



FACE FLIES AND PINKEYE

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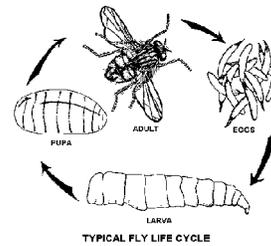
Face flies are one of the most difficult pasture pests to control. They are on cattle only for short periods of time during the day and stay mostly on the head, which is difficult to treat with insecticides. Face flies use an abrasive sponging mouthpart to stimulate tear flow from the eyes. These flies lap up the protein rich secretions from the eye as well as nasal discharges, saliva, or blood oozing from wounds. Most of the time they are off of the animals, resting on plants, fence posts, or other objects.

In addition to being very annoying to cattle, face flies play a role in the transmission of *Moraxella bovis*, the principal causal agent of bovine pinkeye or infectious bovine keratoconjunctivitis. This disease is a highly contagious inflammation of the cornea and conjunctiva of cattle. Coupled with the infectious bovine rhinotracheitis (IBR) virus, *M. bovis* can cause a much more severe inflammatory condition.

The incidence of pinkeye in a herd can vary greatly from year to year and usually is greatest during fly season. However, pinkeye also can occur during the winter or where flies are not particularly abundant. English breeds with less pigment around the eyes (Hereford, Holstein Shorthorn) are more susceptible than are those with completely pigmented eyes (Angus). Infections are much worse in young animals than old animals.

Pinkeye is associated with shipping stress, increased sunlight, eye irritants such as tall, rough pasture grass, and other bacteria and viruses. The eye and nose discharges of infected animals can carry the pathogens, so direct animal-to-animal contact, contaminated equipment, and animal handlers can transmit the disease. Fly control is only part of the comprehensive program needed to reduce pinkeye incidence. Your veterinarian can help you to plan and implement a total program.

FACE FLY BIOLOGY



Face fly maggots develop in freshly deposited cattle manure. Female face flies are most readily attracted to grass-type manure and lay their eggs within 15 minutes after it is deposited. The four stage life cycle takes about 15 to 25 days. Face flies

overwinter as adults in sheltered areas such as barns or attics and become active again in the spring.

SELF-APPLICATOR FACE FLY CONTROL OPTIONS

Devices that allow animals to treat themselves frequently and which target the head and face area are most effective against face flies. Even if a good pasture fly control program is in place, these insects are strong fliers so they may move in from other herds and allowing fly numbers on animals to remain high.

Backrubbers with wicks or fly flips will allow cattle to treat themselves while loafing and scratching. The insecticide should be diluted with a good grade of mineral oil (diesel oil evaporates more quickly and is harder on the cattle's skin) according to label instructions. Do not use motor oil. See ENT-4, Making and Using A Cattle Backrubber, for more information.

Dust bags are most effective when used where cattle have to pass under them daily to get to water or mineral feeders. Best coverage occurs when the animal must lift the bag with its head to pass through. Inspect the bag regularly and recharge it as needed. Keep it dry to reduce clumping of the insecticide and premature loss of effectiveness.

Feed additives or an **insecticide bolus** targets face fly maggots breeding in fresh animal manure. All animals must eat a minimal dose of a feed additive regularly. Supplementary control measures must be taken to deal with flies moving in from nearby herds.

Insecticide-impregnated cattle ear tags release small amounts of an insecticide which are distributed over the animal during grooming or rubbing. Some pyrethroid tags can provide significant face fly reduction for several weeks. See Entfact 505, Insecticide- Impregnated Ear Tags, for more information.

Self-applicator sprayers can be set up at mineral feeders or gates between fields. A switch, tripped by the animal, releases a small amount of spray. Position the nozzle so that the face is treated.