELDAL GAINSAY-ET.....	100	167	70	1273	82	0.16	60	0.09	79	187	225	3.19	42	69	71	M	0.34	57	1269		
180HO9604	HONNEUR LE-ET.....*TL	100	166	70	1975	39	-0.14	60	-0.01	82	219	212			91	102	M	1.69	60	1369		
73HO2272	COMESTAR TOP GUN-ET.....	100	165	69	1593	40	-0.08	64	0.06	83	183	209	3.09	34	79	85	M	2.04	66	1359		
73HO1965	STARTMORE RUDOLPH-ET.....*TL	100	163	67	1724	48	-0.07	64	0.04	87	202	220	3.26	38	135	157	M	2.42	69	1440	7	97
97HO22	528 BERNARD.....*TL	99.1	163	67	2138	48	-0.13	60	-0.03	84	242	225	3.46	26	153	155	M	1.10	64	1254	8	84
28HO471	ROTHROCK LENNON-ET.....*TL	100	163	67	2220	53	-0.12	77	0.03	75	253	265	3.36	40	28	40	M	0.53	58	1343		
73HO2194	CAERNARVON JAY-ET.....	100	161	64	1675	83	0.10	64	0.05	86	226	246	3.25	45	117	128	M	1.76	71	1478		
97HO16	528 HAVEP MARCONI-ET.....*TL	100	160	63	1481	49	-0.02	64	0.08	85	180	213	3.09	39	137	150	M	1.63	60	1358	10	94
220HO9600	250 FATAL.....*BL	96.1	160	63	1260	51	0.02	72	0.15	82	161	224	3.22	16	98	108	M	2.04	56	1523		
73HO2193	SIR ROCKIE AARON-ET.....	100	157	59	1834	56	-0.05	51	-0.03	82	219	204	3.22	36	71	74	M	1.79	65	1315		
2139	250 SWIND GIMMICK-ET.....	100	157	59	1860	76	0.04	51	-0.03	79	238	220	3.20	35	65	67	M	0.50	56	1204		
39HO444	MARKWELL TWOMAR-ET.....*TL	100	157	59	2233	33	-0.21	53	-0.08	77	239	202	3.10	44	44	47	M	1.85	61	1244	7	86
2139	250 RED-FEVER FIRST MIKE-ET.....	100	154	57	1606	54	-0.02	68	0.08	79	196	229	3.34	41	70	71	M	0.42	56	1267		

OFFICIAL AJCA PERFORMANCE PEDIGREE

DATE ISSUED 05-24-99 (T 383985)

215650

FEMALE
AMES BERRETTA SPARKLE
003905412
BORN 02-10-99
TATOO A1386 A1386

OWNER
DAIRY SCIENCE DEPT
123 KILDEE HALL
AMES IA 50011-0001
BREEDER
DAIRY SCIENCE DEPT
123 KILDEE HALL
AMES IA 50011-0001

215650

PA +1067M +41F +47P +150PS +180CYS
+3.0 TYPE +301PTI

REG. NUMBER BIRTHDATE TATOO

ST SR BD DF RA TW RL FA
+1.9 0.0 0.0 +3.2 L0.3 -0.2 PU.3 S1.1
FU RH RW UC UD TP TL
+0.6 +2.2 +2.0 +1.2 S1.1 C2.6 L1.0

SOLDIERBOY BOOMER SOONER OF CJF
000640211 7J159

USDA 1/95 12403 DAUS 1561 HRDS 11% RIP
99%R +1610M -.34% + 22F 83%ILE
99%R -.11% + 42P +163PS +153CYS
AJCA 1/95 8015 DAUS 100%USA
PTAT 99%R +3.3 PTI 99%R +250

OSB E SETTLER SHADOW MAGGIE 95%
003459978 OSB D192

2-00 304 2 15530 5.0 778 3.7 576 DHI
3-00 305 2 20040 5.1 1020 3.8 754 DHI
4-03 305 2 26200 4.3 1125 4.01040 DHI
5-06 305 2 25000 4.3 1068 4.11031 DHI
6-11 305 2 27340 4.3 1179 4.21154 DHI
8-10 305 2 25870 4.0 1036 3.91018 DHI
305 2X ME AVG 6L 24,889M 1095F 977P
PPA +4489M +197F +197P +649PS +779CYS
USDA PTA 1/95 5RECS 71%R 99%ILE
+1031M + 42F + 55P +162PS +210CYS
AJCA 1/95 PTAT 51%R +0.8 PTI 68%R +29

MASON BOOMER SOONER BERRETTA
000651835 YSP 7J254

USDA 1/95 467 DAUS 232 HRDS 41% RIP
96%R +1481M -.22% + 35F 98%ILE
96%R +.07% + 66P +198PS +243CYS
AJCA 1/95 275 DAUS 100%USA
PTAT 92%R +3.5 PTI 92%R +397

AMES BROOK SPARKLE
003758207 A1079 A1079

DHI HERD #42-85-0274 CONTROL #07901
2-00 294 3 13140 4.9 650 3.8 496 DHI
305 2X ME AVG 1L 13,339M 654F 499P
2-09 80%

ST SR BD DF RA TW RL FA
33 32 31 34 20 25 26 31
FU RH RW UC UD TP TL
35 33 31 30 34 33 16
PPA +1394M + 99F + 58P +219PS +253CYS
USDA PTA 1/95 1REC 44%R 94%ILE
+ 653M + 46F + 27P +102PS +118CYS
AJCA 1/95 PTAT 46%R +2.5 PTI 44%R +204

MOLLY BROOK BRASS MAJOR
000644248 29J2865

USDA 1/95 715 DAUS 324 HRDS 70% RIP
97%R +1021M +.08% + 60F 65%ILE
97%R +.00% + 38P +146PS +163CYS
AJCA 1/95 292 DAUS 100%US
PTAT 93%R +4.2 PTI 93%R +304

AMES SILVER SAINT SPARKLE 80%
003658892 A9917 A9917

DHI HERD #42-85-0274 CONTROL #07885
1-11 305 3 15040 5.0 753 3.7 563 DHI
3-03 305 3 16570 5.7 951 4.0 658 DHI
305 2X ME AVG 2L 15,310M 817F 586P
PPA +1632M +166F + 67P +284PS +322CYS
USDA PTA 1/95 3RECS 53%R 79%ILE
+ 300M + 34F + 14P +57PS +67CYS
AJCA 1/95 PTAT 50%R +0.5 PTI 53%R +

OFFICIAL AJCA PERFORMANCE PEDIGREE

DATE ISSUED 05-24-99 (T 383985)

2

FEMALE
 AMES MALCOLM SPARK
 003905413
 BORN 03-01-99
 TATOO A1393 A1393

OWNER
 DAIRY SCIENCE DEPT
 123 KILDEE HALL
 AMES IA 50011-0001
 BREEDER 21565
 DAIRY SCIENCE DEPT
 123 KILDEE HALL
 AMES IA 50011-0001

PA +580M +29F +19P +76PS +81CYS
 +0.4 TYPE +106PTI

ST SR BD DF RA TW RL FA
 -0.8 -0.1 +0.8 -0.1 HO.3 +0.4 PO.4 LO.2
 FU RH RW UC UD TP TL
 0.0 0.0 +0.2 +0.7 01.6 C1.2 0.0

REG NUMBER BIRTHDATE TATOO

DUNCANS PRINCE MALCOLM
 000647162 YSP 7J212

USDA 1/95 118 DAUS 70 HRDS 21% RIP
 89%R + 949M +.00% + 45F 51%ILE
 89%R -.01% + 34P +128PS +140CYS
 AJCA 1/95 58 DAUS 100XUSA
 PTAT 77%R +1.8 PTI 84%R +209

AMES ANDY SPARK
 003771451 A1104 A1104

DHI HERD #42-85-0274 CONTROL #07904
 1-10 245 3 9670 4.7 459 3.6 344 DHR
 305 2X ME AVG 1L 11,880M 564F 423P
 2-05 70%

ST SR BD DF RA TW RL FA
 14 16 18 17 14 22 15 13
 FU RH RW UC UD TP TL
 26 22 25 34 22 31 16
 PPA + 441M + 14F - 1P +31PS +4CYS
 USDA PTA 1/95 1REC 43%R 61%ILE
 + 210M + 13F + 4P +25PS +21CYS
 AJCA 1/95 PTAT 45%R -1.1 PTI 43%R + 3

HIGHLAND MAGIC DUNCAN
 000635862 7J177

USDA 1/95 10291 DAUS 1473 HRDS 2% RI
 99%R + 773M +.08% + 48F 54%ILE
 99%R +.00% + 28P +111PS +122CYS
 AJCA 1/95 7870 DAUS 100XUS
 PTAT 99%R +2.2 PTI 99%R +222

BERRYS SOLDIER PARADE
 003287540 C722 C722

86
 2-00 305 2 13040 4.2 550 3.6 466 DHI
 3-01 305 2 13540 4.2 566 3.7 498 DHI
 4-02 305 2 14770 4.5 664 3.7 550 DHI
 5-05 305 2 13230 4.1 539 3.8 497 DHI
 8-03 305 2 11710 4.6 542 3.7 435 DHI
 9-05 178 2 7790 4.3 338 3.6 280 DHI
 305 2X ME AVG 5L 14,756M 619F 529
 PPA +2000M + 12F + 49P +188PS +170CYS
 USDA PTA 1/95 4RECS 76%R 77%ILE
 + 604M + 2F + 12P +52PS +41CYS
 AJCA 1/95 PTAT 49%R -1.1 PTI 72%R +

FAIR WEATHER ANDY
 000645219 29J2871

USDA 1/95 280 DAUS 120 HRDS 39% RI
 93%R + 953M -.06% + 35F 50%ILE
 93%R -.11% + 18P +99PS +80CYS
 AJCA 1/95 122 DAUS 100XUS
 PTAT 84%R -0.7 PTI 89%R +152

AMES ROYAL SPARK
 003622692 A9814 A9814

52
 DHI HERD #42-85-0274 CONTROL #0787
 2-04 300 3 10990 5.2 575 4.2 457 DHI
 3-03 232 3 10670 5.3 567 4.0 428 DHI
 4-03 262 3 12120 5.3 639 3.9 473 DHI
 5-02 72 3 3820 4.7 180 4.0 152 DHI
 305 2X ME AVG 3L 11,970M 629F 481
 PPA -1647M - 23F - 33P -152PS -123CYS
 USDA PTA 1/95 4RECS 53%R 31%ILE
 - 339M - 1F - 4P -25PS -14CYS
 AJCA 1/95 PTAT 50%R -0.7 PTI 53%R -

OFFICIAL AJCA PERFORMANCE PEDIGREE

DATE ISSUED 05-24-99 (T 583965) 3

FEMALE
AMES DUNKER DELLA
003905414
BORN 03-05-99
TATOO A1396 A1396

OWNER 21565
DAIRY SCIENCE DEPT
123 KILDEE HALL
AMES IA 50011-0001
BREEDER 21565

PA +952M +38F +37P +128PS +147CY\$
+1.3 TYPE +224PTI

DAIRY SCIENCE DEPT
123 KILDEE HALL
AMES IA 50011-0001

ST SR BD DF RA TW RL FA
+2.5 +1.1 +0.7 +0.8 L0.4 +0.6 P0.3 S1.0
FU RH RW UC UD TP TL
+0.6 +1.2 +0.6 +0.5 S1.4 C0.2 L0.3

REG NUMBER BIRTHDATE TATOO

GREENRIDGE ALTHEAS DUNKER
000650637 9J93

USDA 1/95 74 DAUS 44 HRDS 7% RIP
84%R + 999M -.06% + 37F 46%ILE
84%R +.01% + 38P +132PS +149CY\$
AJCA 1/95 40 DAUS 100%USA
PTAT 70%R +1.1 PTI 78%R +225

AMES SOONER DELLA
003693681 A9994 A9994

DHI HERD #42-85-0274 CONTROL #07892
2-00 289 3 16990 4.9 825 3.7 630 DHIR
3-00 305 3 17850 4.7 847 3.9 691 DHIR
305 2X ME AVG 2L 16,774M 795F 627P
2-03 83% 3-00 81%
ST SR BD DF RA TW RL FA
27 16 23 32 15 17 32 18
FU RH RW UC UD TP TL
23 33 28 35 26 36 25
PPA +2792M +117F + 97P +363PS +394CYS
USDA PTA 1/95 2RECS 49%R - 98%ILE
+ 905M + 39F + 36P +125PS +144CY\$
AJCA 1/95 PTAT 50%R +1.5 PTI 49%R +223

HIGHLAND MAGIC DUNCAN
000635862 7J177

USDA 1/95 10291 DAUS 1473 HRDS 2% RI
99%R + 773M +.08% + 48F 54%ILE
99%R +.00% + 28P +111PS +122CY\$
AJCA 1/95 7876 DAUS 100%US
PTAT 99%R +2.2 PTI 99%R +222

GREENRIDGE FW CHIEF ALTHEA-ET 92
003507678 GR1868

2-02 305 3 17750 5.0 881 3.9 686 DHI
3-02 305 2 18950 4.7 892 3.8 712 DHI
4-11 305 2 20560 4.7 970 3.9 809 DHI
6-00 305 2 20360 4.5 913 3.8 777 DHI
8-04 41 2 3360 4.3 144 3.7 124 DHI
305 2X ME AVG 4L 20,773M 961F 785
PPA +4234M +205F +183P +619PS +736CY\$
USDA PTA 1/95 4RECS 85%R 99%ILE
+1433M + 73F + 64P +215PS +258CY\$
AJCA 1/95 PTAT 51%R +0.4 PTI 79%R +3

SOLDIERBOY BOOMER SOONER OF CJF
000640211 7J159

USDA 1/95 12403 DAUS 1561 HRDS 11% RI
99%R +1610M -.34% + 22F 83%ILE
99%R -.11% + 42P +163PS +153CY\$
AJCA 1/95 8015 DAUS 100%US
PTAT 99%R +3.3 PTI 99%R +250

AMES ROYAL DELLA 77
003526975 A9691 A9691

DHI HERD #42-85-0274 CONTROL #0786
2-04 292 2 10660 5.6 598 4.1 438 DHI
3-04 305 2 13370 5.5 739 4.2 560 DHI
4-05 305 3 16750 5.5 917 4.0 676 DHI
5-07 299 3 11250 5.4 613 4.1 466 DHI
6-07 50 3 2240 4.8 108 4.0 89 DHI
305 2X ME AVG 4L 12,367M 673F 502
PPA -1439M + 31F - 8P -72PS -6CYS
USDA PTA 1/95 5RECS 57%R 57%ILE
- 210M + 26F + 10P +18PS +50CYS
AJCA 1/95 PTAT 50%R -0.4 PTI 56%R +

OFFICIAL AJCA PERFORMANCE PEDIGREE

FEMALE
 AMES DUNKER PRIDE
 003905416
 BORN 03-31-99
 TATOO A1403 A1403

PA +1026M +34F +34P +125P\$ +132CYS
 +0.6 TYPE +185PTI

ST SR BD DF RA TW RL FA
 +1.9 +0.7 +0.7 0.0 L0.3 +0.2 P0.9 S1.0
 FU RH RW UC UD TP TL
 +0.5 +0.3 +0.1 -0.3 S0.3 W0.2 L0.3

DATE ISSUED 05-24-99 (T 385985) (4)
 OWNER
 DAIRY SCIENCE DEPT
 123 KILDEE HALL
 AMES IA 50011-0001
 BREEDER 215650
 DAIRY SCIENCE DEPT
 123 KILDEE HALL
 AMES IA 50011-0001
 215651

REG NUMBER BIRTHDATE TATOO

GREENRIDGE ALTHEAS DUNKER
 000650637 9J93

USDA 1/95 74 DAUS 44 HRDS 7% RIP
 84XR + 999M -.06% + 37F 46%ILE
 84XR +.01% + 38P +132P\$ +149CYS
 AJCA 1/95 40 DAUS 100%USA
 PTAT 70XR +1.1 PTI 78XR +225

AMES ANDY PRIDE
 003771452 A1105 A1105

DHI HERD #42-85-0274 CONTROL #07905
 1-09 288 3 14780 4.1 610 3.4 506 DHIR
 305 2X ME AVG 1L 16,524M 677F 561P
 2-04 82%
 ST SR BD DF RA TW RL FA
 25 23 24 29 15 23 31 16
 FU RH RW UC UD TP TL
 35 33 34 28 31 28 24
 PPA +3037M + 76F + 77P +323P\$ +301CYS
 USDA PTA 1/95 1REC 44XR 97%ILE
 +1052M + 31F + 29P +118P\$ +115CYS
 AJCA 1/95 PTAT 45XR +0.0 PTI 44XR +145

HIGHLAND MAGIC DUNCAN
 000635862 7J177

USDA 1/95 10291 DAUS 1473 HRDS 2% RIP
 99XR + 773M +.08% + 48F 54%ILE
 99XR +.00% + 28P +111P\$ +122CYS
 AJCA 1/95 7876 DAUS 100%USA
 PTAT 99XR +2.2 PTI 99XR +222

GREENRIDGE FW CHIEF ALTHEA-ET
 003507678 GR1868

2-02 305 3 17750 5.0 881 3.9 686 DHI
 3-02 305 2 18950 4.7 892 3.8 712 DHI
 4-11 305 2 20560 4.7 970 3.9 809 DHI
 6-00 305 2 20360 4.5 913 3.8 777 DHI
 8-04 41 2 3360 4.3 144 3.7 124 DHI
 305 2X ME AVG 4L 20,773M 961F 785P
 PPA +4234M +205F +183P +619P\$ +736CYS
 USDA PTA 1/95 4RECS 85XR 99%ILE
 +1433M + 73F + 64P +215P\$ +258CYS
 AJCA 1/95 PTAT 51XR +0.4 PTI 79XR +35

FAIR WEATHER ANDY
 000645219 29J2871

USDA 1/95 280 DAUS 120 HRDS 39% RIP
 93XR + 953M -.06% + 35F 50%ILE
 93XR -.11% + 18P +99P\$ +80CYS
 AJCA 1/95 122 DAUS 100%USA
 PTAT 84XR -0.7 PTI 89XR +152

AMES RELIANT PRIDE
 003622690 A9811 A9811

DHI HERD #42-85-0274 CONTROL #07870
 2-05 299 3 14070 4.2 586 3.6 513 DHI
 3-05 258 3 16980 4.2 710 3.6 616 DHI
 4-04 292 3 17100 4.2 715 3.7 639 DHI
 305 2X ME AVG 3L 16,084M 670F 588P
 PPA +2431M + 41F + 77P +270P\$ +282CYS
 USDA PTA 1/95 3RECS 57XR 88%ILE
 + 644M + 15F + 24P +79P\$ +89CYS
 AJCA 1/95 PTAT 50XR -0.4 PTI 56XR +1