

Cattle Lice
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Lice are highly specialized parasites that live in the hair coat and feed off of the cattle host. Lice are primarily a winter problem. That is because summer direct sunshine, rain and self-grooming keep louse numbers low in the thin summer-hair coat of cattle that are pastured in the open. Cattle lice are small, but they occur by the thousands, or even tens of thousands, on infested cattle. The economic impact of cattle lice is highly variable and does not always correlate with the apparent severity of infestation. Two kinds of lice occur on cattle sucking lice that suck blood and biting or chewing lice that feed on skin and secretions of the skin. Biting and feeding activity of lice irritate cattle, and the irritation intensifies with increasing numbers of lice. Cattle damage fences, and bruise and scrape themselves, as they rub to relieve itching caused by the lice. Louse-infested animals are under stress and may be predisposed to disease. Blood loss from sucking lice is sometimes severe enough to cause anemia. If severe enough, louse induced anemia causes calf abortion and rarely may even result in the death of the infested animal. The five species of cattle lice found in North America include four that feed by sucking blood. These are the short nosed cattle louse, long nosed cattle louse, little blue cattle louse, and the cattle tail louse. The fifth species, the cattle biting louse, feeds on skin tissue of cattle. All cattle lice spend their entire lives as parasites on living cattle. When removed from the cattle, they live a few days at most.

Diagnosing Lousiness in Cattle

Often, one of the first signs that cattle have lice is that they rub and scratch themselves against fences, feed bunks, trees, or other objects. In advanced cases, this may result in large patches of bare skin.

“Carriers” or “Chronics.”

Typically, up to one or two percent of the cattle in a herd may carry extremely high numbers of lice, even in the summer. “Carriers” are most often bulls or older cows in poor condition. A “carrier” cow’s calf is usually also heavily infested. Such “carriers” are unthrifty and perform poorly. Bulls may become “carriers” because their hair is longer and denser, and their massive necks and shoulders prevent effective self-grooming. When older cows are “carriers” it is probably the result of reduced self-grooming ability and interactions involving the cow’s nutrition, general health, and immune system.

Sucking lice.

Cattle sucking lice are the Short nosed Cattle Louse, (*Haematopinus eurysternus*), Long nosed Cattle Louse, (*Linognathus vituli*), and the Little Blue Cattle Louse, (*Solenopotes capillatus*). These sucking lice species all have a similar life cycle. The females lay eggs, which they glue to individual cow hairs close to the skin of their host. Immature lice are called nymphs. Each nymph sheds its skin three times as it grows to adulthood. Nymphs resemble adults of the same species in feeding habits and appearance. Typically the life cycle takes about a month. Cattle Tail Louse, (*Haematopinus quadripertusus*) is a blood sucking louse and that is closely related to the short-nosed cattle louse, and very similar

in size and appearance. They prefer to live on the long-haired portion of the tail, but are also often found on the neck and around the eyes. Unlike other cattle lice, tail lice are most abundant in late summer to early fall and are scarce throughout the winter. **This is often the most damaging species in coastal areas of the South, the Southeast,** and southern California, but it is absent to uncommon in the rest of the U.S. Cattle sucking lice sometimes congregate in dense patches, which, when they occur on shorthaired sites, may be seen from several feet away. They appear as black or blue-brown spots the size of a quarter or 50-cent piece. Close inspection of these patches reveal individual lice including adults, nymphs, and eggs. Sucking lice spend most of the time with their heads partly buried in the host's skin as they engorge themselves with blood. Cattle severely infested with short nosed cattle lice take on a characteristic "greasy" appearance. This greasy appearance results from crushed, blood engorged lice and their feces, from blood and serum oozing from wounds made by the lice as they feed, by the cow's scratching and rubbing, and by the shiny translucence of thousands of living lice packed densely together.

Cattle Biting Louse, (*Bovicola bovis*). Biting lice feed on the cells of the skin's surface. The feeding and movement of lice on the skin of cattle cause itching and distress. Cattle biting lice are present on most beef cattle. The moderate infestations of cattle biting lice typical on unsheltered beef animals occur primarily on the withers, upper parts of the shoulders and ribs, and along the back.

Controlling Cattle Lice

Lice are effectively treated with insecticides. Currently lice treatment come in three forms for cattle; pour-on dewormers that are also effective against lice, pour-on pyrethroids, and organophosphate insecticides. Most of the pour-on de-wormers also are very effective at lice control. The pyrethroids and organophosphates do not have a long killing time and will not kill the eggs so they will require a second application about three weeks after the initial application. **The rate of successful lice treatment will depend on proper dosing of all the cattle in the herd. If one head is missed or added after treatment, the herd may easily become re-infected.** A fall treatment is recommended to prevent build up of lice during the winter. If left unchecked, lice numbers increase throughout the winter (except for tail lice). High louse populations coincide with a) periods of acute and cumulative winter stress, b) the season when vitamin A is often deficient in cattle diets, and c) the stress of calving. Lousy cattle are much less able to cope with these other stresses. Self-application devices, such as dust bags and oilers, apply little or no insecticide to the brisket, belly, and legs. Therefore, such methods seldom achieve more than 70 or 80 percent control of lice, and will not provide rapid cleanup of established populations. Some of this information was contributed by D. E. Mock.