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Dairy Lines

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KANSAS DAIRY EXTENSION NEWS

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

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Upcoming Events

Dairy Herd Health Meetings
10 a.m.–2:30 p.m.
March 3
Valentino's
Seneca, KS
March 4
Sedgwick Co. Ext. Off.
Wichita, KS

Milk Quality—Using the Days in Milk SCC Averages

by J.R. Dunham

Subclinical mastitis is the most costly disease on dairy farms. The DHIA Somatic Cell Count (SCC) Summary (DHIA-230) is a valuable tool for evaluating and managing mammary health in a dairy herd.

The Days in Milk Averages is an important section on the DHIA-230 for evaluating dry cow treatment and management programs and for evualuating milking management.

The Days in Milk Averages shown in Figure 1 is actually a stage of lactation profile for SCC. Cows' SCC on each test day are grouped according to their stage of lactation.

The averages for the top 25 percent of herds in the Mid-States DRPC also is shown in this section. Notice that the lowest SCC cows are 50 to 100 days in milk. Then the cell count increases slightly after 100 days. It also shows that cows in milk <50 days have lower SCC than those in milk >300 days. In many high SCC herds this is not the profile.

When the cows in milk <50 days are higher than late lactation cows, suspect a problem during the dry period. It may be dry cow treatments that are ineffective. However, in many cases, it is caused by cows becoming infected as they approach parturition. If the SCC average of cows during early lactation are higher than late lactation cows, usually, 1st lactation cows also will be high.

A thorough evaluation of the dry cows' environment should be made; determine if sanitation of the lots and housing system can be improved. Also, make sure that cows and heifers are not in mud around the hay and feed bunks.

Continued on page 2

Figure 1. **Days in Milk Averages. From DHIA-230.**

Days in Milk Averages	Your Herd	Mid-States Top 25%	Animals > 400	% > 400
Fresh Under 50 Days	268	129	6	15
Fresh 50-100 Days	87	121	1	3
Fresh 101-200 Days	142	144	5	10
Fresh 201-300 Days	163	161	1	6
Fresh Over 300 Days	187	200	1	6

Heart of America Dairy Herd Improvement Summary (January)

	Quartiles				Your Herd
	1	2	3	4	
Aryshire					
Rolling Herd Average	16,515	13,614	12,720	10,361	
Summit Milk Yield 1st	57.6	50.5	47.0	43.0	
Summit Milk Yield 2nd	68.1	62.0	56.9	50.4	
Summit Milk Yield 3rd	73.9	66.3	60.6	54.3	
Summit Milk Yield Avg.	67.2	59.7	55.0	50.5	
Income/Feed Cost	1,229	951	957	813	
SCC 1st LACT	238	142	303	215	
SCC 2nd LACT	165	293	462	466	
SCC 3rd+ LACT	430	390	830	549	
SCC Average	302	289	558	449	
Days to 1st Service	88	90	83	110	
Days Open	128	141	135	144	
Projected Calving Interval	410	423	417	426	
Milking Shorthorn					
Rolling Herd Average	14,714	12,885	11,662	10,395	
Summit Milk Yield 1st	51.9	49.2	45.6	50.3	
Summit Milk Yield 2nd	65.8	55.4	53.2	17.3	
Summit Milk Yield 3rd	71.0	61.3	58.6	63.3	
Summit Milk Yield Avg.	62.8	56.4	51.9	55.6	
Income/Feed Cost	1,316	1,287	831	317	
SCC 1st LACT	162	102	370	173	
SCC 2nd LACT	313	158	599	60	
SCC 3rd+ LACT	445	942	973	84	
SCC Average	306	524	631	129	
Days to 1st Service	93	86	84	163	
Days Open	123	136	99	163	
Projected Calving Interval	405	418	379	445	
Holstein					
Rolling Herd Average	21,794	18,809	16,843	13,785	
Summit Milk Yield 1st	70.3	63.1	58.0	49.4	
Summit Milk Yield 2nd	89.6	79.3	72.2	60.0	
Summit Milk Yield 3rd	94.3	84.0	76.8	64.4	
Summit Milk Yield Avg.	83.7	75.0	69.2	58.8	
Income/Feed Cost	1,872	1,570	1,400	1,029	
SCC 1st LACT	245	283	318	375	
SCC 2nd LACT	272	298	356	449	
SCC 3rd+ LACT	415	455	535	686	
SCC Average	316	356	421	543	
Days to 1st Service	92	94	95	100	
Days Open	145	142	139	143	
Projected Calving Interval	424	422	419	422	
Jersey					
Rolling Herd Average	15,747	13,325	11,799	9,783	
Summit Milk Yield 1st	50.6	44.5	38.9	35.4	
Summit Milk Yield 2nd	62.1	54.4	49.6	41.7	
Summit Milk Yield 3rd	66.5	57.1	53.0	44.9	
Summit Milk Yield Avg.	59.8	52.4	48.2	41.5	
Income/Feed Cost	1,588	1,187	1,039	859	
SCC 1st LACT	244	246	203	393	
SCC 2nd LACT	281	329	257	425	
SCC 3rd+ LACT	403	521	485	591	
SCC Average	323	391	358	497	
Days to 1st Service	83	87	90	85	
Days Open	120	122	126	119	
Projected Calving Interval	399	401	405	398	

Milk Quality, continued from page 1

To evaluate milking management, compare the SCC of cows in milk <50 days to those in milk 50 to 100 days. If the second group is higher, suspect a problem with milking management. A higher SCC indicates that the milking management program is stressful and the cows respond with higher SCC after 50 days in milk. Usually, the SCC will increase in each stage of lactation.

The stress causing higher SCC as cows go through lactation can be due to milking techniques, poor sanitation in the parlor, and/or faulty milking equipment—suspect the first two situations first.

If milking management does not seem to be the cause of higher SCC as cows go through lactation, then the problem is probably narrowed down to the lots and housing system. Systems that do not provide dry and comfortable conditions in the feeding and lounging areas can certainly cause high SCC.

In too many systems cows will not use free stalls unless the weather is extremely severe. Look for conditions of the free stall barns that may not be comfortable for cows, including condition of the free stall surface and ventilation in the barn. In too many systems the cows will congregate in the allies of the free stall barn where there is air movement—this area becomes sloppy and high SCC usually follow.

High producing dairy herds can consistently average <200,000 SCC. Herds with consistently higher averages can improve the count and realize higher profit. Days in Milk SCC Averages can disclose the pitfalls in many herds needing to be removed before improvement can be made.

New!
Dairy Factsheets

The following factsheets are available through your local county Extension office; or by ordering from The Department of Communications Distribution Center • Room 26 Umberger Hall, Manhattan, KS 66506 • Phone, 785-532-5830 • FAX, 785-532-7938 • e-mail, orderpub@lists.oznet.ksu.edu. Please specify the title and publication number (MF ----) in your order.

Commonly Asked Questions About rbST, MF-2168
Dairy "Preventive Herd Health Program" (PHHP), MF-2101
Lameness in Dairy Cattle, MF-2070
Planning a Milking Center, MF-2165

These factsheets were developed by the Department of Animal Sciences and Industry at K-State.

Do You Want to Renovate the Milking Parlor?

by John F. Smith, Dennis V. Armstrong and Mike J. Gamroth

With today's growing herds, people are spending more and more time in the parlor, but it's a big investment.

What about converting your herringbone to a parallel? We've looked at converted parlors and compared them to new ones. It looks like "steadystate throughput" is 10 to 12 percent higher in new versus renovated parlors. For example, you might expect to get 104 cows an hour through a new double-12 parallel and about 93 per hour through a double-6 herringbone converted to a double-12 parallel. Comparable figures for a double-20 parallel would be 187 cows per hour for a new parlor and 161 for a conversion. We assume the same automation and number of operators.

The major reason converted parlors are slower is that there is less cow exit space. This adds to the time needed for cows to leave the parlor. Essentially, you're putting larger groups of cows through the same facility.

Before renovating an existing parlor, dairy producers may want to ask the following questions:

1. What are my long term goals?
2. How many cows do I want to work in the future?
3. Is there room for additional cow housing near the existing parlor?
4. Do I have sufficient acreage to expand the waste management system?
5. How will renovating the parlor effect my bottom line?
6. What is the return on investment?

Remodeling the milking parlor is an important decision. If the goal is to expand the number of cows during the process, careful planning must take place to expand cow housing and the waste management system. This process often is very difficult on facilities that have already been remodeled over the years.

Dairy and Beef Herd Health Meetings

Featuring:
Dr. Jan Shearer, Extension Veterinarian, University of Florida

Topic:
Dairy and Beef Cattle Lameness

Locations:
March 3, 1997 Valentino's, Seneca, KS
March 4, 1997 Sedgwick County Extension Office
7001 W. 21st Street North, Wichita, KS

Schedule:

10:00 a.m.	Coffee, Donuts and Registration
10:30 a.m.	Dairy and Beef Cattle Lameness
12:00 p.m.	Lunch, Dutch treat
1:00 p.m.	Dairy and Beef Cattle Lameness
2:30 p.m.	Adjourn

If you have questions contact:

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*Hay Prices**

	Location	*Quality*	*Price ($/ton)*
Alfalfa	Southwestern Kansas	Premium	120–145
Alfalfa	Southwestern Kansas	Good	115–120
Alfalfa	South Central Kansas	Premium	110–120
Alfalfa	South Central Kansas	Good	90–100
Alfalfa	Southeastern Kansas	Premium	110–120
Alfalfa	Southeastern Kansas	Good	95–120
Alfalfa	Northwestern Kansas	Premium	110–120
Alfalfa	Northwestern Kansas	Good	80–90
Alfalfa	North Central Kansas	Premium	110–120
Alfalfa	North Central Kansas	Good	100–110

Source: USDA Weekly Hay Report, *Week ending February 4, 1997*

*Premium Hay RFV = 170–200
Good Hay RFV = 150–170

Feed Stuffs Prices

	Location	*Price ($/ton)*
SBM 48%	Kansas City	250.20–252.20
Cotton Seed Meal	Kansas City	204–210
Whole Cottonseed	Memphis	135–140
Meat and Bone Meal	Central United States	255–260
Blood Meal	Central United States	545
Corn Hominy	Kansas City	90–93
Corn Gluten Feed	Kansas City	110
Corn Gluten Meal 60%	Kansas City	330–340
Distillers Dried Grain	Central Illinois	147–150
Brewers Dried Grain	St. Louis	134
Wheat Middlings	Kansas City	100–104

Source: USDA Weekly Feed Stuffs Report, *Week ending January 29, 1997*

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