



ENTFACT -508

WALK THROUGH HORN FLY TRAP FOR PASTURED CATTLE

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Horn flies are bloodsucking insects that can be seen on the backs and sides of beef and dairy cattle during most of the summer. These flies spend virtually all of their time on animals. They use a tubular mouthpart to pierce the skin and get a blood meal. While horn flies take only small quantities at a time, they feed frequently throughout the day. Irritation and feeding by horn flies, especially on yearling cattle, results in reduced weight gain during horn fly season. UK research has shown differences in the range of 12 pounds per head resulting from horn fly control.

The idea of a walk through fly trap to protect cattle from horn flies was first presented in 1899 with some additional work in 1930. The development of insecticide resistant horn flies in some areas, plus interest in non-chemical fly control, spurred reinvestigation of fly traps. This fact sheet presents general information on the trap and research results from field tests at the University of Missouri. It is a guide for people considering the use of alternative types of fly control. Specific plans are available from the Agricultural Engineering Plan Service, Room 205, Agricultural Engineering, University of Missouri, Columbia, MO 65211. Ask for plan 1-904-C-6, "Fly Trap". The retail price of materials is estimated at about \$300. Wear and tear was low in field tests so a trap should last for several seasons.

How It Works

The trap reduces the numbers of flies on the animals as they move through it. Ideally, the tunnel-like trap should be placed where animals can pass through it several times a day. Flies are brushed off of the animals while they are in the device. The trap functions somewhat like a minnow trap. The flies move through the angled side slats to light and are trapped between the slats and the outer screened sides of the trap. It is easy to move into the collecting area but very difficult to get out. Horn flies die naturally after a short time off of the animal. Dead flies that accumulate in the trap can be removed but scavenger insects will do an effective cleanup job if the trap is not cleaned.

Effectiveness

Cattle passed freely through the trap, leaving behind many of the horn flies that were on them. Animals using the trap had an average of 50% to 70% fewer horn flies during Missouri field trials than untreated animals. On some evaluation dates, reductions were as high as 90%. Horn fly control on nearby herds wearing insecticide impregnated ear tags averaged 88% to 98% during the tests. While the trap caught some face flies, it did not result in any effective reduction in fly numbers per head. Very small numbers of stable flies and horse flies were caught in the traps but the traps do not provide effective control of these species.

Placement

As with dust bags and back rubbers, placement of fly traps is important. They should be located where the animals must pass through then regularly. Pathways to water, feed, or mineral supplements are ideal. The outside area around the trap should be fenced to exclude cows. This will reduce damage to trap screening and framework.

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