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Lice in Winter

Insect pests can be an ongoing challenge to livestock producers throughout the year, so you have to be continually on the lookout for signs of problems. This time of the year it can be easy to forget about insect pests because we might not directly see them like flies or mosquitos or other insects in the other seasons. But, what can be lurking in a thick winter hair coat??? LICE! Dr. A.J. Tarpoff DVM, Beef Extension Veterinarian for K-State Research and Extension, shared a good article several years ago in Beef Tips. His work serves as the basis of the article.

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 a host reservoir. Adults lay eggs on the hair of infected animals. The overall lifecycle for an egg to mature into an adult, and lay eggs is roughly 28 days. Most females lay 1 egg per day. Cattle lice infections can affect the health and performance of our cows and stocker cattle during the winter months. This time period generally ranges from December through March. The USDA has estimated that livestock producers lose up to \$125 million per year due to effects of lice infestations.

Clinical signs of lice infection generally begin with constant rubbing and scratching within the herd. Fences, posts, water troughs, trees and any other stationary object could be subject to damage from this rubbing. Damage to these physical structures can present as much of an economic loss as reduced animal performance does. 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 per square inch.

There are two different types of lice that infect cattle. Biting lice feed on the skin and secretions on the outside of the animal. The other type is known as sucking lice. These species are blood feeders and pierce the skin. Both types of lice spend their entire lifecycle on the cattle hosts. Off of cattle they survive very poorly and generally only last a few days. Lice are very species specific. So, cattle lice cannot affect people, horses, or any other species.

There are several options when it comes to treatment of lice in cowherds. One option is the avermectin endectocides. These products come in pour-on formulations and injectable formulations. It is important to note that the injectable formulations do not work on biting lice since they do not blood feed. The other options are topical treatments that are non-systemic. These products are typically pyrethroid products similar to what is commonly used to control horn flies during the summer months. These products are very effective against the adult lice, but do not affect the larvae or eggs. Retreatment is often indicated 14 days after initial treatment. There is a product available that is a pyrethroid in combination with an IGR (insect growth regulator) that not only works very well against the adults, but also works against the eggs and larvae. Use of this particular product eliminates the need to retreat in 14 days. As always consult with your herd health veterinarian for products that best fit your situation.

When treating livestock, it is important to treat the entire group. Missing one animal could allow it to serve as the reservoir for reinfesting 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. Our neighbors to the north have a good reference for all livestock pests: <https://entomology.unl.edu/livestock/livestockpestcontrol.pdf>