

# VETERINARY CALL

by Bob Larson, Kansas State University

## Control of Lice

*Winter months bring the threat of lice.*

Every winter, producers must be on the lookout for lice infestations in their cattle herds. Lice thrive in cooler temperatures when cattle have a thick winter hair coat. Therefore, infestations are usually heavy in late winter and early spring, but light the rest of the year.

Lice spend their entire life cycle on animals and can only live a few days in the environment. Transmission from one animal to another is by close contact, and lice enter a herd through the introduction of an infested animal.

Most lice species affecting livestock are species-specific, and consequently, there is no risk of transmission from one species to the other. In other words, cattle won't be affected by lice from sheep, pigs or other species.

Female lice lay their eggs, known as nits, and attach them to hair. The nits can be seen on heavily infested animals as white specks. The hard shell of the nit protects it from most hazards, including insecticide.

Lice are most likely to cause obvious problems on younger calves and adults with poor nutrition or that are affected by other disease. Some animals, which serve as carriers, are particularly prone to lice

infestations and are continuously infested throughout the year.

There are two types of lice (sucking and chewing) that infest beef cattle, but cattle may be infested with more than one lice species at any one time. Sucking lice feed by piercing the animal's skin with their sharp mouthparts and sucking blood. Chewing lice have mouthparts adapted for biting and chewing, and they feed on skin, hair debris and skin secretions.

Lice infestations cause severe itching, which results in cattle rubbing and scratching on feedbunks, fence posts and fences. Economic losses occur due to equipment and facility damage, reduced feed efficiency, lower milk production and slower weight gain.

A preventative treatment for lice in the late fall or early winter with pyrethroid and/or organophosphate insecticides applied as a pour-on or sprayer is recommended.

Insecticides will not kill lice eggs, however. Therefore, a second treatment in 14 to 18 days will be necessary to kill the nymphs that hatch following the first treatment unless the product has sustained killing properties.

Many pour-on insecticides have

relatively prolonged withdrawal times. Therefore, read label directions carefully. Injectable avermectins are effective against many internal parasites as well as several external parasites, including sucking lice (but not chewing lice). Pour-on formulations of avermectins that are effective against the chewing and sucking lice species are available.

Caution should be exercised when treating lice in the fall if cattle could have grubs, because the grub-killing activity of avermectins or systemic insecticides can cause negative side effects.

Proper biosecurity practices such as inspecting and isolating all newly purchased cattle will limit the spread of lice between herds. If purchased cattle are infested with lice, treat them with a nonsystemic insecticide and keep them isolated for at least three days before turning them in with clean cattle. Do not allow noninfested animals to come in contact with feedbunks, sheds or equipment for at least seven days following use by lousy cattle. **AJ**

*Editor's note: Robert L. Larson is a professor of production medicine and executive director of Veterinary Medicine Continuing Education at Kansas State University.*