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Dairy Lines

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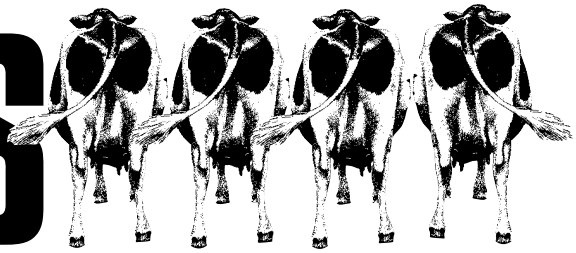
KANSAS DAIRY EXTENSION NEWS



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Upcoming Events

- **September 6–15**
  Kansas State Fair
  Hutchinson, Kansas

- **October 25**
  KSU Dairy Day
  Manhattan, Kansas

Cows in Transition

by J.R. Dunham

As dry cows and springing heifers approach freshening, they are neither dry or lactating—they are in transition between non-lactating and lactating. The transition period is the two- to three-week period before calving. Feeding and management practices during transition can have a marked affect on the next lactation.

Cows and heifers in transition need to be separated from the dry and lactating cows. The transition period is a time for nutritional adjustment; thus, neither the dry or lactating cows' rations fit the needs of the transition cow.

The goals of the transition ration are to adjust cows to the lactating cows' forage and to increase the level of energy in the ration. The lactating ration usually is too high in calcium, potassium, buffer and salt, and can lead to metabolic problems near freshening. Excess minerals also can lead to excessive udder edema.

During transition, the rumen microbes can adjust to the type of forages in the lactating ration, particularly ensiled forages. If the rumen microbes have not had a chance to adjust to ensiled forages, dry matter intake will be depressed after freshening. Hence, forages fed to the lactating cows should be fed to the transition cows. However, limit alfalfa intake to not more than 10 pounds dry matter per day due to the high calcium and potassium content.

Grain mix should be fed at the rate of approximately 1 percent of body weight for adjustment to high energy rations. The grain should contain low levels of mineral and no salt. In Kansas, anionic salts usually are not required if the calcium and potassium content of the transition ration is not too high.

The transition period is a critical time for preventing new mastitis infections. Most dry cow treatments will probably cure mastitis in dry cows, but too many freshen with mastitis because they were infected during transition. As the mammary system makes up for the next lactation, it is somewhat vulnerable to a new infection. Keeping transition cows and heifers clean, dry, and comfortable will go a long way towards controlling new mastitis infections. If mammary problems develop in transition cows and heifers, prepartum milking is the best treatment.

Heart of America Dairy Herd Improvement Summary (July)

	Quartiles				Your Herd
	1	2	3	4	
Guernsey					
Rolling Herd Average	16,420	13,975	12,578	10,640	
Summit Milk Yield 1st	58.4	51.3	46.7	42.6	
Summit Milk Yield 2nd	66.3	62.1	57.6	49.5	
Summit Milk Yield 3rd	68.4	64.4	58.3	49.7	
Summit Milk Yield Avg.	64.6	58.5	53.4	47.3	
Income/Feed Cost	1,500	1,223	855	746	
SCC 1st LACT	195	200	326	294	
SCC 2nd LACT	131	284	395	372	
SCC 3rd+ LACT	557	405	436	610	
SCC Average	293	299	386	451	
Days to 1st Service	90	86	99	97	
Days Open	153	149	159	152	
Projected Calving Interval	439	434	445	437	
Milking Shorthorn					
Rolling Herd Average	15,183	13,673	12,383	10,186	
Summit Milk Yield 1st	55.0	42.2	47.7	43.9	
Summit Milk Yield 2nd	76.6	61.6	58.6	65.7	
Summit Milk Yield 3rd	70.5	71.8	65.8	60.2	
Summit Milk Yield Avg.	68.6	60.8	57.3	54.5	
Income/Feed Cost	1,200	1,090	901	585	
SCC 1st LACT	238	65	254	149	
SCC 2nd LACT	94	133	316	52	
SCC 3rd+ LACT	417	122	865	300	
SCC Average	267	103	481	215	
Days to 1st Service	85	97	85	74	
Days Open	155	137	121	84	
Projected Calving Interval	437	419	403	366	
Holstein					
Rolling Herd Average	21,652	18,807	16,904	14,040	
Summit Milk Yield 1st	70.8	63.6	58.8	51.1	
Summit Milk Yield 2nd	90.8	80.8	73.4	62.3	
Summit Milk Yield 3rd	96.0	85.5	78.6	66.8	
Summit Milk Yield Avg.	84.4	75.8	70.2	60.6	
Income/Feed Cost	1,654	1,380	1,379	937	
SCC 1st LACT	279	304	312	362	
SCC 2nd LACT	295	328	350	415	
SCC 3rd+ LACT	481	529	531	643	
SCC Average	355	395	411	502	
Days to 1st Service	92	94	99	99	
Days Open	141	142	144	143	
Projected Calving Interval	421	422	424	423	
Jersey					
Rolling Herd Average	15,652	13,310	11,993	10,050	
Summit Milk Yield 1st	51.8	46.2	41.1	36.5	
Summit Milk Yield 2nd	62.9	55.3	50.7	43.7	
Summit Milk Yield 3rd	67.5	60.3	54.1	47.2	
Summit Milk Yield Avg.	61.1	55.1	49.2	43.3	
Income/Feed Cost	1,457	1,029	953	733	
SCC 1st LACT	273	322	242	347	
SCC 2nd LACT	253	331	310	328	
SCC 3rd+ LACT	453	516	466	605	
SCC Average	348	415	368	460	
Days to 1st Service	85	89	91	91	
Days Open	120	122	126	130	
Projected Calving Interval	399	401	405	407	

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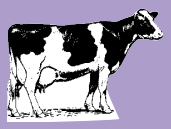
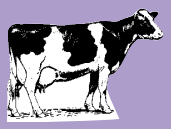


Sire I.D. Versus Production

What effect does sire identification have on a rolling herd average? A trivia question . . . but an analysis of Mid-States Holstein herds shows marked differences in sire selection when herds are ranked by quartiles for Rolling Herd Average (RHA). The table below shows that higher producing herds use a greater percent of genetically superior sires and do a better job of identification. While better identification will not make them milk better, selecting superior sires will!

	Sires of Cows		
Rolling Herd Avg	%I.D.	%w/PTA$P	PTA$P
14,040	36	31	+69
16,904	53	47	+80
18,807	68	60	+86
21,652	77	71	+93



Kansas State Fair Dairy Activities

Sept. 7 ..... 4-H Judging Contest & Quiz Bowl
Sept. 8 ..... Jersey & Guernsey Shows
Sept. 9 ..... Holstein Show
Sept. 10 ..... Celebrity Milking Contest
Sept. 13 ..... Milking Shorthorn Show
Sept. 14 ..... Ayrshire & Brown Swiss Shows

Managing Body Condition

by John F. Smith

Many times, producers call disappointed with the milk production in their herd. Often, they are frustrated and looking for an easy way to correct the problem, such as adding a feed ingredient. When in this situation we would all like to find a single reason why we're experiencing a decrease in milk production. Some of the reasons expressed include: the weather has been hot; my milking equipment needs servicing; something is wrong with my dry cow program; the bst is not working; or I need more bypass protein in the ration. It would be nice if we could locate one problem, however, often it is a number of issues including the body condition of the cows at different stages of lactation.

Body conditioning cows often is put on the back shelf in many operations but is extremely useful in evaluating the nutrition program of both lactating and dry cows. When cows are scored on body condition, they are assigned a score between 1 and 5, with 1 being excessively thin and 5 being excessively conditioned. The majority of cows will have a score from 2 to 4. Body condition scores are subjective so it is important that one person does the scoring. An ideal situation is where a third party such as a veterinarian or nutritionist scores the cows. This will avoid bias scoring. Ideally, cows would be evaluated once a month. However, many producers prefer to score cows at several critical times throughout the lactation and dry period. Some of these critical times include;

- ✓ Dry Off
- ✓ Calving
- ✓ Breeding
- ✓ 100 days prior to dry off

If cows are consistently scored at these times, records can be kept over time to evaluate changes in body condition. The herd can then be divided into the following areas for evaluation;

- ✓ Dry cow management
- ✓ Fresh cow management
- ✓ Late lactation

Differences in the scores between dry off and calving can be used to evaluate the dry cow program. The change in body condition between calving and breeding can be used to evaluate how well cows are making the transition from the dry pen to the lactating strings. It is important to evaluate condition 100 days prior to dry off to determine if ration changes need to be made to ensure cows have proper body condition at dry off. The goal is to avoid body condition score changes more than 1 score throughout the lactation. On average, cows would have a score of 3.5 at calving and not drop below 2.5 at breeding. Average scores at 100 days prior to dry off would range between 2.75 and 3. Body condition scoring is one of those tedious jobs we would all like to avoid. However, it is a critical tool in making nutritional and management changes with different groups of cows. Cows must be in good body condition before we can evaluate the effects of nutritional programs and management strategies on the dairy.

Hay Prices*

	Location	Quality	Price ($/ton)
Alfalfa	Southwestern Kansas	Premium	110–120
Alfalfa	Southwestern Kansas	Good	100–110
Alfalfa	South Central Kansas	Premium	100–110
Alfalfa	South Central Kansas	Good	90–100
Alfalfa	Southeastern Kansas	Premium	100–115
Alfalfa	Southeastern Kansas	Good	90–100
Alfalfa	Northwestern Kansas	Premium	90–105
Alfalfa	Northwestern Kansas	Good	80–90
Alfalfa	North Central Kansas	Premium	90–100
Alfalfa	North Central Kansas	Good	80–90

Source: USDA Weekly Hay Report, *Week ending August 9, 1996*

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

Feed Stuffs Prices

	Location	Price ($/ton)
SBM 48%	Kansas City	247.50–248.50
Cotton Seed Meal	Kansas City	211–211.50
Whole Cottonseed	Memphis	155–160
Meat and Bone Meal	Central United States	235–244
Blood Meal	Central United States	407.50–410
Corn Hominy	Kansas City	135–140
Corn Gluten Feed	Kansas City	115
Corn Gluten Meal 60%	Kansas City	300–305
Distillers Dried Grain	Central Illinois	148–156
Brewers Dried Grain	St. Louis	142
Wheat Middlings	Kansas City	98–103

Source: USDA Weekly Feed Stuffs Report, *Week ending August 9, 1996*

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