

Vet's Corner: Are Bulls more fertile than A. I.?

Last month, Jeff Stevenson, professor Kansas State University, gave a thorough discussion of the costs of natural service versus A. I. breeding in Hoard's Dairyman magazine. "The bottom line net cost per cow of using bulls was \$10.27 more than using an A. I. program." When managers of bull bred herds that I visit for herd health checks were challenged with this data, the common response was "Yeah, but the bulls get more cows bred quicker." This response led me to run some numbers on DC305 Consultant or PCDart for herds that I am privileged to monitor on a monthly basis.

Breeding program	% preg cows >150 DIM when became pregnant	Services per Conception	21 day preg rate
A.I. – pedometers	25%	1.6	29
A. I. Presynch-Ovsynch Timed A. I.	35%	2.9	19
A.I. with hormone Treatment at Vet check	31%	2.6	19
Natural Service	40%	???	12

Cows that are bred after 150 DIM will have calving interval over 14 months (150 days + 282 days pregnant = 432 days)/30 days = 14.4 mo interval. Economic models predict that "fresher" herds produce better than herds with longer days in milk. In this case, the natural service herds will have more cows that are milking in a less profitable stage than the "fresher" A.I. herds.

21 day preg rate is calculated for all cows in the herd that are past the Voluntary Waiting period and not already diagnosed pregnant. Even though, cows that became pregnant before the VWP were removed for the Natural Service herds; their preg rate badly trails the A. I. herds.

These numbers don't support the belief that bulls get cows bred quicker. The superstar breeders are new facilities that have invested in pedometer technology. The initial expense is significant, but there is little recurring cost of hormone purchase, so over time the cost/pregnancy of this system will decline.

Little difference is seen in the performance of the other two A. I. programs. Four farms use DC 305 to generate daily injection lists and all cows are bred on timed A. I. The third group contains 16 herds that have monthly or bimonthly visits and start delayed breeders on targeted breeding or Ovsynch based on rectal palpation findings.

There are only three natural service herds, so this work does not carry the weight of Dr. Stevenson's 20,580 cow study. However, it would be hard for these three dairymen to illustrate that the bulls are getting cows bred quicker.

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