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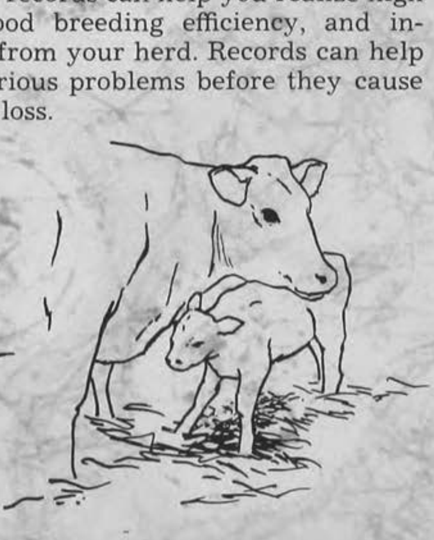
Records -- Not Luck -- for Good Reproductive Performance

Poor reproductive performance in dairy cows is often blamed on bad luck. But it usually results when management judgments are based on incomplete or faulty information. As a dairyman, you have too much at stake to let luck decide your future. Wrong management decisions cost money—they've put some dairymen out of business.

Herd records—complete, accurate, and up-to-date—are your most reliable protections against bad luck. Your records are as useful or as worthless as you make them. When you use them properly, your records can help you realize high production, good breeding efficiency, and increased profit from your herd. Records can help you correct serious problems before they cause a large dollar loss.



THE RECORDKEEPING JOB

Any recordkeeping system is good if it contains the needed up-to-date information and is easy to use. Have a special place in your barn where you can keep your records clean, dry, and handy for frequent use. Although most recordkeeping chores are yours, the A.I. (artificial insemination) technician and veterinarian should make entries for all services they perform. You can obtain record forms from artificial breeding organizations and some feed dealers. Or you might prefer to design your own forms.

The most successful record systems have cards on each individual cow; index these cards in a convenient file system. These cards should contain a complete record of all reproduction, production, and health events since the animal's birth. Incorporate identification and production records into one system. Although barn breeding charts are useful for summarizing the overall herd situation, they are unhandy for bringing together all the facts on individual cows.

Carry a pocket calendar or notebook with you while you work so you can write information in it immediately before you forget. But a notebook can be lost easily, and it is not a complete record system in itself. So always recopy your pocket notebook notations into a permanent system.

A production recordkeeping program is available through your local DHIA association. This program can ease your recordkeeping chores and help you obtain good breeding efficiency by:

- Indicating earliest time to breed after calving, time to dry, and expected calving date.
- Pinpointing potential problem cows through abnormal variations in production.
- Guiding your feeding program so that your cows receive ample nutrients for growth, maintenance, production, and reproduction.
- Indicating potential extra profits you can achieve from good breeding efficiency.
- Making it easier for you to make intelligent culling decisions.

WHAT'S IN THE REPRODUCTION RECORD?

Identification

Keep a permanent inventory of all animals brought into, or born into, your herd. This information should include identification, birth date, sire, dam, and reasons for disposal.

Give every animal in your herd a permanent identification at the time of birth. The best and most permanent identification methods are ear tattoos and brands. Color sketches or photos are excellent for breeds with broken color patterns. Although eartags are good, they are occasionally lost. Neck chains are not for permanent identification but are excellent cross references with tattoos, photos, sketches, or eartags.

Mistaken identity can cause many serious problems such as unplanned inbreeding, failure of purebreds to qualify for registry, and unreliable evaluations of sires and cow families. In the case of registered animals, registration papers must be available to the A.I. technician at each service.

Sire

At the time of breeding, know the animal's sire so that you don't breed her back to her own sire or a close relative. Matings of close relatives result in inbred offspring which are usually undesirable herd replacements.

Heat Dates and Comments

A **complete** record of **all** heat dates helps prevent losses due to poor breeding efficiency. Record the heat of each cow and heifer, even when they are not bred.

Heifers normally have their first heat by 12 months of age and should be bred at 15 months. Heifers not showing heat by this time are often undernourished and small for their age. Have your veterinarian examine heifers not in heat by a year of age. Such animals may have some structural abnormality that prevents them from bearing young. Early detection of these problem cases can help you plan future herd replacements and save unnecessary rearing costs.

Heat cycles less than 18 days suggest abnormal functioning of the ovaries such as cystic ovaries. Cycles longer than 24 days may indicate a disorder of the ovary, that conception occurred and the developing embryo died, or that you missed the cow's last heat or failed to mark it down. An abnormal cycle may be the first, or only, sign of reproductive trouble. Many problems, when caught early, can be successfully treated by a competent veterinarian.

Anticipation of the next heat can help you know when to watch particular cows closely, thus preventing missed heats. You can expect cows to return to heat 18 to 24 days after their last heat, unless they are pregnant. Blood on the vulva or tail means the cow was in heat 1 or 2 days previously. So you can expect these cows to be in heat about 17 days later. All cows do not show this bleeding after heat. Mark anticipated heat dates on your "Heat and Breeding Schedule" and check it daily.

Cows vary in the length of time and intensity of heat, so record comments on length and intensity that will help you catch the next heats of these cows.

Your veterinarian frequently can use these heat records when diagnosing causes of breeding failures.

Calving Date and Comments

Enter the calving date when the cow or heifer freshens, or you may forget it. This date marks the beginning of a new critical period in the cow's reproductive life. The time of first heat after calving and the time to breed are based on this date.

Normal cows should have at least one heat prior to 60 days after calving. If heat does not occur by this time, or if the cow had difficulty calving, a retained placenta, abnormal discharge, or abnormal cycles, your veterinarian should examine her for diagnosis and treatment. Be sure that your records contain comments on all abnormal events related to calving; these notes can be valuable to the veterinarian.

Earliest Breeding Date

Record the earliest breeding date at the time of freshening. For cows in excellent reproductive health, this date should be at least 50 days after calving. For cows in poor reproductive health, use the date your veterinarian suggests or allow at least 90 days after calving. The earliest breeding date may have to be changed, depending on conditions occurring after calving.

Breeding too soon after calving or before the cow is in good reproductive health usually ends up in more time lost than if you delay breeding to the proper time.

Service Information

Keep records of when and to which bull each cow is bred. If a cow returns to heat within 18-24 days, she probably is cycling normally but failed to conceive on the previous breeding. However, about 5 percent of all cows show heat after they are pregnant.

The A.I. technician should know past service dates at the time of repeat breedings. If the cow might be with calf, he will deposit the semen at the opening of the cervix rather than pass the inseminating tube through the cervix and disturb the cervical plug.

Diagnosed Pregnant

Never assume a cow is with calf until she has been examined for pregnancy. Some cows fail to return to heat, even though they have not conceived. Others may return to heat after conception occurs.

Some veterinarians have routine pregnancy examination programs. They visit the dairy farm monthly to examine and treat any abnormal conditions. Some veterinarians can diagnose pregnancy 30 days after breeding; others prefer to wait 60 days. The veterinarian should be able to tell you which service resulted in pregnancy if the cow was bred more than once. It's a good practice to circle the successful service date; this information will help you identify the calf's sire. Routine pregnancy examinations should be part of the management program on every dairy farm.

Due to Calve

Record the expected calving date when the cow is diagnosed pregnant. You can find the expected calving date on your DHIA monthly report or you can: (1) use a gestation chart, (2) add 282 days to the date of service that resulted in conception, or (3) add 9 months and 10 days to the breeding date (the average length of gestation for all breeds). For greater accuracy, allow 279 days for Holsteins, Jerseys, and Ayrshires; 283 days for Guernseys; and 291 days for Brown Swiss.

Turn Dry

Record the date to stop milking the cow at the same time you enter the due date. Cows producing more than normally expected at drying time should be examined. Research has shown that a 6 to 8 week dry period is most efficient. Production is usually reduced in the next lactation if the dry period is less than 45 days. Extending the period beyond 60 days usually has no beneficial effect. Therefore, the "turn dry" date can be easily determined by adding 7 months and 20 days to the date of service or by subtracting 50 days from the expected due date.

Remarks

Use this column for recording information which you cannot logically enter elsewhere. Some examples might be: illness, pussy or bloody discharge, calving difficulty, retained placenta, veterinary findings and treatments, mastitis, or reason for disposal.

Also record any warning signals of heat such as attempting to mount other cows, moist or swollen vulva, mucus discharge from vagina, or restlessness. These remarks should show the date, what happened, and what was done about the problem.

USING YOUR REPRODUCTION RECORDS

Schedules of anticipated reproductive events can help you keep your herd's breeding efficiency under control. On each schedule, group the cows by their reproductive situation in the same order as events are expected to occur (see the example).

Review and summarize your records often. You have a herd breeding problem if the average calving interval is more than 13 months or if more than 1.75 services are required per conception. Intervals between heats should be 18-24 days. Cows exhibiting heat at 36-48 day intervals were probably in heat within the 18-24 day interval but were not detected. Heat intervals not within this range are abnormal; such cows should be examined by your veterinarian.

The "**Dry and Fresh Cow Schedule**" lists cows and heifers in the order you expect them to calve. This order is the same for when cows should be turned dry. Record the calving date when it occurs; therefore, on the example, the next cow to calve is Ebba because there is no calving date, calf I.D., calving interval, or remark recorded. You can easily summarize the calving interval and services per conception from this schedule.

The "**Heat and Breeding Schedule**" shows you when cows will be in heat. (For example, you can quickly see that Blank has not been in heat since calving in February.) By examining this schedule, you can know if it is too early to breed after calving and the length of cycles.

The "**Pregnancy Exams and Veterinary Service Schedule**" lists cows that should be examined by your veterinarian on his next visit to your farm. List all cows showing any abnormalities, as well as cows bred that do not come back into heat. Upon diagnosis of pregnancy, enter cows in the "Dry and Fresh Cow Schedule."

DRY AND FRESH COW SCHEDULE

	Cow I.D.	Fresh date	Date bred	Number of services	Date to dry	Date due	Calving date	Calf I.D.	Calving interval	Remarks
	Bertha	11-20-65	H-100 2-24-66	3	10-26-66	12-3-66	12-14-66	41WBD1514	390	Ret. afterbirth Calf normal
Dec.	Cora	12-11-65	H-101 3-14-66	1	11-1-66	12-20-66	12-16-66	41WBD1515	370	Calf normal cow normal
	Rachel	12-26-65	H-101 3-25-66	2	11-10-66	12-29-66	1-1-67	41WBD2010	369	
Jan.	Dolly	11-30-65	H-100 4-3-66	4	11-19-66	1-6-67	1-2-67	41WBD2011	398	
	Fern	(heifer)	H-92 5-5-66	2		2-10-67	2-13-67	41WBD2105		normal
Feb.	Blank	3-18-66	H-101 5-16-66	1	12-31-66	2-18-67	2-25-67	41WBD2106	344	
	Ebba	2-10-66	H-106 5-18-66	2	1-2-67	2-20-67				

PREGNANCY EXAMS AND VETERINARY SERVICE SCHEDULE

Cow I.D.	Fresh date	Date bred	Exam date	Diagnosis, treatment, and remarks
Bertha	12-14-66		1-30-67	Pussy discharge 1-25-67 antibiotic infusion of uterus
Fern	2-13-67		3-18-67	Pussy discharge 3-10-67 antibiotic infusion of uterus
Cora	12-16-66	H-104 2-18-67	3-26-67	Diagnosed pregnant

HEAT AND BREEDING SCHEDULE

Calf I.D.	Fresh date	Earliest time to breed	Heat date	Next expected heat	Heat date	Service sire & breeding date	Days between heats	Remarks
Bertha	12-14-66	3-14-67	1st 3-22-67		1st 3-22-67	H-102 3-23-67		
Cora	12-16-66	2-2-67	1-26-67	2-15-67	2-17-67	H-104 2-18-67	23	
Rachel	1-01-67	3-2-67	1-30-67	2-20-67				Sold for beef hardware
Dolly	1-2-67	3-3-67	2-15-67	3-7-67	3-9-67	H-102 3-10-67	22	
Fern	2-13-67	5-15-67	4-16-67	5-5-67	5-5-67	N. Br.	21	Pussy dischg. 3-10-67
Cora	12-16-67	2-2-67	Br. 2-17-67	3-9-67				Not in heat by 3-12-67
Blank	2-25-67	4-25-67						