

Have A Plan For Lice Control This Winter

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Lice negatively impact the health, performance, and wellbeing of our cows, stockers, and feedlot cattle during the winter months. The months of greatest lice infestations generally range from December through March. Not only can lice be the cause of direct animal performance losses, but also increases wear and tear on our facilities and fences. The direct losses to cattle come in forms of decreased average daily gains (documented 0.25 lbs/day reduction in growing calves), skin infections, and potentially blood loss and anemia.

While there are several different species of lice found in the United States, they can be broken down to either biting or sucking lice. The biting lice feeds topically on the skin while sucking lice pierces the hide and consumes blood from the animal. Both types of lice spend their entire lifecycles on the cattle hosts. Off of cattle they survive very poorly and generally only last a few days. But can live up to 10 days off host in the right environment leading to reinfection in groups of animals. It is important to note that lice are host species specific, meaning cattle lice cannot affect people, horses, or any other species.

In general, every herd has some level of lice infestation. Lice are carried from season to season by a small percentage of the herd that act as reservoir hosts. Adult eggs lay eggs on the hair of infected animals. Overall lifecycle for an egg to mature into an adult, and lay eggs is roughly 28 days. Most females lay 1 egg per day. These pests are cold dependent, and numbers will diminish quickly with warmer temperatures of the spring.

Clinical signs of lice infected cattle generally begin with behavioral changes such as rubbing and scratching within the herd. Fences, posts, water troughs, trees and any other stationary object could be subject to damage from this rubbing. As the infection and irritation continues, large hairless patches will become evident on animals.

Further diagnosing the issue beyond the clinical signs requires seeing the adult lice on the skin. Parting the hair will reveal the lice. They are very small but can still be seen. They are roughly the size of a grain of sand. The economic threshold for treatment is roughly 10 lice/ square inch.

There are several options when it comes to treatment of lice in our cowherds. One option is the macrocyclic lactone class of endectocides. Examples of products in this class include ivermectin, doramectin, eprinomectin, and moxidectin. These products come in pour-on formulations and injectable formulations. Macrocyclic lactones treat internal intestinal nematodes, but also work on external parasites such as lice. It is important to note that the injectable formulations do not work on biting lice since they do not blood feed. These products are most often used on a herd basis at the end of summer grazing going into winter. Even with herd treatment in the fall, later season lice infections can still occur since they are not active until later in the winter.

The other option is topical treatments that are non-systemic. These products are typically very effective against adult lice but may not affect the larvae or eggs depending on formulation. Retreatment is often indicated 14 days after initial treatment. There are products available that are labelled as a single treatment. They either use an IGR (insect growth regulator) that interferes with development from eggs or is formulated to stay active long enough to kill hatching lice. Use of these particular products eliminates the need to retreat in 14 days. Since these topical formulations kill lice by contact, it is extremely important to apply them appropriately to cattle. Most formations call for the pour-on to be applied with full coverage on the topline of animals, from poll to the tailhead. Poor application of insecticides can lead to reinfestations and the perception of product failure.

When treating cattle, it is also important to treat the entire group. Missing once animal could serve as the reservoir for reinvesting the entire herd. The same thought should be given to new additions to the herd from an outside source. Basic biosecurity such as treating and segregating new additions for 30 days is not only good to reduce risk of lice, it is also a great tool in decreasing introduction of other diseases.

Thank you to Dr. A.J. Tarpoff, Beef Extension Veterinarian, for the contents of this article. If you have any additional questions, feel free to reach out to Hunter Nickell, Livestock Production Agent at any of the Southwind Extension District offices, or by email at nickell99@ksu.edu.