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Why Didn't This Cow Calve?

It is not an uncommon issue to get towards the end of calving season and find that a cow who was diagnosed with a pregnancy in the fall seems to not be showing the signs of impending calving. Upon another preg-check, she's found to be open - frustration for sure! Abortion is one cause of open cows, and often is to blame for this situation, but why? Let's take a look at what might be going on.

The success rate for accurate diagnosis of cattle abortion is only 25-35%. That is concerning because identifying the cause is key to preventing future problems. One problem is abortions are often the result of something that occurred weeks or months before. That makes it difficult to determine the cause at the time of the abortion. In fact, many causes of abortion are unknown. If your herd has problems with abortions, here are some key questions to ask and discuss with a vet.

What exactly is the problem creating the non-calving cow? Was it a failure to conceive or was the fetus lost? Were the cattle preg-checked? Pregnancy failure rate in bovine should be less than 5% as a production-loss goal. If the herd has not been pregnancy checked before, that is the starting point to even know if you have a problem with lost fetuses.

Which animals are involved? What's the difference between the groups that conceived and calved and those that didn't? Were the affected cows' home-raised or new animals brought into the herd? Which age groups are affected? What was their vaccination status? Were modified-live (ML) or killed vaccines used? ML vaccines can cause abortion if given to pregnant cows, or to calves nursing previously non-immunized cows. Initiate such a program carefully. What is the cows' body condition?

What were the cows fed? Feed type, quality and condition are all important factors to consider. Moldy feed causes 3-10% of all abortions; inhaling mold spores is just as dangerous as consuming them. A vitamin A deficiency can also cause abortions. Feedstuffs that are high in nitrates that are not lethal to the animals can first be detected by cows aborting. Don't forget the water source, as nitrates from multiple sources compound and can create a toxic situation.

Which bulls were the cows exposed to? How did those bulls perform throughout the breeding season or was there an injury or illness? Consider sexually transmitted diseases (STDs), especially if the animals were on a community pasture. Brucellosis, listeriosis and trichomoniasis are STDs that cause abortions. Do the affected cows have a common sire or dam?

When did the problem occur? Were the fetuses lost at a certain stage of gestation? Abortion in the 9th month could be due to nitrates in the feed. Handling, or any kind of stress, can also trigger abortions. Did it occur on pastures or when feed was changed? Was the feed tested? Was it free of nitrates? Were cows affected suddenly, or did the problem pass through the herd slowly? Typical abortions occur at low levels of about 2% and are usually seen at the beginning of calving.

Why did it occur? Identify the cow that aborted and isolate it. Recover the aborted fetus and membranes. The stage of gestation can be determined by fetus size and other characteristics: At 2 months, the fetus is mouse size; at 3 months, it's rat size; 4 months -- small cat size; 5 months -- large cat size; 6 months -- small dog size with hair starting to show; 7 months -- fine hair all over body; 8 months -- haircoat complete and teeth slightly erupted; 9 months – incisors erupted. Submit as many fetus samples as possible to a diagnostic lab. The first calf to die is the most important, as a diagnosis may help avoid future abortions.

Call the veterinarian as soon as possible and keep them involved in the entire process. Collect the preferred samples, which include fetus and blood samples from cow(s) that aborted. Pack the fetus and placenta in a double set of heavy-duty plastic bags and pack in ice (don't freeze), along with any blood or tissue samples. Get the package to the diagnostic lab quickly.