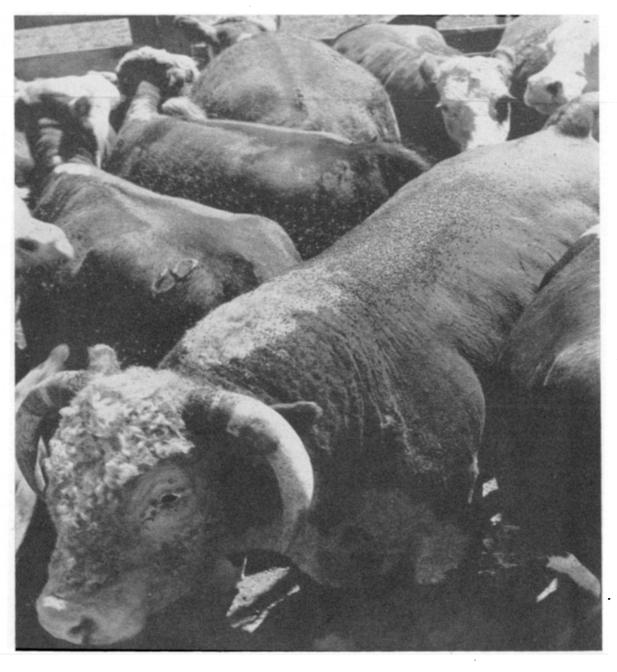
Controlling:—

HORNFLIES and TICKS

Circular 525



EXTENSION SERVICE
Oklahoma A. and M. College
Shawnee Brown, Director Stillwater, Oklahoma

Controlling Hornflies and Ticks

By

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TO CONTROL HORNFLIES

WHAT TO USE:

- 1. For beef cattle in small herds, use a spray or dip containing 0.5 percent DDT. This is made by any of the following:
 - a. 8 pounds of 50 percent DDT wettable powder in 100 gallons of water.
 - b. ½ pound of 50 percent DDT wettable powder in 6 gallons of water.
 - c. 2 gallons of 25 percent DDT emulsion concentrate in 100 gallons of water.
 - d. 1 pint of 25 percent DDT emulsion concentrate in 6 gallons of water.

Hornflies have not built up a resistance to DDT. One application of DDT will usually protect cattle from hornflies for about 3 to 4 weeks.

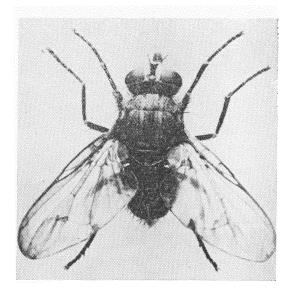
2. On range cattle, use DDT at the above rate, or use a spray or dip containing 0.5 percent toxaphene. Since toxaphene will protect cattle from flies up to about a week longer than DDT, the added expense is justified on range cattle where the greatest expense of the fly control operation is in rounding up the cattle. To make a spray or dip containing 0.5 percent toxaphene, mix 10 pounds of 40 percent toxaphene wettable powder or 5 pints of 75 percent emulsion concentrate in 100 gallons of water.

One application will usually protect cattle from hornflies for about $3\frac{1}{2}$ to $4\frac{1}{2}$ weeks.

WHEN TO USE IT:

Start spraying or dipping as soon as flies are first noticed in the spring. Repeat during the summer as soon as an average of 10 to 15 flies are noticed on each cow.

Although hornflies are small, they make up for a lack of size by large numbers. As many as 1,000 to 10,000 are often found on one unsprayed cow or bull. Each fly feeds at least twice a day by sucking blood from the animal.



EQUIPMENT TO USE:

There is no particular benefit from using high-pressure sprayers when spraying for hornflies. Except in areas where ticks are also a problem, it is a decided waste of spray materials to spray anything but the backs of cattle. A pint to a pint and a half applied on the back with a small, compressed-air garden sprayer will give protection against hornflies equal to that obtained by using a high-pressure sprayer to cover the entire animal with one to two gallons of spray mixture. Therefore, use any type of sprayer convenient and practical for your herd.

Dipping cattle, where vats are available, gives protection comparable to that obtained by spraying.

TO CONTROL BOTH HORNFLIES AND TICKS

In eastern Oklahoma it is desirable to control both hornflies and ticks with the same spray or dip application.

WHAT TO USE:

- 1. Use a spray or dip containing 0.015 percent gamma isomer of benzine hexachloride and 0.5 percent DDT.
- 2. Or use a spray or dip containing 0.015 percent gamma isomer of benzene hexachloride and 0.5 percent toxaphene.

To get 0.015 percent gamma isomer of benzene hexachloride, use any of the following:

- a. 2 pounds of benzene hexachloride wettable powder containing 6 percent gamma isomer in 100 gallons of water.
- b. 1¼ pounds of benzene hexachloride wettable powder containing 10 percent gamma isomer in 100 gallons of water.
- c. $\frac{1}{2}$ pint of 25 percent lindane emulsion concentrate in 100 gallons of water.

To get 0.5 percent DDT or 0.5 percent toxaphene, see the formulas given under hornfly control for beef cattle.

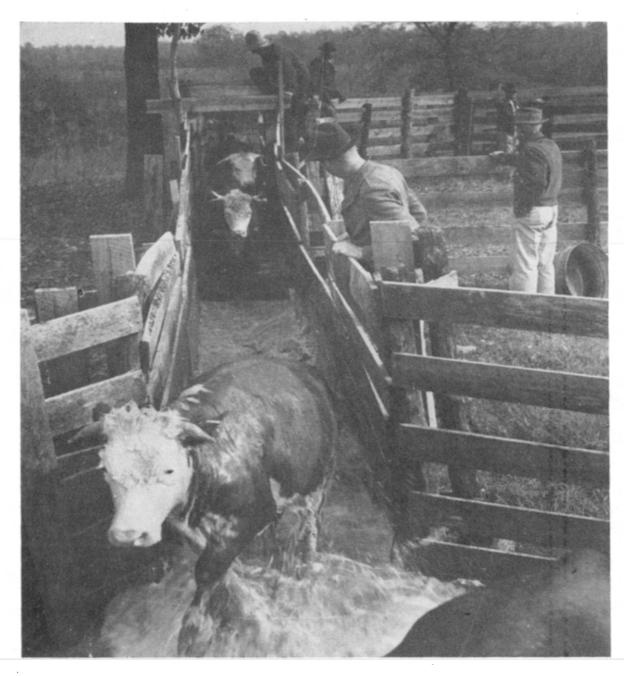
Usually one dipping or thorough spraying with these materials will protect cattle from hornflies and ticks for about 2 to 3 weeks.

WHEN TO USE IT:

Start spraying or dipping as soon as flies and ticks are first noticed in the spring, and repeat when ticks begin to reappear on the cattle.

EQUIPMENT TO USE:

Use either a spray rig or a dipping vat. Spraying will give results comparable to dipping if a thorough job is done, but each animal must be thoroughly covered with the spray. On small herds, small low-pressure sprayers can be used although it will take more time to completely cover each animal with the spray.



Where vats are available, dipping is an excellent way to rid cattle of external parasites. It is especially good in eastern Oklahoma where ticks are a serious problem. Ticks, hornflies, and lice are all controlled when cattle are dipped as recommended.

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