

# Managing Mastitis In Beef Cows

by Heather Smith Thomas

**M**astitis, or inflammation of the udder, is primarily a problem in dairy cows, due to the complexity and quantity of mammary tissue in these high milking cows. But mastitis can also occur in beef cows, and it can be quite serious. Depending upon the infectious organism involved, a bad case of mastitis may even cause death of the cow.

Mastitis may develop if a quarter becomes infected due to contamination from the outside environment, as when a cow lies in mud and manure and bacteria enter the teat canal. When cows are calving in dirty areas, or lying in mud and manure after calving, infectious organisms may enter the teat. Mastitis may also be a sequel to bruising and trauma if the udder is bumped and bruised the damaged tissue creates ideal conditions for an infection to get started.

Last fall after we weaned our calves, one of our 3-year-old cows developed mastitis in a back quarter, probably due to bruising and contamination. The cows had been held in a corral for a couple of days after the calves were taken off them, before we moved the cows to another pasture. Young cows are often upset when their calves are weaned, and many will make valiant attempts to get back to their calves, sometimes going through fences. We generally keep the first and second calvers in a corral for a few days after weaning their calves.

But a corral is always dirtier than a grassy pasture, and this young cow may have picked up infection there. Or she may have developed mastitis because of bruising. She had a full, tight udder after the calf was taken off, and may have bumped and bruised that back quarter on her 2-mile hike up the mountain when we took the cows back to pasture.

A couple days after moving the cows we noticed she had swelling in that quarter (the other quarters were beginning to dry up and shrink in size, but that quarter was very large). We had to bring her back home for doctoring. Weaning

time is a very common time for mastitis, for if a cow is milking heavily the full udder can be easily injured.

If the infection stays localized in the udder (and usually just in one quarter), the mammary tissue may be damaged but the infection is

not life-threatening. That quarter may be permanently damaged unless treatment is soon given, and the cow may lose the ability to produce milk from that quarter. It will be small (and dry) the next time she calves, or may produce a little fluid right after she calves, and then dry up.

If, however, the infection does not stay localized and gets into the bloodstream, the cow will become sick. She'll go off feed and have a fever. Unless proper treatment is swift and diligent, you may not only lose the quarter (or even part of the udder, sloughing away), but you may also lose the cow.

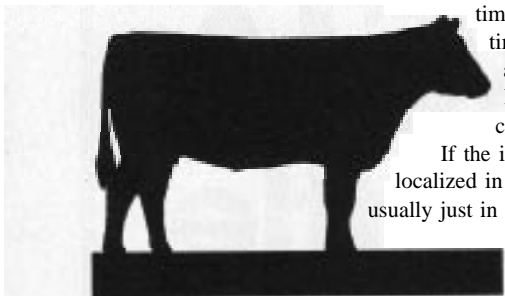
The worst case we ever had was a cow that was out on summer range. She had not settled when bred two months earlier, and was bulling — fighting other cows, riding them and being ridden. Some of them probably bunted her in the udder. As is usually the case with an in-heat cow, the activity and chasing about often prevents the calf from nursing, and the cow's udder may get quite full; the calf may not nurse until the cow goes out of heat. The full udder is more susceptible to bruising.

We noticed she was in heat and made a note that she was open and should be put on the list to sell that fall. But the next day when we checked the cattle, this cow was off by herself, obviously in pain and not eating. When we brought her and her calf home to the ranch with our horses, the cow could hardly travel, due to the pain and inflammation in her swollen udder. It was so painful she would not let the calf nurse; it got weaned early.

With diligent doctoring — antibiotics intramuscularly for more than a week, and antibiotic preparations squirted directly into the affected quarter — we saved the cow, but the raging infection totally destroyed the udder. The whole wide of it eventually fell away and our veterinarian removed the remaining hanging tissue so that it could heal.

We doctored that cow for two months to get her healed up, and eventually were able to sell her. Without prompt and diligent attention in the early stages of this infection, she would have died.

The strangest case of mastitis we ever had was a cow that also developed mastitis out on summer range, about 15 years ago. We discovered her swollen quarter on a routine cattle-checking ride, and brought her and her calf home so we could doctor the infected quarter. But in spite of routine daily treatments, that quarter stayed enlarged and inflamed. A few weeks later the infection broke out through the side of the quarter and drained, like a regular abscess. We kept flushing it out with an antibiotic solution, and one day during the flushing process, out came a 6-inch long piece of stiff grass!





*The whole side of this cow's udder is sloughing away, following a serious case of mastitis.*

The only explanation we could think of for this bizarre situation was that her calf must have come to nurse with a bunch of grass still in its mouth, and one of the grass stems got jammed directly into the teat canal and up into the quarter, providing the contamination and irritation to start the infection.

Even with the antibiotic treatments we were unable to heal it up because the grass was still in there, providing constant irritation. Once the grass came out, we were able to clear up the infection, though she lost the ability to produce milk in that quarter.

Mastitis should always be treated just as soon as it is discovered. The mammary infusions used for dairy cows usually work well for beef cows also — medications that come in a special syringe that you insert into the teat opening, squirting the medication up into the quarter. Some of these should be given once a day, some work better if given twice daily. The main thing is to keep the quarter milked out, if the calf is not nursing it. It's fine if the calf will keep it

milked out (the medication generally won't hurt the calf), but often the cow won't let the calf nurse that quarter because it is sore, or the calf may not like the taste of the milk; sometimes there is no milk — just watery infected fluid.

Milk out as much of the fluid as you can (it may be lumpy infected milk, or abnormal fluid) and then inject the medication. Milk it out at least twice a day until the infection clears up and the quarter is producing normal milk again. If the calf will nurse it, that saves you the trouble of milking it out.

If the cow is at all sick, off feed or feverish, you should also be using a good systemic antibiotic. Keep using it until she is fully recovered. Mastitis can be serious and you may want your veterinarian to advise you on treatment for each specific case. Diligent and proper treatment can make all the difference in whether or not you lose that quarter, or even the cow.

