



Department of Entomology

SELF-APPLICATION DEVICES FOR CATTLE INSECT CONTROL

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Horn flies, face flies and lice are major pests of cattle in Indiana. These insects not only annoy cattle, but they can cause drastic reduction in weight gains and milk production and are often associated in the spread of livestock diseases. When used with the proper insecticides, self-application devices such as dust bags and cable backrubbers provide good control for these pests.

To be effective it is essential that self-application devices be situated so that cattle will use them daily. They should be placed in such locations as gaps in fences between pastures, in gates of pens surrounding water sources, at salt and mineral enclosures or in any situation where forced usage is achieved. In addition, these devices need to be sturdy enough to hold the bags or cables in proper position while at the same time allowing for easy detachment for moving and recharging.

Both the dust bag and backrubber can be constructed simply and inexpensively to meet the above requirements.

DUST BAGS

Dust bags are simply heavy burlap sacks filled with an approved insecticide dust. When an animal bumps against the bag a small quantity of dust sifts through the bag and is deposited on the animal. Commercial dust bags are available that generally consist of a grommeted burlap sack and a plastic hood to protect the bag from rain. A much less expensive way is to obtain some heavy burlap sacks and insecticide dust and make your own bags.

To construct a dust bag use two burlap bags, one inside the other, with four grommets affixed equally spaced apart in the open end. For greater strength, place a piece of sized leather between the burlap and grommet

halves. So constructed, this grommet end can be opened for filling. Each bag should be about one-third full.

Figure 1 shows the proper way to hang dust bags. The height of the bags will depend upon the size of the cattle in the herd. Bag bottoms should be low enough (about 18 inches above the ground) for an animal to butt its head to lift the bag over the neckline. This will allow the bag to drag along the backline when the animal passes beneath (DO NOT USE DUST BAGS WITH HORNED CATTLE). Two dust bags can be hung from a 2" x 4", chain or other support stretched between two posts about 5 feet apart. To protect the dust bags from rainfall, a roof at least 6 feet square should be constructed over the bags. Protection from rainfall prevents caking of the dust. If a bag does get hard, it should be pounded with a stick or similar object to break up the caking to restore it to a dust.

BACKRUBBERS

Oil solutions of insecticides can be applied by means of a purchases oiler or homemade backrubber. The backrubber is by far the least expensive method but must be recharged more frequently.

The backrubber, as shown in Figure 2, consists of a length of chain or several strands of barbed wire around which burlap is wrapped. Barbed wire holds the burlap in place much better than chain. The wire strands are twisted into a cable and held together with hog rings.

The cable is then covered with two layers of burlap bags. The first layer is wrapped lengthwise and the second layer of bags is affixed widthwise. The bags are held firmly in place with hog rings or tied with smooth wire or twine. There are two ways of hanging backrubber cables. One way is to suspend the cable between two braced posts 15 to 20 feet apart. The ends of the cable

should be attached to each post about 3-1/2 to 4 feet above the ground and the other end 9 feet out on a post at ground level. With these two basic designs, backrubbers can be made to fit individual preferences. Most designs are equally effective if properly maintained and placed where forced usage is achieved.

The backrubber cable should be saturated with an appropriate insecticide-oil mixture using about 1 gallon of mixture for each 15 to 20 feet of cable. This will be enough to treat 30 to 40 cattle. Recharge the backrubber frequently enough to keep it moist and effective.

For information concerning current recommended insecticides to use with dust bags and backrubbers refer to Purdue Extension Publication E-12 *Control of Cattle Pests*

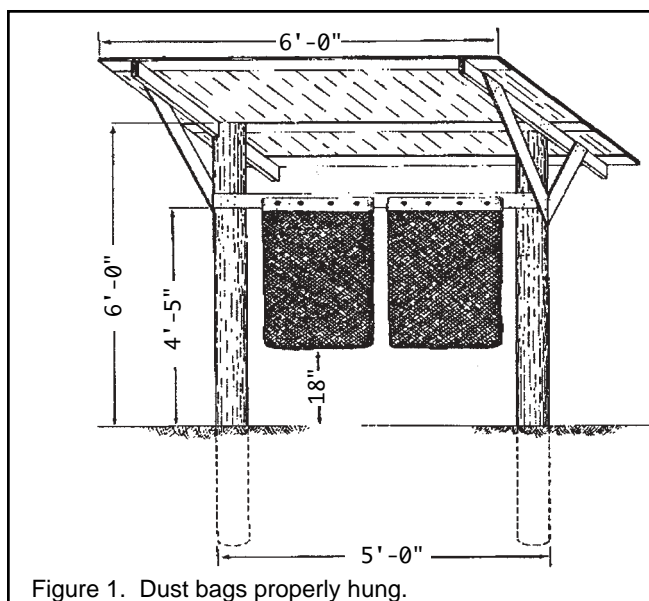


Figure 1. Dust bags properly hung.

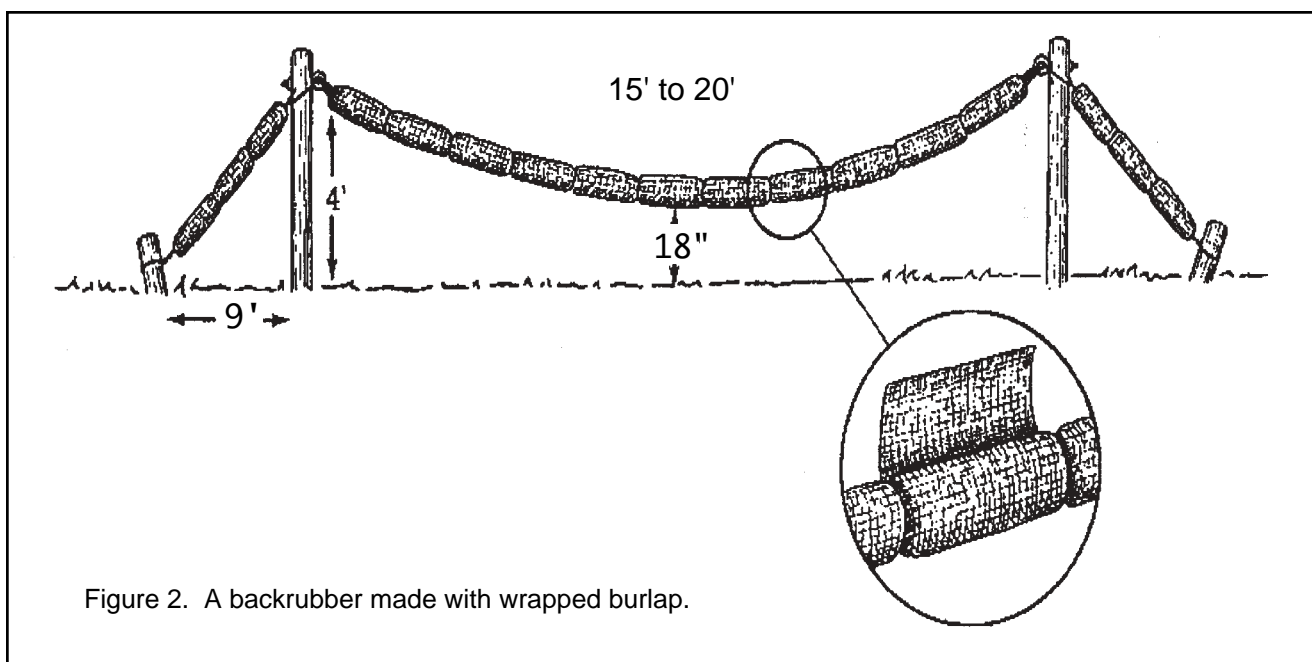


Figure 2. A backrubber made with wrapped burlap.

READ AND FOLLOW ALL LABEL INSTRUCTIONS. THIS INCLUDES DIRECTIONS FOR USE, PRECAUTIONARY STATEMENTS (HAZARDS TO HUMANS, DOMESTIC ANIMALS, AND ENDANGERED SPECIES), ENVIRONMENTAL HAZARDS, RATES OF APPLICATION, NUMBER OF APPLICATIONS, REENTRY INTERVALS, HARVEST RESTRICTIONS, STORAGE AND DISPOSAL, AND ANY SPECIFIC WARNINGS AND/OR PRECAUTIONS FOR SAFE HANDLING OF THE PESTICIDE.

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