## Benchmarks for Evaluating the Reproductive Performance of the Dairy Herd

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Complete and accurate herd records should provide the tools necessary to define past herd performance, assist in establishing goals for the benchmarks being evaluated, and allow monitoring to determine the impact of the plan developed to reach the established goals. The first step in record analysis is to identify key benchmarks that reflect components of reproductive performance that affect the desired outcome or goal. In fact, on many farms data overload is the problem where too much information is available and decisions must be made on what is really important and useful. Eight benchmarks and levels where intervention is recommended are shown below. These goals must be applied with caution and may not be appropriate for intervention on an individual cow basis. It is also important to be practical and reasonable in applying these goals especially in cases where vast improvement in present performance is recommended. In some cases the average value for a benchmark should only be the starting point. A distribution of calving intervals into three categories (<12, 12 to 14, >14 months) allows for a more factual picture of past performance. Days open should also be divided into three groups (<85, 85 to 145, >145 days) and recommended categories for days to first service are less than voluntary waiting period, voluntary waiting period to 100 days, and number of first services greater than 100 days.

Eight benchmarks with intervention levels for monitoring the reproductive status and trends in a dairy herd.

Parameter	Goal	Intervention
Days open	115	160
Calving interval, months	13	14.5
Days to first service	75	100
Conception rate, first service, %	55	30
Conception rate, all services, %	50	30
Heat detection rate, %	70	40
Reproductive culls per lactation, %	< 8	15
Abortions, %	< 5	10

Reproductive performance is a function of certain management policies and how well these policies are implemented in the day-to-day management of the herd. It has long been known that there is an important economic advantage to be gained by efficient reproduction in dairy herds. Throughout her herd life, a cow should calve without difficulty, experience little or no postpartum reproductive disease, breed back within an optimal time period, carry each fetus to term, and have a live birth. The ability to use records effectively is one of the cornerstones of reproductive management.