

Fly Control

Fly control is an important component of summer cattle management. It is important for cattle producers to investigate methods of fly control to limit losses in production and health.

The economic threshold for horn flies on a cow is 100 flies per side for a cow, and 50 flies per side for a calf. When flies are over the economic threshold, they can interrupt grazing and reduce weight gain by 17-33% over an 80-day period. This is especially seen in growing calves that have over 200 flies as their weaning weights can be up to 15 pounds lighter. It has been found that up to \$68/head can be lost due to overpopulation of flies. This totals \$1 billion of income loss over the entire United States.

Types of Flies

There are four main types of flies that can be found on cattle. Horn flies are found on the shoulders, back, and belly. They eat about 20-30 blood meals/day. Face flies are found on the eyes, mouth, and muzzle. They feed on secretions, mostly from eyes, which makes them a vector for pink eye. Stable flies are found on the legs of cattle and cause them to stomp their feet and switch their tails. **The economic threshold of stable flies is 5/leg.** Horse flies bite and feed on cattle's blood, making them a vector for anaplasmosis.

Fly Reproduction

Knowing how and where flies reproduce can help prevent fly populations from growing. Flies lay eggs in fresh manure (horn, face, and house flies) or decaying material (stable flies) where they will then mature and hatch into larvae in about one week. The larvae will then develop in the manure and pupate in the drier ground underneath. Flies complete their entire life cycle between 10 and 20 days.



Fig. 1. Cow with face flies.

Insecticide Resistance

One thing that producers need to be careful of when controlling flies is resistance to insecticide. In order to avoid resistance issues, producers can rotate classes of chemicals. Delaying spring treatments until the flies hit the economic threshold for beef cattle is recommended. When using fly tags, tags should always be removed in the fall. Producers can also use a fly control products during the late fly season to help cut back on the number of larvae that will go underground during the winter.



Fig. 2. Horn flies on the side of a cow

Fly Control Methods

Producers should create a program using different methods to ensure the best fly protection. The producer needs to decide what is best for the herd while considering their facilities and location.

Fly Tags: Ear tags coated in insecticide to prevent face flies.

Pros:

- Lots of options for rotational use

Cons:

- Shorter life time
- Targets only face flies
- Can be more expensive (labor, price of tags)

Oiler: Back rubbers filled with fly control chemical

Pros:

- Intermediate for expenses
- Controls face and horn flies

Cons:

- Have to be refilled
- Must be in a convenient location where cows are forced to use them to be effective.

Pour-On: Insecticide that is poured onto the back of a cow

Pros:

- Some can prevent internal parasites as well as flies
- Used as a component in a fly control program (fly tags for face flies, pour-on for horn flies)

Cons:

- Labor expenses
- Life time is variable



Fig 3. Wagon gears make mineral feeders and oiler portable in a rotational grazing system



Fig. 4 Mineral feeder with fly tags. Cattle mineral is also a common delivery tool for feed-through fly control

Feed-through: Feed additives/supplements, usually in a free choice setting containing fly preventatives

Pros:

- Inexpensive
- No labor involved
- Breaks the life-cycle of the fly

Cons:

- Need to start feeding 30 days prior to fly season
- Only prevents horn flies

Direct Spray: Insecticide that is sprayed onto a cow's back, belly, or legs

Pros:

- Intermediate for expenses
- Very effective for flies everywhere on a cow
- Immediate decrease in fly load

Cons:

- Labor intensive

Acknowledgments:

Simmons, N. (2018, June 8). Fly control is important for cattle herds over the summer. Panhandle Agriculture. IFAS Extension

Written by Travis Meteer, University of Illinois Beef Extension Educator. Revised by Sadie Drayer, University of Illinois Extension Intern

Build your best life. Trust Extension to help.



Illinois Extension
UNIVERSITY OF ILLINOIS URBANA-CHAMPAIGN