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 without any negative effects are 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.

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.

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.

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.
Fly Prevention 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 tag)

Feed through—feed additives/supplements, usually in a free choice setting containing fly preventative
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

Oiler—back rubbers filled with fly control chemicals that cattle can rub against
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 on to 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

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