Controlling Lice in the Fall

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Once cool weather arrives we don’t think about insects as much, but cattle lice are winter pests. As the days get shorter, cattle hair coats grow longer and thicker to provide protection for colder temperatures, but lice also benefit from the protection provided by a winter coat. In herds with lice infestations the problems usually start in the fall, build through the winter, and then generally peak in late winter or early spring. The impact of lice on overall cattle health and production is a matter of debate. Mild lice infestations are perhaps more of a nuisance than a real detriment, whereas heavy infestations probably do negatively impact animal health, growth, and performance.

Types of Lice
Cattle in Alabama are susceptible to infestation by one species of biting louse and three species of sucking lice.

- Biting lice (*Bovicola bovis*) have relatively large, round heads and survive by feeding on the skin, hair and sloughed skin cells of an animal.
- Sucking lice have relatively small, narrow heads designed for piercing the skin and feeding on blood. In large numbers they can contribute to anemia. The species of sucking lice include: the long-nosed cattle louse (*Linognathus vituli*), the little blue cattle louse (*Solenopotes capillatus*), and the short-nosed cattle louse (*Haematopinus eurysternus*).

Transmission and life cycle
Both biting and sucking lice are spread by direct contact, and are typically found along an animal’s head, neck, withers, and rump. Calves get lice from their mothers or herd-mates. Lice can infest cattle all year, but their numbers are typically lower in summer because most lice shed off in the spring along with the winter hair coat. Longer spring and summer days, more intense sunlight, and increased temperatures will also wreak havoc on lice populations, so during those times lice retreat to cooler places on the animal and wait for more favorable conditions to reproduce in larger numbers.

Due to a relatively short life cycle, large numbers of lice can be produced quickly when conditions are favorable for survival. Adult females attach their eggs (also known as nits) to hairs, which hatch in 5-14 days and then develop into egg-laying adults in just 14-21 days. Adults live two to three weeks and females lay about one egg per day.

Carrier animals
Young animals and older, undernourished cattle usually have the heaviest lice infestations. Cattle typically develop some resistance after exposure. A young animal will develop a high louse population after first exposure, while older, more immune competent animals will have fewer lice. However, there are oftentimes a few carrier animals in a herd that maintain higher populations of lice and are difficult to fully delouse.

Symptoms of Lice Infestation
Lice can cause severe irritation and itching, and cattle react by rubbing, licking, or chewing on themselves. Rubbing on fences and trees or any other stationary object is one sign of a lice problem. Another obvious sign of significant lice infestation is hair loss from all the rubbing and licking, particularly around the head, neck, withers, and rump. Heavily
infested animals are often restless, focusing on their discomfort rather than eating. Rubbing and scratching can also result in the destruction of fences and other facilities such as barns and feed bunks.

**Identifying Lice**
Positively identifying lice is best done by restraining cattle and looking closely at areas normally infested with lice. Part the hair and look at the skin along the back and the top of the neck especially. Good light and/or a magnifying glass will facilitate the process. Chewing lice are brown, while sucking lice have a blue tint because of blood inside them. You can also check for eggs – tiny white, yellow or black specks attached to the hair.

**Treatment, prevention, and control**
The entire life cycle of a louse takes place on an animal host, and since lice cannot survive long without a host it makes them a relatively easy parasite to kill. In other words, we know where they live their entire lives, making targeted therapy very effective. There are many good products for lice control on the market today, including pour-ons, dusts, sprays and injectable products. Just be sure to read and follow all label instructions as many products are not as effective on louse eggs. This means that after treatment, eggs can still hatch and continue the infestation. With some insecticides, a follow-up treatment 2–3 weeks later is necessary. This time interval is critical for achieving long term control, as it allows time for the eggs to hatch but not to mature into adults that will then lay eggs themselves and perpetuate the problem.

The different feeding habits of biting and sucking lice are also important as it relates to treatment. The avermectin pour-on products provide good control of both biting and sucking lice, but may not be as effective against gastrointestinal parasites as injectable avermectins. Meanwhile, the injectable avermectin products provide good control of sucking lice, but very poor control of biting lice. Thus, if an avermectin injectable is used for deworming, control of biting lice won’t be very good unless another product is used in conjunction with it. If lice are a problem in your herd, treatment in late fall or early winter can avoid the development of heavy infestations in late winter or early spring. Consult with your veterinarian to determine which products are likely to be most effective for the types of lice and time of year in your area.