WHY MY COW HAD BLOODY DISCHARGE AFTER HEAT?

A streak of blood in the mucus usually means that, a cow had a high peak of estrogen one to three days ago. It is therefore recommended to record that heat and date it two days ago. This only indicates that she has been in heat. It has no relationship with timing of ovulation or whether or not she conceived (possibly she had Delay ovulation). This condition can be treated in next heat by administering GnRH at the time of insemination to insure that, a cow will ovulate within 7-18 hours after A.I, and a satisfactory conception rate can be achieved.

WHAT CATTLE DISEASES AFFECT CONCEPTION?

We normally think of the venereal type diseases as being the main causes of sterility problems, from a disease standpoint. However, it must be remembered that any disease or condition which will affect general health of an animal can also affect conception. Any disease which can cause a high fever, produce toxins, or create a debilatory condition in a cow can cause a sterility situation. Plant poisoning and the many nutritional area of involvement are also factors similar to diseases which we always have to consider. The venereal type diseases usually associated with cattle sterility are Brucellosis,

Trichonomiasis, Vibriosis and certain virus infection. We usually think of leptospirosis in this classification also.

WHEN SHOULD A COW BE TREATED BECOUSE OF FAILURE TO CONCEIVE? IF TREATED WHILE IN HEAT, SHOULD SHE BE BRED AT THAT PARTICULAR HEAT?

We know this is a two-part question, and thinking of when to treat a cow, this question means when in the estrus cycle should we treat a cow.

The answer here would have many ramifications depending on what is wrong with the cow, the economic factors involved, and the method employed by the veterinarian performing the services. There are no clear-cut ruled or answer to this question.

A large of veterinarians' believes that they can do the best job of diagnosis and treating sterility condition in an individual animals if they check the cow when she is in heat or just coming in heat. One thing is sure, it is easier to make intra-uterine injections in a cow that is in heat, and we can often diagnose cases of metritis (infection of the uterus) by checking the vaginal uterus discharge associated with the heat symptoms.

In my opinion, and this is shared by a number of veterinarians doing sterility work, the most optimum time to examine a cow is 16-17 days after a heat period, or 4-5 days before the next one. The uterus of a cow in heat is more tense, and the vaginal and cervical mucosa is often inflamed. This make some conditions in the cow more difficult to diagnose when the cow is in heat.

Now for part two of this question. Should a cow be bred at the same heat period as treated? Here again, we would need to follow the advice of the veterinary making the examination and doing the treatment. In real several cases of infection he would treat the cow and advice you to wait.

WHAT CAUSES PREGNANT COWS TO COME IN HEAT?

We must always remember nothing works perfect in nature. we have constantly changing conditions, and a corresponding variance from the normal .We know that cows show signs of heat due to the influence of the estrogens in the ovarian follicles .These follicles form ,fill with fluid containing estrogens formed to the extent that the cow shows signs of heat even though pregnant. This situations usually occurs only once or twice in early weeks of gestation, but it may continue all through the pregnancy and if that is the case, the cow will show signs of heat about every 3 weeks right up to freshening. We usually do not attempt treatment, but extra injections of progesterone would, in most cases, check these symptoms.

A COW IS HAVING REGULAR HEATS, SHE HAS BEEN EXAMINED AND NOTHING IS FOUND WRONG INTERNALLY, A HIGH CONCEPTION BULL HAS BEEN USED, SHE DOES NOT CONCEIVE. NOW WHAT DO YOU DO?

We always feel like we are giving out with double talk when we try to answer this kind of question. It is very difficult to advice treatment of condition when we don't know what is wrong. Our attempt to solve the problem becomes almost a trial and error situations. We just have to attempt different things and hope it will do the job.

If a cow is coming in heat regular, and nothing can be found wrong when checked by a veterinarian, and high conception bulls have been used by the service man, then I would say the cause of the return services would be one of the following situations.

- 1. This cow may not be ovulating in the normal range of time. In other words, we may be breeding her too early or too late. Time of breeding in some of our sterility cases is a big factor. We know ovulation can occur anywhere from 16 hours up to 65 hours after the start of heat. In an occasional cow, this range of time may be even more toward one or the other extreme. The female eggs of the cow can retain its ability to be fertilized only about 20-40 hours. Sperm life in the cow is not much longer than that of the unfertilized egg, so we need to juggle the time of breeding in problem cows, or in some situations we might breed her more than once. This could solve the difficulty if time of breeding is the cause.
- 2. The cow may have uterine infection so mild that we cannot diagnose it by ordinary methods, yet it will be severe enough to keep the cow from breeding. I have followed enough cows to the slaughter house myself where I had repeatedly checked the internal organs and they felt normal, yet when the reproduction tract was removed from the cow and opened, the mild inflammation of the mucous lining of the uterus was very apparent. So, sometimes we need to treat cows for mild metritis even though we cannot be positive that is the cause of the repeat breedings.
- 3. Anatomical causes. Occasionally we have some blockage of the oviducts or adhesions in the area of the ovaries which could obstruct passage of the sperm and ovum, but in no way

affects the heat periods. Some of these conditions are very difficult to diagnose even by the most experienced sterility specialists.

- 4. Nutrition if only an occasional cow in the herd is giving trouble as described in this question, we would not be suspicious of a nutrition problem. But if a large number of cows are involved we certainly cannot rule out a vitamin mineral nutrition problem.
- 5. Always be aware of the fact that a small percentage of cows will come in heat and still be pregnant.

HOW SOON AFTER BREEDING CAN A COW BE EXAMINED FOR HEAT?

Usually the interval between 45-60 days is preferred by most veterinarians. Some men have trained themselves to diagnose pregnancies much sooner around 28-30 days but if we wait until around the 45-60 day interval we are past the point where we get the early embryo death, and we can be a little more sure of the diagnosed pregnancy reaching birth.

WHAT CAUSES COWS TO SKIP HEAT PERIODS OR NOT COME IN HEAT?

The following might be one of the reasons which cause a cow to skip heat or not come in heat:

- 1. cows may be coming in heat but not manifesting it by the usual signs .We say they are going through 'silent heats', everything is normal, except that they do not show the symptoms.
- 2. Cows are coming in heat, but only for short length of time, and hence are real easy to miss. This can happen quite often.
- 3. Cows are coming in heat normally, but through lack of observations close, through ignorance of dairy workers, they go unnoticed.
- 4. Suckling a calf will inhibit normal heat in a lot of cows for a considerable period of time.
- 5. Retention of the corpus luteum (yellow body). This can usually be treated with good results.
- 6. Dormant ovaries (We see this most often in old cows). It is associated with nutritional deficiencies and with aging.
- 7. Infections of uterus- This will check heat in some cows.
- 8. Excessive cold weather This seems to check heat in some cows.
- 9. Pregnancy-Often, to our embarrassment or surprise, we find cows are not showing heat because they are already pregnant.
- 10. In skipping a heat period, or periods, any of the above situations could be the cause, plus the conditions known as early embryonic death where the cow conceives, the embryo starts to develop, may be lives 3-6 weeks, dies, and we have a cow returning for services -6 weeks or more after being bred.