Two types of lice may be found on cattle in Missouri—chewing lice and sucking lice.

**Chewing Lice** feed on hair, scabs and excretions from the animal’s skin and irritate the skin with their sharp claws and mandibles. Chewing lice infestations weaken the animal, interrupt normal feeding activities and make the animal more susceptible to diseases.

The **cattle biting louse** is the only species of chewing louse occurring on cattle in Missouri. It is yellowish white with a reddish head and may be found all over the animal’s body and when full grown will be about \( \frac{1}{12} \) inch long. It is a pest of both young and mature cattle.

**Sucking Lice** feed by piercing the animal’s skin with their sharp mouthparts and withdrawing blood. The loss of blood stunts growth and reduces weight gain. The irritation caused by lice also hinders the animal’s feeding activities which may reduce the growth rate. Continued heavy infestations weaken the animal to the point that stress from disease or extreme cold weather may cause death.

Three species of sucking lice may be found on cattle in Missouri. Sucking lice may be found on the head, neck, withers, around the base of the tail, brisket, and along the inner surfaces of the legs. The **longnosed cattle louse** is generally a pest of young cattle and is about \( \frac{1}{16} \) in. long. The **shortnosed cattle louse** is about \( \frac{1}{30} \) inch long and is more often a pest of older cattle. The **little blue louse** is about \( \frac{1}{40} \) inch long. It is generally a pest of older animals and is more common around the animal’s head.

**Life History**

The eggs (nits) are glued to the hair and hatch in one to two weeks. The nymphs that hatch from these eggs become full-grown and start to lay eggs in about two weeks.

Both chewing and bloodsucking lice are most abundant during the winter. Infestations are usually light during the summer and early fall but increase rapidly in the winter and spring. Some animals may be continuously infested with lice throughout the year. You may notice that certain animals are particularly prone to lice infestations. Schedule these “carrier” animals for disposal.

**Control**

Just because cattle are scratching or rubbing against solid objects during winter and early spring doesn’t mean they are lousy. Examine them before applying control measures. Part the animal’s hair where lice are most likely to be and look for lice or for eggs attached to the hair.

Cattle lice may be controlled with insecticides applied by sprayers, backrubbers, dust bags, or by “pour-on” methods. Insecticide sprays will not affect the eggs, therefore, a second spray in 14 to no more than 18 days later will be necessary to kill the nymphs that hatch following the first spray.

**Missouri Insect Control Recommendations** are revised annually and are subject to possible change during the season. This guide is intended for use during the 1979 season only. No discrimination is intended and no endorsement is implied.
## METHOD OF CONTROL
### 1979 BEEF CATTLE LICE CONTROL RECOMMENDATIONS

<table>
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<th>Sprays</th>
<th>Backrubbers</th>
<th>Dust Bags</th>
<th>Pour-on Method</th>
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</thead>
<tbody>
<tr>
<td>1. Coumaphos (Co-Ral) - Use 0.06% coumaphos made by mixing 2 pounds 25% Co-Ral wettable power in 100 gallons of water or 1 ounce in 3 gallons of water; or mix 2 quarts 11.6% Co-Ral emulsifiable concentrate in 100 gallons of water or 4 teaspoons in 1 gallon of water.</td>
<td>1. Ronnel (Korlan) - Charge the backrubbers with 1% ronnel made by mixing 10 tablespoons 24% Korlan emulsifiable concentrate in 1 gallon of fuel oil.</td>
<td>Use tightly woven or multiple layer burlap bags containing:</td>
<td>Starting at the shoulders, pour the required amount of insecticide along the backline for a distance of 18 to 24 inches.</td>
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<tr>
<td>*2. Dioxathion (Delnav) - Use 0.15% dioxathion made by mixing 2 quarts 30% Delnav livestock emulsifiable concentrate in 100 gallons of water or 4 teaspoons in 1 gallon of water.</td>
<td>2. Toxaphene - Use 5% toxaphene made by mixing 2/3 pint 60-65% toxaphene livestock emulsifiable concentrate in 1 gallon of fuel oil.</td>
<td></td>
<td>1. Crufomate (Ruelene) - Mix 1 part 25% Ruelene emulsifiable concentrate with 6 parts of water and apply 1 fluid ounce of the solution per 100 pounds of body weight, but NO MORE THAN 8 FLUID OUNCES PER ANIMAL, or use commercially available 13.4% Ruelene ready-to-use pour-on applying 1/2 fluid ounce per 100 pounds of body weight, but NO MORE THAN 5 FLUID OUNCES PER ANIMAL.</td>
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<tr>
<td>3. Malathion - Use 0.3% malathion made by mixing 1 gallon 57% malathion emulsifiable concentrate in 100 gallons of water or 7 teaspoons in 1 gallon of water.</td>
<td>RESTRICTION: DO NOT permit animals access to toxaphene treated backrubbers within 28 days of slaughter.</td>
<td></td>
<td>2. Stirofos (Rabon) - Use 3”1,, Rabon livestock dusting powder.</td>
</tr>
<tr>
<td>4. Ronnel (Korlan) - Use 0.25% ronnel made by mixing 1 gallon 24% Korlan emulsifiable concentrate in 100 gallons of water or 8 teaspoons in 1 gallon of water.</td>
<td>RESTRICTIONS: No pre-slaughter interval is required with dioxathion (Delnav) or malathion but NO preslaughter interval is required with coumaphos (Co-Ral) or malathion.</td>
<td></td>
<td>1. Dioxathion (Delnav) - Use 0.15% dioxathion made by mixing 2 quarts 30% Delnav livestock emulsifiable concentrate in 100 gallons of water or 4 teaspoons in 1 gallon of water.</td>
</tr>
<tr>
<td>*5. Toxaphene - Use 0.5% toxaphene made by mixing 3 quarts 60-65% toxaphene livestock emulsifiable concentrate in 100 gallons of water or 2 tablespoons in 1 gallon of water.</td>
<td>RESTRICTIONS: No pre-slaughter interval is required with toxaphene (Delnav) or ronnel (Korlan) but DO NOT treat more often than once every two weeks. DO NOT spray with toxaphene within 28 days of slaughter. No pre-slaughter interval is required with coumaphos (Co-Ral) or malathion.</td>
<td>Use commercially available 13.4% Ruelene ready-to-use pour-on applying 1/2 fluid ounce per 100 pounds of body weight, but NO MORE THAN 4 FLUID OUNCES PER ANIMAL.</td>
<td>RESTRICTIONS: On native Missouri Cattle, DO NOT apply these pour-ons during October, November, and December. To do so may cause possible side effects from any cattle grubs the animals may have. Follow label restrictions for use on cattle imported from other states. DO NOT treat with crufomate (Ruelene) within 7 days of slaughter. DO NOT treat with famphur (Warbex) or fenthion (Lysoff) within 35 days of slaughter.</td>
</tr>
</tbody>
</table>

Use a sprayer that will produce at least 200 pounds of pressure so as to wet the skin, not just the hair. The first spray should be applied about November 1. Make a second application 14 to no more than 18 days after the first application.

**Precautions:**
- DO NOT apply in conjunction with oral drenches of other internal medication, such as phenothiazine, or with natural or synthetic pyrethroids or their synergists, or with other organic phosphates.
- Brahman and Brahman crossbred cattle are sensitive to most organic phosphate insecticides. Read and heed label restrictions when using organic phosphate insecticides on Brahman cattle.
- DO NOT contaminate feed, water, or feed and water utensils. DO NOT locate backrubbers where excess insecticide or spillage will contaminate water supplies. Observe required time interval between application of any insecticide and slaughter of treated animal. READ AND FOLLOW all restrictions and precautions printed on the container label.

*An asterisk (*) preceding any insecticide means that all or some uses of the product have been or will be restricted by the Environmental Protection Agency. Applicators must be certified and licensed before they may purchase restricted products.*