

DAIRY ONE HIGHLIGHTS REPRODUCTIVE MANAGEMENT REPORT, Part II

Last month we began outlining the Reproductive Management Report. This month we continue our profile of that report and focus on the summary portion located below the individual cow listing. By examining the summary information, we can quickly and easily see how successful the current reproductive program is. Of course, summary information should be viewed with extreme caution on small to medium sized herds. Averages can be misleading in these herds since a few animals may significantly impact the overall value.

Category	# of cows	Avg. days open	Projected Calving Interval	Days to 1st Service	Percent Cows Open					Number of cows with the following no. of services					Number of Intervals between Breedings & the Avg. (Days)			
					<60 Days	60-89 Days	90-119 Days	120-149 Days	>149 Days	1	2	3	4+	Avg.	<18	18-24	>24	Avg.
1. cows culled previous 12 mo.	84	273	26.6	86	24	6	10	5	56	9	3	3	5	2.9	6	6	39	40
2. pregnant cows	80	150	14.3	88	4	24	28	8	38	37	17	10	16	2.4	12	10	35	37
3. cows bred not yet determined pregnant.	67	184	15.3	89	1	13	31	3	51	29	7	6	25	3.0	10	1	36	43
4. cows open over 60 days and not serviced.	26	142	13.6			46	15		38	services for cows pregant and not pregnant				2.7	ave. breeding interval for pregnant & open cows			40
5. average for all cows bred and open>60days not serviced.	173	162	14.6	88	3	23	27	5	43	services for cows confirmed pregnant				1.0	no. of 1st services			168
6. average including cull cows	257	198	17.9	88	10	18	21	5	47	services for cows including culls				2.7	% of 1st services successful			55

Category

1. Cows Culled Previous 12 Months. This is the total cows removed during the previous 12 months regardless of reason.
2. Pregnant Cows. Cows determined and reported to be pregnant. Reproduction information will be calculated for this group only if the pregnancy status of each cow is reported to your Dairy One Farm Service Technician.
3. Cows bred not yet determined pregnant: cows that have been serviced but have not yet been determined pregnant.
4. Cows open over 60 days not yet serviced. Cows fresh at least 60 days that have not been bred.
5. Average for all cows bred and all cows open>60 days not serviced. This is a summary of cows in categories 2,3,and 4.
6. Average including cull cows. This is a summary of all cows in categories 1, 2, 3, and 4. * *Number of cows is the number of cows in each category.*

Average Days Open: this is the average days open for all cows in each category. The goal for the breeding herd (category 5) is generally accepted to be between 100-110 days. Average for category 4 should be considerably less.

Projected Calving Interval: this is the average projected calving interval of all cows in a category. It is calculated by adding gestation (280 days) to the last breeding date, assuming the last breeding date results in a pregnancy. An apparent optimum average calving interval can be achieved with excessive number of breedings, a high reproductive culling rate, or high percentage of the herd

at both extremes in calving interval. Thus, analyze services per conception, distribution of cows by various intervals in days open and reproductive culling rate.

Days to first service: is the average interval from calving to first service. This is used as an indicator of efficiency of heat detection, provided the dairy producer does not have an excessive voluntary wait period.

Percent of cows open by interval: this is a distribution of the percentage of cows in each of the five intervals of days open. Cows open over 120 days are potential problem cows and those open over more than 150 days are serious problem cows.

Number of cows with the following number of services: This value is the distribution of the number of cows with 1, 2, 3, or 4+ services and average number of services for categories 1, 2, and 3. A cow is not included in the summary if there are less than 45 days since date of last service and no confirmed pregnancy or repeat service was reported. Category 1 are culls including reproductive culls.

Expect a higher average number of services for category 3 because generally more of the chronic repeat breeding cows are in category 3. As more repeat breeders become pregnant, the averages for categories 2 and 3 will begin to approximate each other. Thus, the average services for category 3 provides an advanced indication of number of services per pregnancy in the future.

Services for cows pregnant and cows not confirmed pregnant: is the average number of services for all cows in categories 2 and 3. As with any average value, it may be largely affected by a small shift in total numbers, particularly in smaller herds.

Services per pregnancy (total services for all Cows/pregnant cows): is used as an index of the efficiency in semen usage. It includes all cows that have been serviced. This index is calculated by dividing the total number of services in category 2 and 3 by the total number of pregnant cows currently in the herd.

Services per cow including culled: is the average number of services for all cows in categories 1, 2, and 3.

Number of intervals between breedings and the average (days): this value is the summary of distribution of intervals with abnormally short cycles (< 18 days), normal cycles (18-24 days) and long cycles (> 24 days). The average days between intervals is calculated using all intervals for all cows. The average breeding interval is a good indicator of the efficiency of heat detection after first breeding. In herds with good reproductive performance, most intervals are in the 18-24 day category.

Average breeding interval for pregnant and open cows is the average interval between breedings for cows in categories 2 and 3.

Number (#) of 1st services is the total first services for the herd. This number is used to determine percent of first services that were successful. A first service is not included in the total if there are less than 45 days since date of first service and no confirmed pregnancy or repeat service reported.

Percent (%) first services successful is the percentage of first services that resulted in pregnancy. Cows are assumed not pregnant (open) to first service if there was repeat service following first service, or if 45 days elapsed since first service and the cow has not been reported as pregnant. First service pregnancy rate must be evaluated in the context of how pregnancy status is determined in the herd (palpation by veterinarian, failure to return to heat, progesterone analysis). Failure to return to heat as a method of determining pregnancy depends on efficiency of heat detection. Also a small percentage of pregnant cows will exhibit heat. The larger the number of first services, the more reliable the first service pregnancy rate is an index of reproductive efficiency.

Reproduction continues to be one of the most challenging management issues on most dairies. Dairy One's Reproductive Management Report can help you to effectively track and monitor reproductive performance in your herd. You can request this report option through your Farm Service Technician.

If you would like more information
about herd records services,
contact the Dairy One main office in Ithaca, New York
(1.800.496.3344 or e-mail: dmr@dairyone.com).

Also visit Dairy One's web site to keep up with the
latest developments at www.dairyone.com