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Upcoming Events

K-State Dairy Days Nov. 8–Whiteside, KS Nov. 9–Seneca, KS





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DAIRY RESEARCH & EXTENSION NEWS

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Weigh replacement options to reduce financial risk

Mike Brouk Kansas State University

As replacement heifer cost has increased and supply decreased during the past year, many producers are taking a more active role in the production of their future herd. The value of springing heifers has increased from \$1,200-1,300 to more than \$2,000 during the past year. Many producers report a shortage of quality heifers and are reluctant to buy at the current prices. Difficult times require greater management skills, and many producers are taking another look at their operation's replacement program.

Dairies that have expanded in the past several years have depended on a supply of heifers from independent growers, brokers and sales. This has allowed the dairies financial flexibility by transferring the investment in replacements to a point near the entrance of the animal into the lactating herd. However, when heifer prices exceed budgeted amounts, the operation must provide additional capital or reduce the number of replacements purchased. Reducing the number of replacements will reduce total herd size and likely result in reduced future milk revenue. This generally has negative longterm effects on the financial success of the operation.

Culling

How can a dairy reduce the risk associated with heifer supply and price? First, reduce cull rates. During the past decade,

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Kansas Dairy Days set in two locations

K-State Dairy Days 2001 will take place in November in two locations.

November 8 10 a.m.–2:00 p.m. Whiteside Amish Community Bldg. Greg McCormack, 316-662-2371

> November 9 10 a.m.–2:00 p.m. Seneca, Valentino's David Key, 785-336-2184

The featured speaker is Dr. Bill Mahanna, Pioneer Hi-Bred International, Inc., who will discuss *Selecting Silage Hybrids*, and *Evaluating Nutritive Value of Silages*.

Research updates will focus on the following topics: *Fan Placement in Barns*, John Smith; *Head locks vs. Feed rails*, Mike Brouk; *Nutrition*, John Shirley; *Reproduction*, Jeff Stevenson; *Drinking Water*, Joe Harner, and *Raw Milk Quality*, Karen Schmidt.

Meals will be sponsored by the Kansas Dairy Commission. Call for reservations.

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cull rates have increased in many areas of the country. Cull rates of 35-40% are not uncommon. Data generated with Dairy Metrics (Dairy Records Management Systems, Raleigh, NC) indicated that the average Midwest Holstein herd had an annual cull rate of 38% and a 6% death rate. For those herds adding 50 or more cows during the past year (76 herds), the cull rate was 38% with a death rate of 7%. Reproduction and low milk production are generally the major reasons for culling. Reproduction is one measure of our ability to manage cows on an individual basis. While we manage groups of cows, breeding success is determined on each cow. Cows having a difficult calving, metritis, metabolic disease, etc. are less likely to rebreed. Many times these problems can be traced to the transition period.

Culling of heifers is especially costly to the dairy operation. As the price of heifers increases, this financial burden becomes even greater. Net profit from the first lactation will not cover the capital loss associated with the early departure of the animal. The dairy operation must generate additional profit to cover these losses. The low milk prices during 2000 made this especially challenging.

Reducing cull rates depends upon excellent preventative care and early detection of animals requiring treatment. The transition period (3 weeks before and 2 weeks after calving) is the most critical period for the dairy cow and offers the greatest opportunities for reducing cull rates. Careful attention to cow comfort—heat stress abatement; clean, dry facilities; adequate resting, feeding and drinking water space—will improve intakes and provide greater immune function during this stressful period. Careful attention to diet formulation and delivery is critical. Finally, careful observation of animals including daily measurement of rectal temperature after calving will ensure that individual animals are treated quickly. Treatment within the first 6 to 12 hours of the onset of a challenge is important for rapid recovery.

Analyze the culling decisions on your dairy to determine why animals are leaving your herd. Review individual cow records to determine if culling could have been prevented. Some dairies have cull rates below 20%. How would your cash flow be affected if your rate dropped from 35% to 30%? You could purchase 5% fewer heifers, sell some heifers or expand the herd 5%.

Replacements

Reducing cull rates will help reduce the number of replacements required, but will not ensure a supply. The current replacement situation is not a major problem for producers who raise their own replacements or have an arrangement with a heifer grower. For operations choosing not to raise replacements, developing an arrangement with one or more heifer growers is an important step in ensuring a future supply of replacements for a dairy operation. However, it is not easy and requires management time.

When entering into an agreement with a heifer grower, make it a win-win situation for both parties. Producers need to visit the facilities, check references and make plans to visit your future herd at least every couple of months. When the heifers return as springers, it is too late to make changes for those animals. Records of growth rates are helpful in determining how your "employee" (the heifer grower) is performing. While the grower is operating an independent business, he or she is providing a vital service to your herd. The grower has your future in his or her hand!

Once the relationship with a grower is established or if the dairy is going to raise replacements, careful attention should be given to the quality of the calves produced by the operation. Dairy producers generally determine the genetics and initial health of the calves. What kind of genetics do you want for your future herd? We have known for years that genetics can make a difference. What genetic levels are required for your operation? This answer may be different for each herd. It is depends on the production and management goals of the operation. Decide where you want your farm to be in five years and select genetics to match those goals.

Calves are generally born on the dairy and transferred to the heifer grower or heifer development site. High death losses during the first week of life still occur on many operations. These losses are preventable with adequate vaccination programs, colostrum management, housing and animal management. However, management may not want to devote time to this area of the operation. This is a mistake that could be costly in the future. A little time spent now can reduce future replacement costs.

The current replacement heifer situation is forcing the industry to take a closer look at replacement options. Development of a plan to supply adequate numbers of quality replacements is important to the future success of a dairy. This may require an adjustment in management and financial resources. A barn full of lactating cows today does not ensure the future of an operation. Neglect of your heifer replacement program is poor financial planning.

Manure Utilization Workshops

Beef and Dairy Manure Utilization Workshops are scheduled for December: Dec. 10, Seneca; Dec. 11, Wichita Dec. 12, Erie; and Dec. 13, Ottawa. For details contact Joe Harner at 785-532-2930.

- Topics:
- Why Be Concerned with Managing Livestock Wastes? State and national water quality concerns, total maximum daily loads
- Agronomic Management of Nutrients I Nutrient crediting worksheet, soil sampling and testing, manure nutrient testing, sampling liquid and solid manures
- Agronomic Management of Nutrients II Agronomic impact of manure application meth ods, examples of nutrient management planning
- Manure Application Considerations Land application methods, impact of manure application methods, calibration of application methods and solid and liquid storage consideratoins
- Controlling Other Livestock Pollution Concerns
 Pasture/feeding considerations
- Feeding to Reduce Excreted Nutrients

Hay Prices*—Kansas							
Location	Quality	Price (\$/ton)					
Southwestern Kansas	Supreme	125–130					
Southwestern Kansas	Premium	110-130					
Southwestern Kansas	Good	100					
South Central Kansas	Supreme	115-135					
South Central Kansas	Premium	100-125					
South Central Kansas	Good	—					
Southeastern Kansas	Supreme	110					
Southeastern Kansas	Premium	100-110					
Southeastern Kansas	Good	—					
Northwestern Kansas	Supreme	105-110					
Northwestern Kansas	Premium	90-105					
Northwestern Kansas	Good	—					
North Central/East Kansas	Supreme	105-120					
North Central/East Kansas	Premium	90-105					
North Central/East Kansas	Good	80-85					
	ices*—Kansas Location Southwestern Kansas Southwestern Kansas Southwestern Kansas South Central Kansas South Central Kansas South Central Kansas Southeastern Kansas Southeastern Kansas Northwestern Kansas Northwestern Kansas Northwestern Kansas Northwestern Kansas Northwestern Kansas Northwestern Kansas Northwestern Kansas North Central/East Kansas North Central/East Kansas	ControlLocationQualitySouthwestern KansasSupremeSouthwestern KansasPremiumSouthwestern KansasGoodSouth Central KansasSupremeSouth Central KansasPremiumSouth Central KansasGoodSouth Central KansasSupremeSouth Central KansasSupremeSouth Central KansasSupremeSouth Central KansasSupremeSoutheastern KansasGoodNorthwestern KansasSupremeNorthwestern KansasSupremeNorthwestern KansasSupremeNorthwestern KansasSupremeNorthwestern KansasSupremeNorthwestern KansasSupremeNorthwestern KansasSupremeNorthwestern KansasSupremeNorth Central/East KansasSupremeNorth Central/East KansasGood					

Supreme = over 180 RFV (less than 27 ADF) Premium = 150–180 RFV (27–30 ADF) Good = 125–150 RFV (30–32 ADF)

Source: USDA Kansas Hay Market Report, October 5, 2001.

Hay Prices—Oklahoma							
	Location	Quality	Price (\$/ton)				
Alfalfa	Central/Western, OK	Premium	100-120				
Alfalfa	Central/Western, OK	Good	95-110				
Alfalfa	Panhandle, OK	Premium	110-120				
Alfalfa	Panhandle, OK	Good	100-110				
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Source: Oklahoma Department of Agriculture, October 4, 2001

Feed Stuffs Prices					
	Location	Price (\$/ton)			
Blood Meal	Texas Panhandle	405-415			
Canola Meal		—			
Corn Gluten Feed	Kansas City	74-76			
Corn Gluten Meal	Kansas City	270-280			
Corn Hominy	Kansas City	76–78			
Cotton Seed Meal	Kansas City	155–165			
Whole Cotton Seed	Memphis	90			
Distillers Grains	Central Illinois	95-100			
Menhaden Fish Meal	Gulf	435–445			
Pork—Meat and Bone Meal	Texas Panhandle	185–195			
SBM 48%	Kansas City	167-178			
Sunflower Meal		85			
Wheat Middlings	Kansas City	57-62			

Source: USDA Feedstuff Market Review, October, 2001



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Ay	vrshire	10 105	15.061	14.140	10.070	
	Rolling Herd Average	19,105	15,361	14,149	12,370	
	Summit Milk Yield Ist	64.0	0.0	49.0	43.5	
	Summit Milk Yield 2nd	//.U	35.50	65.0	64.0	
	Summit Milk Yield Avg	80.0	25.5	57.0	58 50	
	Income/Feed Cost	1 716 0	788.0	1286.0	574.0	
	SCC Average	231.0	202.0	560.0	370.0	
	Days to 1st Service	76.0	27.0	69.0	53.5	
	Days Open	146.0	92.5	108.0	189.0	
1	Projected Calving Interval	14.0	12.30	12.80	15.40	
B	rown Swiss					
	Rolling Herd Average	19.686.2	16.919.2	15 466 3	13,918,3	
	Summit Milk Yield 1st	60.17	58.0	53.0	47.29	
	Summit Milk Yield 2nd	70.17	60.33	66.17	62.43	
	Summit Milk Yield 3rd	87.33	74.33	70.17	66.86	
	Summit Milk Yield Avg.	70.17	67.67	63.50	59.86	
	Income/Feed Cost	1,661.25	1,591.0	1,444.7	1,045.8	
	SCC Average	493.67	400.83	507.0	413.0	
	Days to 1st Service	65.5	64.17	88.50	72.86.	
	Days Open	196.83	165.83	174.67	234.57	
	Projected Calving Interval	15.68	14.68	14.95	16.93	
н	olstein					
	Rolling Herd Average	23,037.3	19,986.3	17,801.4	14,451.8	
	Summit Milk Yield 1st	73.0	66.09	59.96	52.06	
	Summit Milk Yield 2nd	92.45	83.37	74.35	63.09	
	Summit Milk Yield 3rd	97.75	87.87	78.54	68.27	
	Summit Milk Yield Avg.	86.66	78.54	71.47	62.45	
	Income/Feed Cost	1,902.4	1,599.38	1,384.76	1037.2	
	SCC Average	375.63	426.95	455.71	620.87	
_	Days to 1st Service	96.54	97.51	94.42	93.42	
	Days Open	174.78	176.67	188.91	218.89	
	Projected Calving Interval	14.96	15.02	15.43	16.41	
Je	rsey					
	Rolling Herd Average	16,935.5	14,345.9	13,103.6	11,301.2	
_	Summit Milk Yield 1st	47.44	45.56	45.78	38.0	
	Summit Milk Yield 2nd	65.78	59.78	61.0	45.22	
_	Summit Milk Yield 3rd	72.44	63.44	51.33	48.0	
	Summit Milk Yield Avg.	65.44	56.67	54.67	43.89	
_	Income/Feed Cost	1,869.63	1,507.29	1,235.86	811.86	
	SCC Average	369.78	284.89	453.33	577.78	
	Days to 1st Service	83.67	80.33	62.89	91.0	
	Days Open	145.33	132.11	159.56	152.33	
_	Projected Calving Interval	13.99	13.56	14.46	13.19	
M	ilking Shorthorn					
	Rolling Herd Average	15,380.0	14,889.0	13,931	11,233.0	
_	Summit Milk Yield 1st	50.0	53.0	54.0	47.5	
	Summit Milk Yield 2nd	66.0	68.0	62.0	27.5	
_	Summit Milk Yield 3rd	70.0	78.0	66.0	62.0	
	Summit Milk Yield Avg.	65.0	65.5	61.0	56.0	
i.	Income/Feed Cost	210	1295.0	1,358.0	1,038.0	
	SCC Average	312	256.0	2/6	344.5	
	Days to 1st Service	0.0	92.5	110.0	124.0	
	Days Open	91.0	149.5	124.0	177.5	
	Fiojected Calving Interval	12.20	14.10	15.50	15.0	

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