

# **DISEASES OF BEEF CATTLE ASSOCIATED WITH POST-CALVING AND BREEDING**

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Once a cow has delivered her calf the groundwork for the next year's calf crop must be laid. This publication will examine some of the more common problems that occur during the post-calving interval and at the time of breeding. Often these problems are subtle and a producer may not realize there is a problem until the cows are examined for pregnancy or until the next calving season. Once a problem has progressed to this point the individual animal is often culled from the herd or an entire calf crop can be significantly reduced.

## **1. PROBLEMS POST-CALVING**

### ***Metritis (Uterine Infection)***

Cows will normally have a discharge from their birth canal for 8-14 days post-calving. The discharge is often thick and reddish in color and has no odor. If the uterus becomes infected from calving the cow has developed metritis.

#### Causes

Infection of the uterus by bacteria following calving. Often cows that have a difficult birth, retained placenta or have calved in a dirty environment will become infected.

#### Clinical Signs

Discharge from the birth canal that is thin, watery, with a red to gray color and has a foul smell.

The cow may become sick, and have increased temperature, depression, off feed, diarrhea and stop milking.

#### Treatment

Administer drugs to evacuate the uterus of infected contents. Usually oxytocin will only work in the first 48 hours after calving. Prostaglandins may be more effective in increasing uterine tone and opening the cervix to drain the uterus.

Antibiotics should be infused into the uterus.

Systemic antibiotics are useful especially oxytetracycline.

If the cow is sick supportive treatment is necessary; fluids, steroids, glucose and antihistamines.

Cattle may develop tetanus or other clostridial infections from metritis so vaccination or use of tetanus anti-toxin may be indicated.

#### After Effects

Chronic uterine infection, problem breeder.

### ***Endometritis***

This is chronic low grade infection of the uterus. The cow very seldom shows any outward signs.

### Causes

Often follows metritis or retained placenta.

Often follows difficult calving, twins, abortions or C-sections.

Physical damage to the birth canal during calving or during breeding can cause endometritis.

### Clinical Signs

Often no signs other than some flecks of pus in the mucus discharged during the heat periods.

Affected cattle will cycle normally but will not conceive.

Uterus may feel abnormal during rectal palpation.

### Treatment

Evacuate the uterus using prostaglandins.

Treat the uterus with antibiotic flushes, best to treat the uterus during a heat to improve drainage.

Often no treatment is done because the problem is not discovered until pregnancy examination and the cow is culled for being open.

### Prevention

Identify all cows with calving problems and watch for abnormal discharges.

Consider having a pre-breeding examination done on cattle with potential problems so they can be treated before breeding starts or identified to be culled.

## ***Delayed Uterine Involution***

Often associated with difficult births, twins, abortions, C-sections or retained placentas.

Cattle that have had metritis or endometritis often have sub-involuting uterus.

### Clinical Signs

None, only found by rectal palpation.

### Treatment

Similar to endometritis.

## ***Pneumovagina (Windsucker)***

In older cows the cervix and uterus extend forward over the brim of the pelvis, this pulls the vulva forward into the pelvis and allows air to be trapped in the birth canal. Tears or laceration from calving can also allow air to be trapped.

### Clinical Signs

Air in the vagina after urination, defecation or after the animal stands up.

Urine is retained in the floor of the vagina, fecal material may also be present.

Because of contamination the affected cow is often a problem breeder.

### Treatment

Correct tears and lacerations with surgery and treat the uterus for infection.

### ***Pyometra (Pus in the Uterus)***

The cow with pyometra has developed a uterine infection and the cervix has closed to prevent the accumulated pus from draining out. The uterus becomes enlarged and the cow will not show heat cycles.

#### Causes

Pyometra can result from any contamination of the uterus; problem calving, retained placenta or contamination during breeding.

In some cases cows are pregnant and the fetus dies and becomes macerated.

#### Clinical Signs

Cow fails to show heat.

Fluid filled uterus found on rectal palpation.

Discharged pus may be seen around the tail and vulva.

#### Treatment

Prostaglandins to drain the uterus.

Antibiotic flushes and manual massage.

## **2. Problems At Breeding**

### ***No Heat***

Beef cattle will respond to environmental and nutritional stress by stopping normal heat cycle activity. Before the breeding season begins, observe the cow herd for signs of estrus activity. You should expect about 5% of the herd to

be in heat on any given day. By watching for signs of estrus and getting a rough estimate of the percentage of cows showing heat you have a fair idea of the level of estrus cycle activity in the herd. If you find that the level of activity is lower than expected consider having a number of animals examined to determine if they are cycling or not.

The lack of cycling by individual cows may be the result of uterine problems, pregnancy or stress. Rectal palpation can quickly determine the cause.

#### Treatment

In most cases prostaglandins will bring a cow into heat if she is cycling normally already. If normal cyclic activity has stopped because of stress the pre-existing condition must be resolved.

### ***Weak/Silent Heats***

Often occurs 30-60 days post partum. Cow is having difficulty in establishing normal cyclic activity after calving.

Animals that are stressed will have a more difficult time in starting normal cyclic activity. Cattle that are at greatest risk are first calf heifers that are being bred for the second calf and older cows with poor teeth or chronic health problems.

Marginal deficiencies in copper may cause weak heats.

If a high percentage of cows show decreased heat activity, have several cows examined and check for serum copper levels.

Short term (48 hours) removal of calves may help herds where the cows are showing weak or absent heats.

### ***Persistent Heat***

In a small percentage of cattle the follicle that brings the animal into heat does not rupture and release the egg. In these cases the animal will show heats constantly or every few days.

#### Treatment

Cattle with persistent heats should be examined rectally and if a cystic ovary is found treated to induce ovulation. Cystic ovaries can also cause a lack of heats.

#### Prolonged Time Between Heats

A prolonged period between heat cycles will occur in a small

percentage of cattle. The primary cause is the early death of the fetus, rarely because of congenital problems. A beef producer must be alert to two common diseases that will cause early embryonic death and therefore prolonged intervals between heats. These diseases are trichomoniasis and vibriosis. Both are venereal diseases carried by the bull and infect the cow during breeding. The resulting infection kills the embryo after 4-6 weeks and the cow will then return to heat. These diseases are a particular problem in range operations because infected bulls may be introduced without the owners knowledge.

If you observe an unusual number of cows returning to heat after 45-60 days of breeding, have several cows examined immediately.

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