

Keys to Successful Reproductive Performance

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(We prefer to use our own material in Dairy Notes. However, the author Mike O'Connor, of this article just retired from a career of helping dairy farmers and has some good advice for all. Reprinted with permission from the Penn State Dairy Notes)

I have had the privilege to visit dairy herds which consistently achieve high milk production and excellent reproductive performance. Some major common characteristics among these herds are:

1. Commitment to maintaining a high heat detection rate or submission rate to first service

The strategies to accomplish this vary among herds but include one or more of the following systems:

- Routine visual observation for estrous behavior which results in accurate and efficient detection of estrus.
- Proper use of either traditional heat detection aids or electronic systems to capture activity associated with estrus.
- Implementation of a proven estrous synchronization or timed insemination program.
- If available, contracting the services of an artificial breeding organization to perform estrous detection and other tasks associated with reproductive management.

The key is a systematic approach assuring a high percentage of the herd is inseminated between the voluntary waiting period and 100 days.

2. Timely resubmission for insemination cows which failed to conceive to a previous service

More herds are adopting resynchronization programs to shorten the interval between services. Recent DHIA data shows that there has been improvement in reducing the interval to first service but the challenge is to reduce the intervals between subsequent services. To accomplish this, pregnancy status must be determined accurately and early enough so open cows are identified and resubmitted for insemination in a timely manner.

3. Maintaining accurate records and monitoring performance

I have been impressed with the information these dairy producers keep at their finger tips related to the key benchmarks of reproductive performance, use this information on a regular basis to monitor performance and quickly seek help in identifying potential problems.

4. Implementation of a comprehensive herd health program

Herds performing well have adopted the appropriate vaccination program for both heifers and cows for their geographical region and understand the importance of biosecurity. In conjunction with a sound nutrition program, a complete herd health program results in a

low incidence of periparturient and postpartum reproductive and metabolic problems and good udder health. Such problems have a significant impact on conception rate. Implementing a routine hoof care program and appropriate calving management procedures are included under the general area of herd health.

5. Using standard procedures related to AI technique

Achieving good conception rate requires attention to the details associated with timing of insemination, semen handling and insemination technique. Always remember, you are handling a delicate commodity.

6. Place a high priority on nutrition and feeding management

These herd managers realize the importance of feeding a balanced ration to not only the lactating herd but breeding aged heifers, dry cows and the transition group. These managers or their consultants routinely evaluate body condition, monitor dry matter intake in all groups and quickly make adjustments.

7. Provide a good environment for the herd

Whether the cows are housed in a tie-stall barn, free stall barn, dry lot or bedded pack; high performing herds are provided adequate ventilation, attempt to improve the footing surface to minimize slipping and encourage mounting activity, allow for frequent interaction among cows and implement strategies for heat abatement. The maternity area is clean, dry and not overcrowded.

8. Utilize a team approach

Many successful small and large herds involve their veterinarian, nutritionist, AI consultant and employees in discussion related to reproductive management. Since reproduction is a complex process which is impacted by all many aspects of management, everyone must be aware of the economic importance of good reproductive performance, attention to detail, compliance with procedures and monitoring performance on a regular basis. When changes are made everyone must be informed.

One of the major misconceptions I encounter related to reproduction is: "good reproductive performance and high milk production are not compatible". I have been on many herds that are successfully managing both areas and there is DHIA summary data to illustrate, that as a group, high producing herds achieve similar reproductive performance to lower producing groups of herds. Granted, it takes commitment to implement and maintain a systematic approach to reproductive management utilizing the concepts presented above.