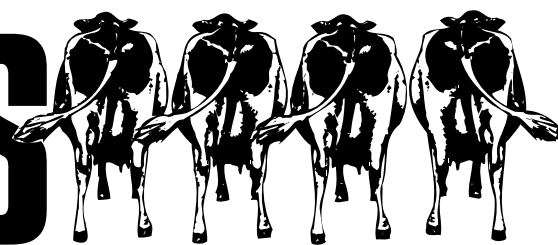


May 1998

Dairy Lines



Volume 4, Number 5

DAIRY RESEARCH & EXTENSION NEWS

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

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Upcoming Events

August 17-18, 1998

Midwest Dairy
Management Conference
Minneapolis, MN



Kansas State University

Research and Extension



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Summer is on its way!

By John Smith and Dan Waldner

Dairy cattle experience stress when the temperature humidity index (THI) is above 72. As you're reading this, your dairy cows have more than likely already experienced several days in which the THI has been above 72. There are a number of things that can be done to alleviate some of the effects of heat stress. Some of those methods are discussed below.

Water Availability

Making cool and clean water easily available to lactating dairy cows is the first priority. Water should be made available when the cows leave the milking parlor, at every crossover in freestall housing, and a minimum of two locations in drylot housing. In a pasture situation, water should be provided in multiple locations to reduce walking distance to water. Evaluate the capacity of your water system to determine if it will meet peak demand on your dairy.

Walking Distance

When a dairy cow is walking, she is working. Look at strategies to reduce walking distance to the milking parlor, feed, water and shade. Try to house cows as close to feed, water shade and milking parlor as possible. Reducing walking distance will reduce the workload of the cow and allow her to use more energy to dissipate heat and produce milk.

Shade

Research trials completed in Arizona and Florida indicate that providing shade during heat stress will increase milk production by 4 to 5 pounds per cow per day. Shade should be provided in housing areas and over the holding pen.

Milking Center

Often, dairy cows are under the most heat stress in the holding pen. Heat stress in the holding pen can be reduced by minimizing the amount of time cows spend in the area. The sides should be open during the summer to increase ventilation.

Once these basic strategies to reduce heat stress are implemented, producers can look at other techniques to cool cows on the dairy. Good luck keeping your cows cool and comfortable this summer.

June 4

11th Annual

Dairymen of Oklahoma (D.O.G.)
Golf Classic

Firelake Golf Course, Shawnee, OK

10 a.m. Shotgun Start

for more information contact:

Jennifer Starkey (405) 424-4519

June 30, 1998

Milking Shorthorn & Judging Clinic
Grady Co. Fairgrounds

Chickasha, OK

9 a.m. Registration

10 a.m. Contest

Heart of America Dairy Herd Improvement Summary (May)

	Quartiles				Your Herd
	1	2	3	4	
Ayrshire					
Rolling Herd Average	15,311	14,204	13,252	10,270	
Peak Milk Yield 1st	56.5	49.0	50.0	40.0	
Peak Milk Yield 2nd	70.0	62.5	59.5	51.3	
Peak Milk Yield 3rd	78.0	64.5	65.5	60.5	
Peak Milk Yield Avg.	69.0	57.5	58.5	49.3	
Income/Feed Cost	963	788	1,013.5	341	
SCC Average	218.5	340	397	346	
Days to 1st Service	76	73.5	58.5	85	
Days Open	140.5	135.0	110.5	167	
Projected Calving Interval	13.8	13.6	12.8	14.7	
Brown Swiss					
Rolling Herd Average	19,365	15,700	14,403	13,742	
Peak Milk Yield 1st	66.6	54.8	51.0	51.5	
Peak Milk Yield 2nd	85.6	69.6	63.8	65.1	
Peak Milk Yield 3rd	91.2	74.8	72.8	69.5	
Peak Milk Yield Avg.	82.4	68.3	63.4	63.3	
Income/Feed Cost	1,319	1,245	952	937	
SCC Average	306	317	306	236.5	
Days to 1st Service	75	92.5	82	88	
Days Open	139	145	165	138	
Projected Calving Interval	13.7	13.9	14.6	13.7	
Guernsey					
Rolling Herd Average	16,115	15,164	12,991	11,501	
Peak Milk Yield 1st	61.0	58.0	49.5	50.5	
Peak Milk Yield 2nd	74.0	67.5	55.5	51.0	
Peak Milk Yield 3rd	69.0	73.0	60.5	57.5	
Peak Milk Yield Avg.	67.0	67.0	55.5	53.5	
Income/Feed Cost	1,579	1,325	1,106	328	
SCC Average	135	222.5	608	404	
Days to 1st Service	93	42.5	32	46	
Days Open	147	167	205.5	227	
Projected Calving Interval	14.1	14.7	16.0	16.7	
Holstein					
Rolling Herd Average	22,344	19,451	17,432	14,251	
Peak Milk Yield 1st	78.8	69.5	63.9	54.4	
Peak Milk Yield 2nd	96.2	85.4	77.4	65.8	
Peak Milk Yield 3rd	102.1	91.6	83.3	71.2	
Peak Milk Yield Avg.	91.9	82.5	75.5	65.4	
Income/Feed Cost	1,679	1,373	1,186	921	
SCC Average	325	337	377	437	
Days to 1st Service	88.5	89	85	76	
Days Open	156	155	160	182	
Projected Calving Interval	14.3	14.3	14.5	15.2	
Jersey					
Rolling Herd Average	15,739	13,289	11,841	9,651	
Peak Milk Yield 1st	54.8	47.8	41.9	39.9	
Peak Milk Yield 2nd	65.0	58.7	53.5	43.7	
Peak Milk Yield 3rd	71.5	62.0	56.3	48.3	
Peak Milk Yield Avg.	64.2	57.6	50.5	45.1	
Income/Feed Cost	1,411	996	846	474	
SCC Average	303	338	227	383	
Days to 1st Service	85.5	78	77	65	
Days Open	124	128	134.5	183	
Projected Calving Interval	13.2	13.4	13.6	15.2	

August 17-18, 1998
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Management Conference
Minneapolis, MN

Preliminary Incubation Count (PIC)

by Dan Waldner

Most producers are accustomed to standard plate count (SPC) reports, which indicate the total number of aerobic bacteria present in the milk at the time of pickup. However, Dairy Farmers of America, Inc. have recently instituted the use PIC as a measure of milk quality and a means for paying quality premiums. The PIC is a better indicator of sanitary conditions than the SPC and can be lowered through proper cooling even though the milk may not have been produced under sanitary conditions.

The PIC is a measurement of the psychrotrophic (cold-thriving) bacteria in a milk sample. These bacteria produce enzymes that cause the breakdown of protein and fat, which in turn causes off-flavors in milk and shorten shelf life. Pasteurization normally kills psychrotrophic bacteria. However, it does not destroy the enzymes they produce.

High PICs are most often associated with failure to thoroughly clean and sanitize either the milking system or the cows. Marginal cooling (i.e. milk that is held over 40°F) or prolonged storage times may also result in unacceptable PIC levels by allowing organisms that grow at refrigeration temperatures to multiply. High PIC can also be attributed to bulk tanks that are rinsed, but not washed and sanitized after each milk collection; worn inflations and milk hoses; or from not using a sanitizer.

If you have questions regarding PIC on your farm, contact your county or state extension personnel for trouble shooting suggestions.

Hay Prices*—Kansas

	Location	Quality	Price (\$/ton)
Alfalfa	Southwestern Kansas	Premium	n/a
Alfalfa	Southwestern Kansas	Good	85
Alfalfa	South Central Kansas	Premium	90-100
Alfalfa	South Central Kansas	Good	85-95
Alfalfa	Southeastern Kansas	Premium	110
Alfalfa	Southeastern Kansas	Good	85-90
Alfalfa	Northwestern Kansas	Premium	100
Alfalfa	Northwestern Kansas	Good	85-90
Alfalfa	North Central Kansas	Premium	100
Alfalfa	North Central Kansas	Good	90-100

Source: USDA Weekly Hay Report, Week ending May 1, 1998

*Premium Hay RFV = 170-200

Good Hay RFV = 150-170

Hay Prices—Oklahoma

	Location	Quality	Price (\$/ton)
Alfalfa	Central/Western, OK	Premium	100-110
Alfalfa	Central/Western, OK	Good	75-90
Alfalfa	Panhandle, OK	Premium	100-110
Alfalfa	Panhandle, OK	Good	75-90

Source: Oklahoma Department of Agriculture, May, 1998

Feed Stuffs Prices

	Location	Price (\$/ton)
SBM 48%	Kansas City	164-169.60
Cotton Seed Meal	Kansas City	126-128
Whole Cottonseed	Memphis	147
Blood Meal	Central United States	350
Corn Hominy	Kansas City	85-88
Corn Gluten Feed	Kansas City	74-75
Corn Gluten Meal 60%	Kansas City	245-245
Distillers Dried Grain	Central Illinois	77-84
Brewers Dried Grain	St. Louis	n/a
Wheat Middlings	Kansas City	48-50

Source: USDA Weekly Feed Stuffs Report, Week ending April 29, 1998

Kansas Dairy Field Day

June 13

Heartland Jerseys

Seneca, KS

Registration: 10:00 a.m.

Program: 10:30 a.m.

Vaughn Studer, dairy consultant for Farmland Industries, will give a presentation on transition.

Lunch: Sponsored by Kansas Dairy Association; Ice cream provided by Well's Blue Bunny

Farm Tour: Prior to morning program or following afternoon program

Directions: 2½ miles east of Seneca on Highway 36 and 1 mile south

Heartland Jerseys:

- 100 percent registered Jerseys—145 head DHIR
- Double 7 herringbone parlor, weigh jars, auto-takeoffs
- Mono-slope two-row free-stall barn
- Conventional free-stall barn with enclosed holding pen
- Calf-Tel hutches and "Multi-Max" group hutches
- Total mixed ration
- KDHE approved manure system (1994)
- Milk sold to Well's Blue Bunny, Omaha

1998 Western Kansas Dairy Conference

June 4—June 6

Finney County Fairgrounds

Garden City, KS

- Large dairy tours
- Large dairy seminars—planning; engineering; production
- Special agricultural speakers
- Trade show

June 4

5:30–7:30 p.m. Registration—Plaza Inn

6:30–7:30 p.m. Welcome Reception—Plaza Inn

June 5

7:30 a.m. Registration and Continental Breakfast

8:30 a.m. Western Kansas Welcome, Larry Berg, President, WKREDA

8:35 a.m. Opening Remarks, Patty Clark, Director, Ag. Products

Development Division, KDOC&H

8:50 a.m. The Planning Process, Joe Harner, Kansas State University

9:50 a.m. Break and Trade Show

10:15 a.m. The Changing Dairy Industry, Monty Hemenover,

US Dairy Export Council

11:50 a.m. Lunch—Fairgrounds Exhibitor Building—

Trade Show Living in Western Kansas, Steve Miller, Sunflower Electric

1:15 p.m. The Changing Dairy Industry (*continued*)

2:45 p.m. Break and Trade Show

3:15 p.m. Dairy Layout and Design, John George, Engineer, Agriculture Engineering Assoc.

4:15 p.m. Animal Waste and Lagoons, Gary Mitchel, Secretary of Kansas

Department of Health and Environment

6:00 p.m. BBQ and Rodeo—Fairgrounds

June 6
7:30 a.m. Continental Breakfast and Trade Show—Exhibitors Building

8:30 a.m. Water and Water Rights, Mark Rude, State of Kansas

9:15 a.m. A Nutrition Program for Cow Comfort, Dick Dunham, Kansas State University

Break and Trade Show

9:55 a.m. Update on Milk Marketing Orders,

10:25 a.m. Donald Nicholson, Milk Market Administrator, Southwest Plains, Order 106

11:15 a.m. Washington D.C. Update, Senator Pat Roberts (tentative),

Senator Sam Brownback (tentative), Congressman Jerry Moran (tentative)

11:45 a.m. Lunch and Trade Show—

Exhibitors Building

For registration or trade show information call Carol Meyer at 316-2763264 or Diana Hembree at 316-277-4576; FAX 316-277-4594.

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

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