Livestock Production

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Lice: A Winter Skin Parasite

Lice are parasites that must reside on a live animal to survive. In cattle, two types of lice are very common: the biting louse and the sucking louse. The biting louse will be seen moving about on the cattle as it feeds by biting and moving on to the next meal. The sucking louse will bury its mouth parts in the cattle and take long blood meals. Fortunately, lice that reside on cattle prefer to infect other cattle rather than human beings. It would be highly unusual for lice from cattle to colonize and reproduce on you or your family. Nevertheless, these little parasites can cause the farmer significant financial loss.

Signs

Cattle with louse infestations scratch against poles and trees due to itching and irritation caused from the biting, sucking, and aimless wandering of these parasites. The constant scratching will lead to hair loss (especially on tail head or neck), hide damage, and skin infections. Severe infestations can lead to hairball accumulations in the gut because the cattle are constantly grooming themselves. Severe infestations with sucking lice can result in significant blood loss and anemia. Summertime skin temperatures are too warm for lice to survive. They reproduce effectively in late fall. Therefore, cattle will be affected in late winter in the northern U.S., but infestations can occur earlier if environmental conditions are suitable.

Transmission

The life cycle of lice is perpetuated in a herd of cattle by carrier animals. When fall arrives, the lice begin reproducing on the carrier animals. The parasites then move to other cattle by direct contact or by staying on scratching posts or feeders for very short periods of time before being picked up by another host.

Diagnosis

The easiest way to diagnose lice infestation is to look at several key areas on your cattle. January is a good time to administer scour prevention vaccines for spring calving. While cows are in the chute, part the hairs on the tail heads, around the neck, ears and dewlap. Using a good light source, observe for the presence of the moving lice roughly the size of a flea. In the tail switch itself lice eggs (known as knits) can be seen attached to hair follicles. Any evidence of lice would indicate that treatment is necessary.
Treatment

Adult lice are killed with a variety of pour-on products available at your feed store. Injectable ivermectin enters the blood stream and will kill the sucking lice. However, biting lice do not ingest enough blood to be killed. If biting lice are present, a pour-on ivermectin product should be used. Many of the products do not kill lice eggs and a second treatment needs to be administered two weeks later as the eggs hatch. Dipping and/or spraying with an approved compound with applications two weeks apart should effectively eradicate lice.

Prevention

Initiation of prevention strategies should occur in the late fall when breeding activity is beginning to increase. Chlorpyrifos compounds placed in a single spot have been useful for a season of lice prevention. Dust bags or back rubbers can be used to control lice but are dependent on the entire herd using them. An obvious prevention strategy is to eliminate the carrier state and prevent reinfection next year. Theoretically, this can be done by applying an effective compound in doses two weeks apart. Reality is that the lice still survive on some of these "lice magnets" and prevention strategies have to be initiated on a yearly basis.