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# Livestock

# Pest Control



Federal Cooperative Extension Service  
Oregon State College  
Corvallis

EXTENSION CIRCULAR 561

April 1954

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Cooperative Extension work in Agriculture and Home Economics, F. E. Price, director. Oregon State College and the United States Department of Agriculture cooperating. Printed and distributed in furtherance of Acts of Congress of May 8 and June 30, 1914.

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# Lost: 300 Million Dollars!

**Livestock pests cost U. S. Farmers nearly 300 million dollars every year. Most of this loss could be avoided.**

Livestock pests common all over Oregon include grubs, lice, ticks, and horn flies. Easy, effective, low-cost control methods are known for all of these pests.

## *Grubs cause:*



- ▶ Direct loss in meat and hides at slaughter time.
- ▶ Heel flies, which make animals run, reducing weight and milk production.

## *Lice and Ticks cause:*



- ▶ Low rates of gain.
- ▶ Additional cost because more feed is used per pound of gain.
- ▶ Less milk.
- ▶ Less weight at market.
- ▶ Spread of diseases.

## *Sheep Ticks (Keds) cause:*



- ▶ Wool damage.
- ▶ Higher feed costs.
- ▶ Lower weights.

## *Horn Flies cause:*



- ▶ Reduction of grazing hours and poor gains.
- ▶ Loss of blood and lower weights.
- ▶ Less milk.

## **Insecticides**

Good insecticides are available to control these pests. These are DDT, TDE, methoxychlor, rotenone, fortified pyrethrum, toxaphene, chlordane, benzene hexachloride (BHC), and lindane. Rotenone powder is the only one of these that is recommended for the control of cattle grubs.

DDT, TDE, methoxychlor, rotenone, and pyrethrum are the safest materials. Chlordane, toxaphene, benzene hexachloride, and lindane are more toxic, and the manufacturer's directions should be followed. Use them only at the directed strengths and do not use them on young animals less than four months old.

On dairy cattle use only methoxychlor, rotenone, lindane, or pyrethrum sprays, but use lindane for louse control only. Wettable powders are safer and are preferred over oil mixtures. Rotenone powders are more effective than rotenone extracts for grub control.

## **Application**

Lice and ticks occur on any part of an animal's body; therefore, complete coverage is necessary for good control. For the control of lice on cattle, use an average of about 2 gallons of spray solution per head. When controlling horn flies, complete coverage is not so essential. Spray the back and sides well.

Cattle grubs appear in the back, and it is necessary to spray only the back of the animal. To kill the grubs, the rotenone must penetrate

the hole that the grub has made in the hide. When using a high pressure sprayer, hold the spray gun about a foot from the back to assure this penetration. For treating grubs, spray animals in a chute or spray corral when possible and spray from above. If lice are present at the time of grub treatment, spray the entire animal with the rotenone spray. DDT can be mixed with rotenone, but this is unnecessary unless protection from ticks is desired.

## **Equipment**

High pressure sprayers are effective and the most popular. Dipping vats are satisfactory. The so-called "automatic spray-dip" type of machine is excellent but most suitable for the larger operators because of the expense. Low pressure sprayers will give good results, but more care is needed to get the animal completely wet to the skin. Hand sprayers and hand dusting can be used for small numbers of animals. It is better to do the job with the equipment available than to leave it undone.



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## Livestock Pest Control Recommendations

Pest	Insecticide	Amount per 100 gallons water	When to apply	Remarks
Lice	DDT, methoxychlor, chlordane, TDE.	8 lbs. 50% wettable powder	Early fall	
	Rotenone	1 lb. 5% ground root	Early fall	Treat twice—2 to 3 weeks apart.
	BHC, lindane, toxaphene, chlordane.	Follow manufacturer's directions	Early fall	Preferred if ticks are present. Do not use on young animals.
	Fortified pyrethrum.	Follow manufacturer's directions	Early fall	Safe on all classes of livestock.
Ticks	Toxaphene, chlordane, or DDT + BHC or DDT + lindane.	Follow manufacturer's directions	Spring—before turning out	Do not use these materials on calves. Calves may be partially protected by spraying with DDT alone.
Cattle Grubs	Rotenone	7½ lbs. 5% cube or derris powder	1st application 5 to 6 weeks after grubs first appear in back. Repeat at 5-week intervals.	Follow this schedule as closely as management permits. Later treatments important to control second species. <sup>1</sup>
Horn Flies	DDT, methoxychlor, chlordane, toxaphene, TDE, fortified pyrethrum.	Follow manufacturer's directions	When flies present	Self-treating devices may be used. <sup>2</sup>
Sheep Tick (Keds)	DDT, methoxychlor, TDE.	8 lbs. 50% wettable DDT (as spray). 4 lbs. 50% wettable DDT (as dip)	Anytime convenient and when weather mild. Late summer or early fall suggested.	Thorough coverage gives best results.
	Rotenone	Rotenone ½ lb. 5% cube or derris (as dip only).		
	Toxaphene, chlordane, BHC, lindane.	Follow manufacturer's directions		
Hog Lice or Mange	Toxaphene, DDT, chlordane, BHC, and lindane.	Follow manufacturer's directions	When present	BHC, lindane, and chlordane will control both lice and mange.

<sup>1</sup> For hand dusting, use 1½ per cent rotenone powder if available; if not, use 5 per cent rotenone. For wash, use 12 ounces 5 per cent rotenone in 1 gallon water.

<sup>2</sup> See OSC Extension Circular 555, "Home Made Self Treating Devices for Horn Fly Control."