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John F. Smith Extension Specialist, Dairy Science

Dan Waldner Extension Specialist, Dairy Science

Mike Brouk Extension Specialist, Dairy Science

#### **Contributors**

Karen Schmidt Professor, Dairy Products

John Shirley Professor, Dairy Science

#### Jeff Stevenson Professor, Dairy Science

Dave Sukup Manager, Heart of America DHI

#### Upcoming Events

Oklahoma Field Days Registration: 9 a.m. Judging contest: 10a.m.

June 10 Milking Shorthorn, Calvin

June 12 Brown Swiss/Jersey, Perkins

June 13 Guernsey/Ayrshire, Perkins

Juhe 18 Holstein/Grady Co. Judging Clinic, Chickasha





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# Monitor bulls closely to avoid problems in dairy operations

Natural service (NS) bulls are commonly employed on U.S. dairy farms, particularly on newly established large dairies. Bulls may be employed exclusively at first, then progressively less as improved management allows more emphasis to be placed on genetic progress within the herd.

Problems can arise because dairy bulls often are not subjected to close scrutiny or monitoring. In addition, management practices on many dairies are not conducive to optimal bull-breeding performance. As a result, many dairies undoubtedly fail to obtain optimal reproductive performance from NS bulls.

NS bulls provide the default option when the effective implementation of artificial insemination (AI) is difficult or not cost effective. Bulls are used in breeding management schemes to eliminate perceived obstacles to AI including costs and the lack of qualified personnel to adequately perform tasks such as heat detection.

A common perception is that a motivated bull generally will detect more heats than will humans, particularly if the latter are poorly trained or motivated. Theoretically, bulls should also be able to deposit semen at the most advantageous time for female fertility, as they work around the clock and often service receptive females a number of times.

Bulls continue to be used in dairy herds because they provide an alternative to managing a heat-detection or an estrussynchronization program and save the cost of implementing a successful AI program.

Problems can arise as encountered on a 2,500-cow dairy in southwest Kansas. Many of the bulls at the dairy were observed to be tentative in their footing. Twenty-one of 98 bulls examined, a total of 21 percent, were classified as poor breeding prospects and recommended to be culled. An additional seven bulls had problems that might compromise breeding success but that could improve with time. The most common bull problem encountered was lameness, although a number of bulls also showed evidence of seminal vesiculitis/accessory of seminal disease.

The practice of running bulls in mixedage groups with large numbers of females in free stalls and on concrete appeared to be a major contributor to the dairy's bull problem. In this case, running older bulls with younger bulls, particularly in confined spaces, could have contributed to lowered activity by the younger group because older bulls tend to be dominant, more aggressive, and prevent other males, even if they are infertile.

Older bulls also pose a human safety risk, as well as tending to outgrow free stalls.

Lameness also was a concern with cows at the dairy, with factors such as poor concrete texture and free-stall design probably contributing to this problem.

continued on page 2

Consider the following recommendations when using bulls in a commercial dairy:

• Subject all virgin bulls to a breeding soundness evaluation (BSE) before admitting them to the herd.

• Give bulls a physical exam every 6 months and a full breeding soundness exam every 12 months.

• Provide adequate handling facilities for the working and handling of bulls to reduce the risk of injury to both animals and personnel.

• Give bulls in free-stall housing regular access to dirt lots.

• Monitor working bulls daily. It is important for personnel to be especially alert for signs of lameness. Early detection of lame bulls is critical. Train employees to observe common lameness signs, as well as other problems associated with breeding bulls. Treat or replace lame or otherwise injured bulls as soon as possible. • A workable system is to maintain bulls in breeding groups that will be rotated into the breeding herd for one or two weeks, followed by the same time for rest.

• Bulls ideally should be less than 2.5 years of age, aggressive, older and large. Heavy bulls should not be retained on the dairy.

• A suitable bull-to-female ratio is approximately one bull for 12 to 25 open cows.

• If a dairy has large breeding pens with large numbers of animals, it may be beneficial to distribute open cows over more pens to reduce the number of bulls in any given pen.

• Avoid drastic changes in diets fed to bulls. Don't put bulls abruptly onto the same diets as lactating cows without slowly increasing intake and energy in steps.

• Minimize the effects of heat stress by providing shade and a cooling system.

• Subject bulls to the same vaccination and preventive health program as the cows (with the exception of vaccinations for brucellosis, trichomoniasis and MLV IBR).

## Developing and Maintaining a Proper Pre-milking Routine

Every dairy needs to optimize pre-milking cow preparation in order to meet quality standards and maximize productivity and efficiency. While there are basic scientific principles that govern what is acceptable cow preparation procedure, not every farm will have the same routine. Reviewing the following list of factors may be helpful in determining what is best for your dairy. The ideal pre-milking cow preparation routine should:

- Minimize water use
- Focus attention on teat surfaces
- Use a sanitizer (i.e. pre-dip)
- Assure complete pre-dip coverage of the teat surfaces
- Allow 30 seconds of pre-dip contact time
- Provide a minimum let-down stimulus (teat massage, fore-stripping, teat drying) of 10 seconds
- Provide a prep lag time of 45 to 90 seconds
- Remove all dirt from teat surfaces
- Minimize machine-on time
- Minimize variation between milkers
- Not slow down milking

How do you ensure that the best pre-milking routine is being conducted on a consistent basis on your farm?

- Do a complete analysis of your present milking routine.
- Design a practical milking routine with consideration of your facility, milking equipment and milking personnel.
- Develop a written milking routine protocol for use as a job description and for training new employees.
- Have a routine milker meeting to train milkers, boost morale and solve problems. Use available training aids.
- Establish specific standards of performance (e.g. 150,000 SCC, or less and 5,000 standard plate count) and keep milkers informed of how they are doing by charting performance measures of milk quality and mastitis.
- Praise milkers when they are doing a good job, and challenge them to keep looking for ways to improve.

If you need help developing a milking routine and training employees, contact your local extension office or state dairy extension specialist.

Source: Udder Topics, December, 2001

Heart of America Dairy Herd Improvement Summary					
	Quartiles			Your	
	1	2	3	4	Herd
Ayrshire					
Rolling Herd Average	18,171	15,785	14,326	11,317	
Summit Milk Yield 1st	62.0	57.6	53.3	29.6	
Summit Milk Yield 2nd	69.0	67.0	41.0	35.3	
Summit Milk Yield 3rd	36.0	70.0	47.0	59.0	
Income/Feed Cost	07.5	1 235	1 1 3 9	55.0 608	
SCC Average	327	195	394	317	
Days to 1st Service	40	89	20	67	
Days Open	120	153	124	131	
Projected Calving Interval	13.1	14.2	10.2	13.5	
Brown Swiss	20.244	17 166	15 5 4	12 021	
Rolling Herd Average	20,244	17,166	15,764	13,931	
Summit Milk Yield 1st	05.5 81.5	51.2 60.7	44.1 66.5	47.5 62.4	
Summit Milk Yield 3rd	86.0	65.2	63.5	66.4	
Summit Milk Yield Avg.	77.5	68.1	63.8	61.4	
Income/Feed Cost	1,986	1,721	1,369	1,402	
SCC Average	418	392	390	412	
Days to 1st Service	94	44	85	72	
Days Open Projected Caluing Interval	1/5	155	1/2	211	
	14.9	14.2	14.9	10.1	
Bolling Herd Average	21 628	15 607	13 672	12 806	
Summit Milk Yield 1st	50.0	53.5	47.0	48.5	
Summit Milk Yield 2nd	0.00	64.5	56.0	53.0	
Summit Milk Yield 3rd	92.0	63.0	62.5	57.5	
Summit Milk Yield Avg.	78.0	60.5	57.5	54.5	
Income/Feed Cost		1,483	1,341	54.5	
SCC Average	57.0	349	183	1,190	
Days to 1st Service	108	103	209	238 99	
Projected Calving Interval	12.8	15.5	16.1	15.6	
Holstein					
Rolling Herd Average	23,030	20,163	17,896	14,590	
Summit Milk Yield 1st	73.3	66.5	60.6	52.2	
Summit Milk Yield 2nd	93.9	84.4	74.9	64.3	
Summit Milk Yield 3rd	100	89.7	81.3	69.3	
Summit Milk Yield Avg.	88.3	1 822	12.1	63.5	
SCC Average	2,178	394	432	555	
Days to 1st Service	88	88	94	95	
Days Open	168	169	181	210	
Projected Calving Interval	14.7	14.7	15.1	16.1	
Jersey					
Rolling Herd Average	17,748	14,982	13,366	11,208	
Summit Milk Yield 1st	54.2	48.7	40.0	40.1	
Summit Milk Yield 2nd	62.3 74.2	61.3	52.5	48.8	
Summit Milk Yield Avg	65.6	58.3	54.0	48.6	
Income/Feed Cost	2,149	1,719	1,330	1,058	
SCC Average	404	302	386	510	
Days to 1st Service	89	78	72	94	
Days Open	144	133	152	185	
Projected Calving Interval	13.9	13.6	14.2	15.3	
Milking Shorthorn	15 564	1/ 016	14 602	10 565	
Summit Milk Vield 1st	59.0	55.0	14,092	10,303	
Summit Milk Yield 2nd	58.0	73.0	64.0	55.0	
Summit Milk Yield 3rd	74.0	77.0	80.0	59.0	
Summit Milk Yield Avg.	63.0	69.0	66.0	51.5	
Income/Feed Cost	1,308	1,412	1,625	865	
SCC Average	220	154	237	390	
Days to 1st Service	85 180	301	84 126	151	
Projected Calving Interval	15.1	19.1	13.4	14.2	
r rojected curving micrya	1.5.1	17.1	1.5.4	17.4	

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	Location	Quality	Price (\$/ton)	
Alfalfa	Southwestern Kansas	Supreme	120-135	
Alfalfa	Southwestern Kansas	Premium	105-120	
Alfalfa	Southwestern Kansas	Good	—	
Alfalfa	South Central Kansas	Supreme	120-135	
Alfalfa	South Central Kansas	Premium	100-125	
Alfalfa	South Central Kansas	Good	—	
Alfalfa	Southeastern Kansas	Supreme	110-120	
Alfalfa	Southeastern Kansas	Premium	100-110	
Alfalfa	Southeastern Kansas	Good	80-90	
Alfalfa	Northwestern Kansas	Supreme	110-120	
Alfalfa	Northwestern Kansas	Premium	100-110	
Alfalfa	Northwestern Kansas	Good	_	
Alfalfa	North Central Kansas	Supreme	115-130	
Alfalfa	North Central Kansas	Premium	100-115	
Alfalfa	North Central Kansas	Good	85-95	
	Supreme = over 180 RFV (less than 27 ADF)			

 $\begin{array}{l} \text{Premium} = 0.01 \text{ 100 KM} + (1003 \text{ mlm} 27.47) \\ \text{Premium} = 150 - 180 \text{ RFV} (27 - 30 \text{ ADF}) \\ \text{Good} = 125 - 150 \text{ RFV} (30 - 32 \text{ ADF}) \end{array}$ 

Source: USDA Kansas Dept. of Ag Market News Service Report, April 2, 2002

Hay Prices—Oklahoma					
	Location	Quality	Price (\$/ton)		
Alfalfa	Central/Western, OK	Premium	105-120		
Alfalfa	Central/Western, OK	Good	90-105		
Alfalfa	Panhandle, OK	Premium	110-115		
Alfalfa	Panhandle, OK	Good	90-105		

Source: Oklahoma Department of Ag-USDA Market News Service, April 4, 2002

### Feed Stuffs Prices

	Location	Price (\$/ton)
Blood Meal	Central US	312
Corn Gluten Feed	Kansas City	68-71
Corn Gluten Meal	Kansas City	225-235
Corn Hominy	Kansas City	76-78
Cotton Seed Meal	Kansas City	150
Whole Cotton Seed	Memphis	95
Distillers Grains	Nebraska	90-95
Pork—Meat and Bone Meal	Texas Panhandle	180
SBM 48%	Kansas City	161-169
Wheat Middlings	Kansas City	63-67

Source: USDA Market News Service, April 3, 2002

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John Smith Extension Specialist Dairy Science K-State

Mike Brouk Extension Specialist Dairy Science K-State

Dan Waldner Extension Specialist Dairy Science Oklahoma State

