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G92-1112 Lice Control on Cattle

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Lice Control on Cattle

Identifying and controlling lice on cattle both are covered here.

John B. Campbell, Extension Entomologist

- Life cycle
- <u>Control</u>

Cattle lice may be the most underestimated livestock insect in terms of economic losses. The USDA estimates that U.S. livestock producers lose \$125 million a year to cattle lice.

Heavy louse populations cause lowered milk production, loss of flesh, stunted growth, general unthriftiness and anemia. "Chronic" or "carrier" cows may abort due to louse-induced anemia. During severe winters, louse-infested animals are more susceptible to respiratory diseases.

Fall and spring calves, yearlings, and older unthrifty cattle usually have the heaviest lice infestations. Heavily infested cattle are generally in poor physical condition with rough, patchy hair coats that have a dirty appearance.

University of Nebraska studies and studies of others indicate that moderate to heavy lice populations may reduce weight gains of calves by as much as 0.21 lb/day. Nebraska cattle usually are infested with more than one species of louse. These studies also indicate that calves fed at a higher nutrition level had lower lice populations and were affected less severely by lice than calves fed a maintenance ration.

Older animals may be "chronic" or "carrier" animals that, despite repeated insecticide treatments, continue to carry heavy lice populations. These animals are instrumental in reinfesting entire herds each year, and should be culled from the herd.

Life cycle

There are three species of blood-sucking and one species of chewing or biting lice in Nebraska. The latter feeds exclusively on sloughing skin.

The life cycle of all lice species is similar. Lice are host specific and spend all of their lives on the animal.

Eggs (nits) are deposited on the hairs of cattle. The feeding habits of immature lice are the same as those of the adults. The life cycle from egg to adult is from three to four weeks during cold weather. Reproduction slows dramatically in warm weather.

In the summer, lice generally can be found only in the folds of skin between the legs and body of cattle. In the winter, as populations increase, lice move to the neck, dewlap, muzzle, around the eyes, the neck and side of the face, back, sides, and tailhead. Specific locations are favored by particular species.

Lice are transmitted from one animal to another by contact. Suckling calves become infested from lice-infested cows while feeding, so cows should be treated prior to calving.

Control

Consult *EC89-1550*, *Nebraska Management Guide for Control of Arthropod Pests of Livestock and Horses*, for a listing of specific insecticides recommended for lice control. Read, understand and then comply with insecticide labels when treating livestock.

Some insecticides cannot be used on lactating dairy cattle, and most restrict use on calves under 3 months of age. Many have treatment-slaughter intervals and treatment frequency restrictions.

Fall applications of the systemic pour-on, spot-on, spray, injectable or dip insecticides for grub control give added benefits of reducing louse populations.

These treatments may not be enough to prevent a build-up during severe winters. Most can be used again after the grub treatment cutoff date (Nov. 1 to Feb. 1), and are quite effective. Some may have a reduced treatment rate for lice control.

Dursban (chlorpyrifos) pour-on is a non-systemic so it can be used anytime, but the label has many use restrictions concerning breed and sex of cattle. The Ivomec injectable wormer is very effective for the blood-feeding lice species, but may not control the chewing louse. Consequently, the chewing louse may increase within a herd. Recently a pour-on formulation has become available that should improve control of the chewing louse.

Systemic insecticides used between Nov. 1 and Feb. 1 might bring about a host-parasite reaction as a result of killing grubs while they are in the esophagus or spinal canal of the animal. However, cattle can be treated effectively with non-systemic insecticides if they need treatment during the cutoff period for grub treatment.

Lice-infected cattle may be detected because they exhibit excessive scratching and grooming. Itching is indicated when barb wire fences have hair on the barbs and the infested cattle show hair loss and an unthrifty appearance.

Cattle with white faces and necks may show a dark, greasy appearance if lice populations are heavy. Cattle can be examined for lice by containing them in a squeeze chute and examining the face, dewlap, neck, back and tailhead. Lice can be seen by making a two-handed hair part of those areas in good light. Lice numbers averaging more than three per square inch indicate a need for treatment.

Examine treated cattle after about 14 days, regardless of treatment method, to determine if a second or continued treatment is necessary. Most insecticides are not effective against eggs, so lice hatched after treatment may reinfest the animal. When spraying or dipping in the winter, pick a warm day so the cattle

will be dry by sundown. This practice reduces cold stress.

Insecticide dust bags and oilers used for fly control also can be used for control of lice. The best results are obtained when these self-treatment devices are used to prevent a serious build-up of louse populations. Once heavy populations are present, it will take two to four weeks to reduce the louse population to non-economic levels. Insecticide-impregnated ear tags used for fly control have not been effective in controlling lice.

Replacement animals brought into a herd during winter months should be examined for lice. If present, the animals should be treated before being exposed to cattle in the herd.

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