

Focus on Fly Control in 2016

cornea and conjunctiva of beef cattle. If coupled with the infectious bovine rhinotracheitis (IBR) virus, *M. bovis* can cause a much more severe inflammatory condition.

Stable flies

Stable flies continue to emerge as an economic threat in beef and feedlot cattle. Stable flies are aggressive feeders that inflict a painful bite. Stable flies cause significant stress in cattle, causing them to spend energy in avoidance behaviors such as foot stamping and tail switching.

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For most beef producers, the yearly calving season has been completed and breeding cows and heifers is now the main focus. However, another critical step in a profitable season is effectively keeping the various flies attacking your cattle under control, especially as the herd takes advantage of green pastures and warmer summer temperatures.

While horn flies continue to cause the most economic loss in cattle, there are at least three other fly species that economically impact beef cattle production. These species include: the face fly, the stable fly and, to a lesser extent, the housefly. The successful control of these flies can mean extra dollars earned for the beef producer.

Horn flies

This blood-feeding pest is responsible for losses of beef cattle performance in the millions of dollars annually. When horn-fly numbers are high, beef cattle experience a high level of annoyance and blood loss. The end result of high horn-fly populations is decreased milk production, reduced weight gains, changes in grazing patterns and cattle bunching together.

A typical horn fly will take some 20 to 30 "blood meals" each day consisting of around five ounces of blood loss per feeding. The only time they leave a beef animal is when the female horn fly deposits eggs in fresh cow manure. The complete life cycle, from egg to adult, can usually be completed in 10 to 20 days. Without any type of control, multiple generations of horn flies can impact any beef herd with measurable economic losses.

Face flies

The face fly is quickly becoming a major economic pest to beef producers. As a matter of fact, the face fly has replaced the horn fly as the most economically devastating pest in California beef production.

A non-biting fly, the face fly feeds on animal secretions. The adult female face fly typically clusters around a beef animal's eyes, mouth and muzzle, causing a high level of discomfort and annoyance to the beef animal.

Face flies can be vectors of *Moraxella bovis*, the principal cause/agent of bovine pinkeye or infectious bovine keratoconjunctivitis. Pinkeye is a highly contagious inflammation of the

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Range cattle may spend extended periods (not eating or gaining weight) in creeks or ponds to avoid stable flies. Feedlot cattle are also prone to stable flies

According to a recent survey, Kansas feedlots lose an estimated \$22 million annually due to stable flies. Blood loss

and disturbance of feeding may result in a 15% loss in body weight of cattle when stable fly populations are high.

Houseflies

Houseflies are primarily a nuisance to cattle and may cause cattle to engage in avoidance behaviors that detract from time spent feeding. Movement of flies from manure to cattle and between cattle makes houseflies ideal vectors for certain diseases. Houseflies have been implicated in the transmission of enteric diseases such as salmonellosis and shigellosis. Houseflies may also transport parasitic worm eggs from manure to feed.



Standard fly-control options include insecticide dust bags, back rubbers (oilers), animal sprays, pour-on insecticides and insecticide-impregnated ear tags. Sometimes a combination of two or more of these control measures is needed to achieve a reasonably high level of control of these various fly species. However, a producer will need to apply multiple options several times during the fly season to achieve optimal results of these four fly pests, and especially horn flies.

Oral, multi-fly control

A new oral larvicide (feed additive) option is now available that can assist in controlling all four types of flies without the animal stress, handling of pesticides and expensive labor associated with administering multiple fly-control options.

Producers can control all four fly species by offering Champion's JustiFLY™ Feedthrough with their mineral of choice starting 30 days prior to flies appearing and ending after the first freeze. A producer can simply mix a 360-gram add-pack with 50 pounds (lb.) of free-choice mineral. The active ingredient is diflubenzuron, a highly effective insect growth regulator (IGR) that stops larvae from developing once in contact with treated manure.

Unlike current methoprene-based products that only control horn flies, JustiFLY is EPA-labeled to control horn flies, as well as face flies, stable flies and houseflies. It is also EPA-approved for use in lactating beef and dairy cows and calves and has no milk disposal issues or withdrawal period.

Based on a mineral consumption rate of 2-3 ounces (oz.) per head per day, one 360-gram add pack provides approximately 200 cow days (1,200 lb. each) of fly control. This product is an economical, easy-to-use pasture fly-control option where killing flies is critical to animal comfort, overall performance (including weight gains), herd health and stress-reducing fly control convenience.

Editor's Note: Steve McKinley has been writing about management and herd health issues for more than 40 years. This article was provided by McKinley Communications Inc. on behalf of Champion USA.