

# *Texas Dairy Matters*

*Higher Education Supporting the Industry*

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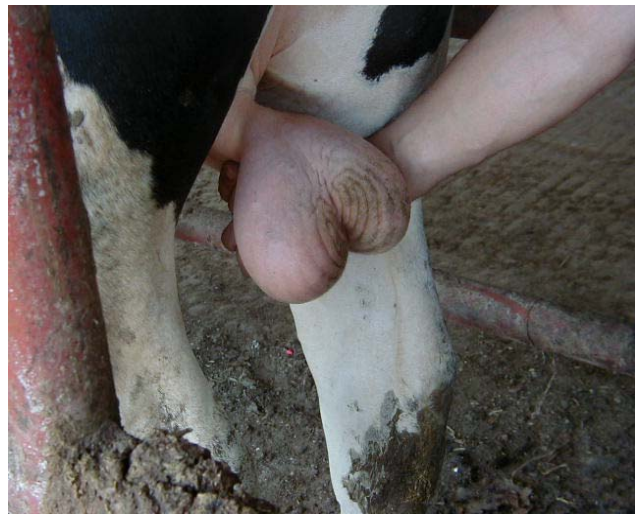
## MANAGE NATURAL SERVICE SIRES

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Daughters of proven AI sires produce more than 3000 pounds of additional milk during their lifetime. Despite the economic advantages from increased production, many producers continue to use natural service to mate some or all of their cows.

Some producers use natural service because of difficulty in training employees to detect estrus. Others think it is cheaper than using artificial insemination.

In 2005, it was estimated that it cost dairy producers an extra \$10 per cow annually to use natural service compared to artificial insemination with a synchronization program. Besides the lost production, there are many costs associated with using natural service. First, the bulls have to be purchased or raised to breeding age. Other costs include the feed bulls consume while in breeding pens, increased maintenance costs from damage to facilities, liability if an employee or visitor is injured, facilities to keep “bulls-in-waiting” and “resting bulls”, opportunity cost of not having a lactating cow in the space occupied by the bull, increased risk of venereal diseases (trichomoniasis, vibriosis, and ureaplasmosis), etc.



Conduct a breeding soundness examination on all bulls prior to service and at six month intervals.

Despite these costs, some choose bulls for their mating program. To insure success with natural service, develop a management program for bulls that includes:

1. Purchase only young, virgin bulls.
2. Identify each bull with its own unique identification number.
3. Perform a breeding soundness exam (BSE) on all bulls at the time of purchase. Repeat BSE every six months.
4. Test bulls for persistent infection with BVD and trichomoniasis prior to introducing them into the herd. Sell any that are found positive.
5. Vaccinate bulls based on protocols specific for your herd. Booster in three weeks as required.
6. Check bulls daily for lameness and any other health disorder. Promptly remove any bull found unsound.
7. Keep some reserve bulls in a resting pen to replace bulls.
8. Verify that bulls are in the correct pen daily and maintain one bull for approximately every 20 open cows in a pen.
9. Rotate and rest bulls on a regular basis, for example every 14 days. Provide a separate pen for resting bulls (preferably with dirt footing) with a higher fiber feed. Avoid a drastic change in rations fed to bulls. For example, TMR refusals contain less cottonseed and energy, but minimize the risk associated with a complete ration change.
10. Monitor bull attitude daily. Cull any bull that becomes aggressive or difficult to handle immediately.
11. Provide adequate handling facilities suitable for bull restraint and movement to reduce the chance of employee injuries.

Getting cows pregnant in a timely manner is the ultimate goal for any breeding program. Whether using natural service or artificial insemination, manage the program for success. For more information on reproduction or other topics, visit <http://texasdairymatters.org>.

## Resources

Cassell, B.G., S.M. Jobst, M. L. McGuillard, and R. E. Pearson. 2002. Evaluating sire selection practices using lifetime net income functions. *J. Dairy Sci.* 85:3492-3502.

Overton, M.W. 2005. Cost comparison of natural service sires and artificial insemination for dairy cattle reproductive management. *Theriogenology* 64:589-602.

Overton, M. W., and W. M. Sischo. 2005. Comparison of reproductive performance by artificial insemination versus natural service sires in California dairies. *Theriogenology* 64:603-613.