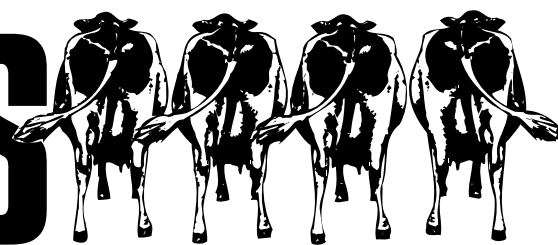


February 1998

Dairy Lines



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DAIRY RESEARCH & EXTENSION NEWS

http://www.oznet.ksu.edu/dp_ansi/dairylin.htm

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Upcoming Events

April 27–28, 1998
Heart of America
Dairy Management
Conference for
Dairy Professionals
Kansas City, MO

August 17–18, 1998
Midwest Dairy
Management Conference
Minneapolis, MN



Printing sponsored by



Heifer Vaccination Programs

by Gregor L. Morgan, DVM,
Oklahoma State University

A lot of time, money and genetic investment has been put into a replacement heifer before she produces a calf at 23 to 25 months of age. Estimates on the cost of producing a heifer range from \$900 to \$1,400. Because the costs are so high in raising replacement heifers, a producer must be familiar with and manage those "practices" that optimize replacement heifer health, growth and potential milk production. The answers lie not in a bottle and syringe but in sound animal welfare and husbandry practices.

The major causes of early calf loss are diarrhea and pneumonia. There are several vaccines that have been advocated for use in the pre-calving period to provide good protection in the newborn. There is debate as to how effective some of these vaccines are. However, vaccines against K99 E. Coli bacteria have proven effective in certain situations. Vaccines directed against this very common cause of severe and often fatal diarrhea in the first few days of life can be administered to pregnant cows prior to calving to increase the antibodies against this organism in the colostrum. This is a vaccine that could be recommended as mandatory in first-calf heifers and as an optional vaccine in adult cows depending on circumstances. However, poor colostrum management and poor husbandry practices are more often the cause of diarrhea problems in calves than is low antibody levels against E-Coli in the colostrum itself.

Birth to Weaning: Young pre-weaned calves (<2 months) usually require little in the way of vaccines. An intranasal dose of IBR/PI3 can be

justified as a preventive measure against respiratory disease.

At weaning (2 to 3 months), calves may be vaccinated with modified live virus vaccines (MLV) containing IBR, BVD, PI3 and BRSV. A follow-up revaccination (2 to 4 weeks) with BRSV alone must be given if BRSV is included in order to get good protection. Calves should be vaccinated against *Pasturella pneumonia* also at weaning.

At 6 to 10 months of age, heifers should be revaccinated with MLV, IBR, BVD, PI3, BRSV, a minimum 2-way clostridial vaccine (up to 7-way), Brucellosis (Bang's) and Leptospirosis (*Pomona minimum*). If history of Leptospirosis or Clostridial disease exists on the property in calves at a younger age, then appropriate earlier vaccination should be done.

At least 30 days prior to breeding replacement heifers, a repeated vaccination with MLV, IBR, BVD, PI3, 2-way Clostridial and Leptospirosis (has a short 4 to 6 month protection period only) should be done.

From this period on, these replacement heifers, when adult cows, will only require an annual booster with IBR, BVD, PI3 vaccine. This may be done during their non-pregnant period with MLV vaccines or if pregnant only with non-MLV vaccines. If MLV vaccines are administered to pregnant animals, about one-third may be expected to abort. Leptospirosis may be administered to cows at confirmed pregnancy check time.

This outlines a minimum vaccination program for dairies. Other vaccines may be advised by the attending veterinarian depending on location and disease history on the farm.

Heart of America Dairy Herd Improvement Summary (January)

	Quartiles				Your Herd
	1	2	3	4	
Ayrshire					
Rolling Herd Average	16,796	14,676	13,773	11,432	
Peak Milk Yield 1st	60.0	52.0	51.0	47.0	
Peak Milk Yield 2nd	76.5	69.0	57.5	52.6	
Peak Milk Yield 3rd	81.5	73.5	64.5	59.6	
Peak Milk Yield Avg.	72.5	63.5	59.0	54.3	
Income/Feed Cost	944	792	1023.5	584	
SCC Average	284.5	350.5	138	369	
Days to 1st Service	77	66	63.5	120	
Days Open	139.5	130.5	129.5	186.3	
Projected Calving Interval	13.8	13.5	13.5	15.3	
Brown Swiss					
Rolling Herd Average	20,029	15,461	14,434	13,333	
Peak Milk Yield 1st	69.2	54.5	52.1	50.5	
Peak Milk Yield 2nd	84.8	71.1	64.4	63.1	
Peak Milk Yield 3rd	92.6	77.6	69.6	67.7	
Peak Milk Yield Avg.	85.0	69.3	62.1	61.7	
Income/Feed Cost	1,280	1,184	990	790	
SCC Average	316	295	354	272	
Days to 1st Service	81	94	82	70	
Days Open	140	147	174	168	
Projected Calving Interval	13.8	14.0	14.9	14.7	
Milking Shorthorn					
Rolling Herd Average	15,072	14,027	13,350	13,065	
Peak Milk Yield 1st	57.0	51.0	55.0	48.0	
Peak Milk Yield 2nd	72.0	61.0	61.0	54.0	
Peak Milk Yield 3rd	82.0	69.0	71.0	70.5	
Peak Milk Yield Avg.	72.0	62.0	64	56.0	
Income/Feed Cost	1,304	717	1,083	895	
SCC Average	277	45	223	326.5	
Days to 1st Service	96	45	0	94	
Days Open	104	159	244	123.5	
Projected Calving Interval	12.6	14.4	17.2	13.3	
Holstein					
Rolling Herd Average	22,294	19,430	17,269	13,904	
Peak Milk Yield 1st	76.9	68.5	63.4	53.6	
Peak Milk Yield 2nd	95.0	84.9	76.6	65.0	
Peak Milk Yield 3rd	100.9	90.7	83.0	69.8	
Peak Milk Yield Avg.	90.4	81.5	74.9	64.1	
Income/Feed Cost	1,612	1,349	1,147	874	
SCC Average	323	362	396	478	
Days to 1st Service	88	91	85	83	
Days Open	158	156	163	184	
Projected Calving Interval	14.4	14.3	14.5	15.2	
Jersey					
Rolling Herd Average	15,707	13,253	12,168	9,986	
Peak Milk Yield 1st	53.9	47.0	42.9	44.5	
Peak Milk Yield 2nd	65.7	57.5	54.9	50.4	
Peak Milk Yield 3rd	72.4	61.8	60.2	52.9	
Peak Milk Yield Avg.	63.9	56.3	53.1	49.4	
Income/Feed Cost	1,436	946	921	627	
SCC Average	329	284	247	358	
Days to 1st Service	96	83	86	89	
Days Open	134	124	147	139	
Projected Calving Interval	13.6	13.2	14.0	13.8	

Hay Prices*—Kansas

	Location	Quality	Price (\$/ton)
Alfalfa	Southwestern Kansas	Premium	105–130
Alfalfa	Southwestern Kansas	Good	100–105
Alfalfa	South Central Kansas	Premium	100–120
Alfalfa	South Central Kansas	Good	90–100
Alfalfa	Southeastern Kansas	Premium	100–110
Alfalfa	Southeastern Kansas	Good	90–100
Alfalfa	Northwestern Kansas	Premium	100–120
Alfalfa	Northwestern Kansas	Good	85–90
Alfalfa	North Central Kansas	Premium	100–120
Alfalfa	North Central Kansas	Good	80–100

Source: USDA Weekly Hay Report, Week ending February 3, 1998

*Premium Hay RFV = 170–200

Good Hay RFV = 150–170

Hay Prices—Oklahoma

	Location	Quality	Price (\$/ton)
Alfalfa	Central/Western, OK	Premium	100–130
Alfalfa	Central/Western, OK	Good	75–100
Alfalfa	Panhandle, OK	Premium	100–130
Alfalfa	Panhandle, OK	Good	75–100

Source: Oklahoma Department of Agriculture, January 29, 1998

Feed Stuffs Prices

	Location	Price (\$/ton)
SBM 48%	Kansas City	204.70–206.70
Cotton Seed Meal	Kansas City	159–160
Whole Cottonseed	Memphis	140
Blood Meal	Central United States	350
Corn Hominy	Kansas City	98–105
Corn Gluten Feed	Kansas City	88–90
Corn Gluten Meal 60%	Kansas City	305–315
Distillers Dried Grain	Central Illinois	100–105
Brewers Dried Grain	St. Louis	NA
Wheat Middlings	Kansas City	75–78

Source: USDA Weekly Feed Stuffs Report, Week ending February 4, 1998

Oklahoma AI Update & Nutrition Workshop 9:15–3:00

April 2, Grady Co. Fairgrounds
Chickasha, Oklahoma

April 9, Mayes Co. Fairgrounds
Pryor, Oklahoma

OSU Dairy Days

April 22, Pryor, Oklahoma

April 23, Chickasha, Oklahoma

Oklahoma State University 62nd Annual Dairy Day

Dates and Locations

Wednesday, April 22, 1998: Northeast Vo-Tech Center, Pryor, Oklahoma
(6 mi. West of Pryor, OK on Hwy. 20)

Thursday, April 23, 1998: Grady County Fairgrounds, Chickasha, Oklahoma
(1.5 mi. West of 144 & Hwy. 62 Junction)

Program:

8:00 a.m.	Registration*—Visit Exhibits	12:00 p.m.	Lunch—Visit Exhibits
9:50 a.m.	Welcome	1:15 p.m.	DHIA Production and Quality Milk Awards
10:00 a.m.	Focusing Management's Attention— State of the State <i>Dan N. Waldner, Oklahoma State Extension Dairy Specialist</i>	1:30 p.m.	Planning a Dairy Expansion <i>John F. Smith, K-State Research and Extension Dairy Specialist</i>
10:15 a.m.	Milk Pricing and the New Order <i>Don R. Nicholson, Milk Market Administrator, Tulsa, OK</i>	2:15 p.m.	Dealing with Environmental Mastitis <i>Jim Ver Steeg, DVM, Pharmacia & Upjohn</i>
11:00 a.m.	Financial Management—Positioning for Your Dairy Future <i>Joe Conlin, University of Minnesota Extension Dairy Specialist</i>	3:00 p.m.	Adjourn—Visit Exhibits

Registration: \$10/person, \$15/couple, children under 12—Free. Registration includes lunch and 1 copy of proceedings. Extra copies of proceedings may be purchased for \$5 each.

1998 Oklahoma Quality Milk Awards

(Deadline—March 31, 1998)

Sponsored by:

Oklahoma State University Department of Animal Science
Klenzade—Division of Ecolab, Inc.

Requirements:

Contestants must fill out the entry form, showing the SCC, Bacteria (SPC) and Antibiotic tests for the calendar year 1997. Four tests are required during any 6-month period.

Awards:

The competition will be divided into three divisions according to herd size: Large—160 or more cows; Medium—80–160 cows; Small—80 or fewer cows.

- ☆ Lowest yearly average SCC and bacteria count in all divisions will receive a plaque.
- ☆ Certificates of merit will be presented to all entrants with an average SCC under 300,000 and bacteria counts averaging 10,000 or less.

Entry Form

1998 Oklahoma Quality Milk Awards

Month	Year	SCC	Bacteria	Antibiotic	Total Cows*
January	1997				
February	1997				
March	1997				
April	1997				
May	1997				
June	1997				
July	1997				
August	1997				
September	1997				
October	1997				
November	1997				
December	1997				

Name _____

Address _____

Phone () _____

Send results on this form to:
Dr. Dan N. Waldner
201 Animal Science
Stillwater, OK 74078

Entry Deadline: March 31, 1998

*Include dry cows in total

COOPERATIVE EXTENSION SERVICE
U.S. DEPARTMENT OF AGRICULTURE
KANSAS STATE UNIVERSITY
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Dairy Lines is jointly published for dairy producers by the Department of Animal Sciences and Industry, K-State Research and Extension, and the Department of Animal Science, Oklahoma Cooperative Extension Service.

For more information or questions, please contact 913.532.5654 (K-State) or 405.744.6058 (OSU).

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