

Summer Fly Control on Cattle

W. Dee Whittier, DVM
Extension Veterinarian, Cattle
Department of Large Animal Clinical Sciences
VA-MD Regional College of Veterinary Medicine

With summer conditions come the worry and loss associated with fly infestations of cattle. Economic losses occur because of the worry of the flies, because they suck blood from the animals and because they spread cattle diseases such as pinkeye. Effective control measures will allow increases in profitability in beef cattle operations.

The first major type of fly that affects Virginia cattle is the horn fly. So named because it does rest on the horns of cattle with modern polled cattle the flies tend to rest on the withers, back and sides but the flies also spend time on the undersides of cattle where most of the biting occurs.

Losses associated with horn fly infestations have been studied extensively. The crucial level of flies for losses to begin to occur is 200-250. If either young animals or cows have this many flies or more than treatment will result in increased weight gains. Studies done at Texas A&M University have documented average increases in weaned calf weights of 20-27 pounds when effective control of horn flies is implemented

The second major type of fly that affects Virginia cattle is the face fly. This fly is larger and more robust than the horn fly and spends only periodic feeding times on the flies during the day. As the name implies these flies prefer to be on the face and consume the secretion from the eyes and nostrils. They are particularly important because they transmit the pinkeye organism from one animal to another and because they damage the cornea of the eye during feeding and thus allow a port of entry for the pinkeye-causing organism.

A number of methods and products are available for the control of cattle flies. More emphasis has been placed on horn fly control, perhaps because their study is easier and because they are generally easier to control. The topical products that are currently approved for control and available fit into four major categories: organophosphates (OP's), Pyrethroids, organochlorines and endectocides. Pyrethroids have, to date, given the best face fly control because of their ability to cause rapid knock down. Table 1 summarizes the products according to their application class.

Table 1. Products for control of Horn Flies and Face Flies.

Pour-Ons	Ear Tags	Spray Formulations	Dusts
5 Pyrethroids (1-10 % Concentrations)	8 pyrethroids	4 Pyrethroids (10-42.5%)	1 Pyrethroid (3%)
2 Endectocides with claims for flies	5 OP's (5-40%)	4 OP's (5.8-50%)	2 OP's (1-50%)
1 Spinosyn	2 combo OP & Pyrethroids		
	1 Organochlorine		
	1 Endectocide		

Other products that are approved for fly control are feed-through and rumen bolus products that prevent fly development in manure pats. Since both horn flies and face flies lay their eggs in manure and the development proceeds there, inhibiting compounds will prevent the hatching of flies. An important consideration in the use of these products is the availability of other untreated cattle in the proximity. If there are many neighbors (within 1-5 miles) with cattle who do not use these control products producers often see little benefit from mineral and bolus treatments for flies.

When making decisions about fly control it is important to realize that there are many effective programs. Producers should develop a program for their operations which is cost effective and most convenient. Some of the factors to consider when developing a fly control program for a herd include:

Young cattle should receive more attention than older cattle. Because they are growing decreases in gain effect income directly.

Young cattle are much more susceptible to pinkeye.

Fly tags are convenient but have some drawbacks.

Full season control from fly tags, especially for face flies, is generally not possible.

Horn flies developed resistance to the original pyrethroid eartags quite rapidly. Newer pyrethroids and OP's have been slower to have resistance develop. Combination pyrethroid and OP products are quite good against resistant flies in theory. No resistance to endectocides has been reported.

The use of two fly tags (one in each ear) extends control by only 10-14 days in most areas.

Dustbags, oilers, face mops and other "self medicators" can be very effective because they provide for long-term high concentrations of insecticides on cattle.

Locations for "self-medicators" must be carefully chosen so that cattle will get frequent contact.

Virginia Cooperative Extension materials are available for public use, re-print, or citation without further permission, provided the use includes credit to the author and to Virginia Cooperative Extension, Virginia Tech, and Virginia State University.

Issued in furtherance of Cooperative Extension work, Virginia Polytechnic Institute and State University, Virginia State University, and the U.S. Department of Agriculture cooperating. Alan L. Grant, Dean, College of Agriculture and Life Sciences, and Interim Director, Virginia Cooperative Extension, Virginia Tech, Blacksburg; Wondi Mersie, Interim Administrator, 1890 Extension Program, Virginia State, Petersburg.

July 10, 2009