# Volume 3, Number 11

# **Co-Editors**

James R. Dunham Extension Specialist, Dairy Science

John F. Smith Extension Specialist, Dairy Science

Dan Waldner Extension Specialist, Dairy Science

## **Contributors**

Karen Schmidt Associate Professor, Dairy Products

John Shirley Associate Professor, Dairy Science

Jeff Stevenson Professor, Dairy Science

Dave Sukup Manager, Heart of America DHI

## Upcoming Events Kansas & Oklahoma

Dairy Profitability Workshops 9:30 a.m.–2 p.m. November 20—Chickasha, OK Grady Co. Fairgrounds December 10—Shattuck, OK Ellis Co. Fairgrounds December 11—Sulphur, OK Chickashaw Motor Inn December 17—Pryor, OK Mayes Co. Fairgrounds





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DAIRY RESEARCH & EXTENSION NEWS

 $http://www.oznet.ksu.edu/dp\_ansi/dairylin.htm$ 

# Freestall Management for Cow Comfort: Part 1

by J.F. Smith, G.A. Jones, and J. Harner

Bedding or cushioning is very important to encourage freestall use. If the stalls are hard, there is very little incentive to use the freestalls over the alleys. The bedding of choice is anything that provides 4 inches of cushion, absorbs moisture, prevents friction and does not promote the growth of bacteria. Common beddings include sand, mattresses, composted manure, and wood shavings or sawdust.

When sand is used as bedding, with a 4-inch minimum, it can be both a base and bedding. Sand provides great cow comfort, drains well, and helps keep cows very clean. Sand will not support bacterial growth. In addition, when a cow steps out of the stall and kicks sand onto the alleys, it improves cow footing. Sand is the GOLD STAN-DARD for cow comfort. The major problem with sand bedding is sand in the manure systems. As much as 35 to 70 pounds per cow per day can be added to the manure. When the sand settles out in the manure system this can be a major problem. The only sound advice for sand-laden manure is to plan on sand settling and to then be able to remove it from the manure system.

Mattresses can provide a satisfactory base and adequate cushioning. A mattress can be filled with a variety of materials: sawdust, shavings, straw, hay, or ground rubber. The mattress, when properly filled, only provides cushioning. Producers still need to add adequate amounts of drv bedding on top of the mattress to help keep the surface dry and to reduce friction on the hocks. Mattresses are easily the second best things that can be used for a freestall surface, and they may be the best choice for a manure system that cannot handle sand-laden manure.

Many producers have successfully used composted manure from a solid separator as freestall bedding. It is critical that producers who choose this option have the facilities and equipment to properly handle and compost the manure to provide high quality bedding.

Selecting a bedding type is important. However, the success of using the bedding will be determined by the producers ability to keep stalls full of bedding and properly groomed. This will entice cows to use the stalls on a regular basis.

		Quartiles			Your
	1	2	3	4	Herd
Ayrshire					
Rolling Herd Average	16,657	14,357	12,567	8,840	
Peak Milk Yield 1st	61.5	53.5	54.0	38.5	
Peak Milk Yield 2nd	79.5	67.0	63.5	50.0	
Peak Milk Yield 3rd	84.5	73.5	67.0	56.5	
Peak Milk Yield Avg.	76.0	65.0	62.0	48.5	
Income/Feed Cost	1,033	911.5	791.5	150	
SCC Average	261.5	415.5	321	637.5	
Days to 1st Service	74.0	95	100	130.5	
Days Open	123	145.5	146.5	148.5	
Projected Calving Interval	13.25	14.0	14.05	14.10	
Brown Swiss					
Rolling Herd Average	19,490	15,158	14,302	13,260	
Peak Milk Yield 1st	67.0	55.5	54.5	50.1	
Peak Milk Yield 2nd	86.3	71.1	63.5	62.2	
Peak Milk Yield 3rd	94.6	77.5	70.0	69.5	
Peak Milk Yield Avg.	82.3	69.1	63.5	61.2	
Income/Feed Cost	1,394	1,303	1,107	798	
SCC Average	340	255	444	225	
Days to 1st Service	78.5	70.8	76.6	85	
Days Open	138	175	138	163	
Projected Calving Interval	13.7	15.0	13.7	14.5	
Holstein					
Rolling Herd Average	22,246	19,362	17,262	14,029	
Peak Milk Yield 1st	77.8	69.2	63.7	54.3	
Peak Milk Yield 2nd	97.3	86.8	78.4	66.9	
Peak Milk Yield 3rd	104.4	93.6	85.2	72.1	
Peak Milk Yield Avg.	92.2	82.9	76	65.3	
Income/Feed Cost	1,726	1,491	1,258	950	
SCC Average	334	366	402	497	
Days to 1st Service	88	90	83	76	
Days Open	151	154	161	179	
Projected Calving Interval	14.2	14.2	14.5	15.1	
lersey					
Rolling Herd Average	15,155	13,162	11,385	9,320	
Peak Milk Yield 1st	54.2	46.4	44.3	38.5	
Peak Milk Yield 2nd	64.2	61.1	52.1	46.1	
Peak Milk Yield 3rd	70.8	59.8	56.4	47.7	
Peak Milk Yield Avg.	63.2	55.0	51.3	44.8	
Income/Feed Cost	1,441	1,051	870	418	
SCC Average	328	243	301	417	
Days to 1st Service	85	84	97	62	
Days Open	125	145	136	143	
Projected Calving Interval	13.3	14.0	13.7	13.9	

Kansas Dairy Association and K-State Research and Extension's Labor Management Workshop December 9, 1997 Hutchinson, KS December 10, 1997 Hillsboro, KS December 11, 1997 Ottawa, KS See page 3 for more details

# Milk Quality... Heifers' SCC may be too High

### by J. R. Dunham

The Somatic Cell Count (SCC) is one of the important quality measures of milk. SCC affects the shelf life and flavor of milk as well as the yield of manufactured products, especially cheese.

A dairy's goal should be to produce milk with less than 200,000 SCC. However, most herds do not meet this goal. The Heart of America DHIA Quartile Summary shows that the higher Rolling Herd Average (RHA) quartiles usually have the lowest SCC, yet none average as low as 200,000 SCC.

There are many reasons why the SCC is higher than desired, but in too many herds the reason is that fresh heifers are too high. This indicates that the heifers were probably infected with mastitis prior to calving. Once animals have been infected, their SCC tends to remain higher than desired throughout their lifetime in the herd. Thus, many herds could lower the SCC average by reducing the SCC average of fresh heifers.

If the first lactation SCC average exceeds 100,000 or the percent of first lactation heifers exceeding 300,000 SCC is greater than 5 percent, too many heifers are probably freshening with mastitis. Notice that all of the quartile averages for first lactation exceed 100,000 SCC. Yet, the SCC average of first lactation heifers in low SCC herds consistently average less than 100,000.

Heifers become infected with mastitis before freshening when sanitation in their environment is less than desirable. Such things as springer heifers wading in ponds before calving or going to feed bunks surrounded by mud holes too often result in heifers freshening that are already infected with mastitis. Usually, springing heifers and dry cows will be in the same lot and the older fresh cows will also have higher than desired SCC averages.

The best way to determine if there is a heifer SCC problem is to review the SCC Report (DHIA-230). Determine how many heifers have a higher than desired SCC the first month of lactation. Heifers with SCC higher than 300,000 are more than likely infected with mastitis.

Every dairy farmers is encouraged to review the SCC report to determine if fresh heifers are contributing too much to the SCC average. In most situations the fresh cows will also be too high.

# LABOR MANAGEMENT STRATEGIES FOR DAIRIES

December 9, 10 & 11, 1997

Co-Sponsored By: Kansas Dairy Association & K-State Research and Extension Dairy

- 10:00 Registration and Refreshments
- 10:30 Labor Management Strategies Tom Maloney, Cornell University
- 12:00 Lunch Sponsored by Kansas Dairy Assoc.
- 1:00 Labor Management Strategies, cont.
- 2:30 Adjourn

# **Dates & Locations**

- Dec. 9 Hutchinson, Kansas Amish Community Bldg., 4 West of Hwy 96 & 50 to Whiteside Rd., South 2 Intersections, <sup>1</sup>/4 mile West
- Dec. 10 Hillsboro, Kansas Methodist Church
- Dec. 11 Ottawa, Kansas Franklin County Extension Office, 1418 S. Main

Please call one of the following offices for meal reservations by December 1: Reno County: 316-662-2371 Marion County: 316-382-2325 Franklin County: 913-229-3520





Hay Prices*—Kansas						
	Location	Quality	Price (\$/ton)			
Alfalfa	Southwestern Kansas	Premium	100-120			
Alfalfa	Southwestern Kansas	Good	90-100			
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	100-110			
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 November 7, 1997

\*Premium Hay RFV = 170-200

Good Hay  $\overrightarrow{RFV} = 150-170$ 

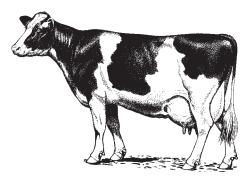
# Hay Prices—Oklahoma

· · · · ·	enanoma		
	Location	Quality	Price (\$/ton)
Alfalfa	Central/Western, OK	Premium	100-120
Alfalfa	Central/Western, OK	Good	75-100
Alfalfa	Panhandle, OK	Premium	100-120
Alfalfa	Panhandle, OK	Good	75-100

Source: Oklahoma Department of Ag, October 30, 1997

#### Feed Stuffs Prices Location Price (\$/ton) Kansas City SBM 48% 243.50-248.50 Cotton Seed Meal Kansas City 200 Whole Cottonseed Memphis 140 Blood Meal **Central United States** 460 Corn Hominy 96-101 Kansas City Corn Gluten Feed Kansas City 80-85 Corn Gluten Meal 60% Kansas City 340-345 Distillers Dried Grain **Central Illinois** 115-130 Brewers Dried Grain St. Louis 108 Wheat Middlings Kansas City 76 - 79

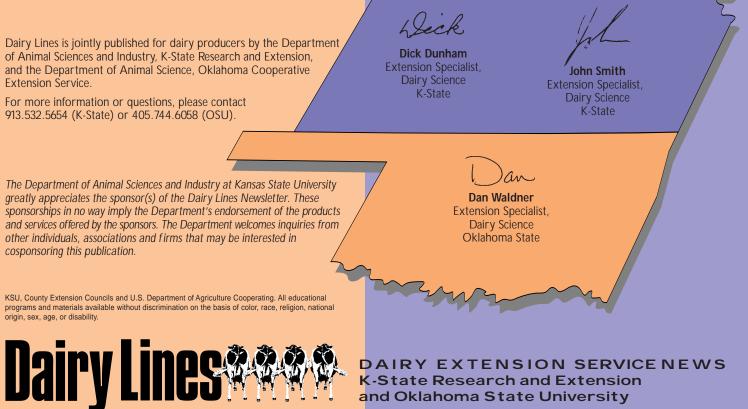
Source: USDA Weekly Feed Stuffs Report, Week ending November 7, 1997



Kansas Dairy Association

Department of Animal Sciences & Industry 125 Call Hall Manhattan, Kansas 66506–1600

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