



Fly Control For Cattle And Horse Owners

By Jackie Nix

Flies are among the most difficult pests to control. Some species of flies are blood feeders, such as horn flies and stable flies. These biting flies cause great economic losses every year. Non-biting flies can also cause problems as they can carry diseases and can be very annoying to both livestock and humans. As rural areas are increasingly encroached upon by urban sprawl, nuisance lawsuits are on the rise too. House and stable flies are considered together in nuisance lawsuits. This litigation usually cites dust, odors, and flies as a complex without identifying fly species. Urban expansion into agriculturally zoned areas has increased the possibility of lawsuits thus bringing about higher rates for liability insurance. If lawsuits are settled in favor of the claimant, the settlement requires either punitive damages or removal of the livestock. With this in mind, it is no wonder that fly control is of vital importance to today's savvy cattle and horse owners.

Some common flies of concern to cattle and horse owners are face flies (Figure 1), stable flies (Figure 2) house flies (Figure 3) and horn flies (Figure 4). Horn flies and face flies cause problems in pasture situations. House flies and stable flies are problems in and around barns and stables.

Horn Flies

Adult horn flies are about half the size of house flies. They are dark gray in color with two transparent wings folded flat over the back, often in a delta wing position. The life cycle is completed in 8 to 45 days depending on temperature and humidity. Horn flies can be distinguished by their habit of congregating and resting head downwards on the back and shoulders of their host and by their delta-wing appearance. Horn flies tend to rest quietly until disturbed whereas other flies always seem to be on the move. Depending on the weather, horn flies will rest on different parts of the host body (underside during intense heat or rain) or on light or dark-colored patches of hair (dark patches when cool, light when hot). Horn flies rarely leave their host except to lay eggs, to move to other cattle in the herd, or when cattle enter buildings. Most feeding occurs along the underline of the animal and results in scabby, often bleeding, sores. Flies will continue to feed around the margins of these sores causing the sores to get larger with each successive year of attack. The hide gradually takes on a calloused, rough appearance. Each fly may feed from 10 to 38 times each day, causing annoyance and irritation to the host. Grazing time is disrupted, resulting in significantly reduced weight gains and daily production.

The horn fly alone is estimated to cause losses of \$700 million to the U.S. beef industry annually. Tests have shown that the annoyance, irritation and blood loss caused by flies can reduce weaning weights of calves nursing fly infested mother cows by 12 to 14 pounds; average daily gain of grazing yearling steers may be reduced 12 to 14 percent, or as much as 30 pounds during the grazing season. Horn flies have also caused lowered sexual libido in bulls, resulting in reduced reproductive efficiency.

Stable Flies

Stable flies are dark colored, 3/4-inch long, and have piercing bayonet-like mouthparts that extend from under their head. They resemble the common house fly except for the mouthparts and the "checkerboard" markings on the underside of the abdomen. Their life cycle is about 3 weeks in summer and longer in cooler weather. Females deposit 400 or more eggs during their life. Stable flies feed on most species of domestic livestock, but are major pests of horses and cattle. They penetrate the animal's skin with their piercing mouthpart and feed on blood. They primarily feed on the front legs, causing animals to bunch in a circle with each animal trying to protect its front legs.

Face Flies

Adult face flies are similar in appearance to house flies except for being larger and darker. Face flies are serious pests of cattle and horses. Face flies are nonbiting flies that feed on animal secretions, nectar, and dung liquids. Adult female face flies typically cluster around the animal's eyes, mouth, and muzzle, causing extreme annoyance. Their activity around the animals' eyes allows face flies to serve as vectors of eye diseases and parasites such as pinkeye and eyeworms. They are also facultative blood feeders, meaning that they gather around wounds caused by mechanical damage or biting fly activity to feed on blood and other exudates. They often overwinter in homes and other structures near pastures where these animals are kept.

House Flies

House flies are similar in appearance to stable flies and develop in similar material. The house fly will also develop in fresh manure. Because house flies have sponging mouthparts, they cannot pierce the skin of an animal. Instead, they feed on animal wastes, decomposing feeds, and other liquefied organic matter. The life cycle of the house fly is about 2 weeks. House flies have been incriminated in the transmission of many animal and human diseases.

What can livestock owners do to control flies?

Control of fly pests in and around pastures and barns requires an integrated approach. No one fly control method or insecticide product will result in total control. In order for flies to reproduce they require appropriate breeding material, optimum moisture and adequate warmth. By eliminating any of these, you will reduce the fly's ability to produce a new generation. Therefore, a successful fly control program must include the following methods:

1. Sanitation
2. Mechanical control

3. Proper use of insecticides

Sanitation should be first and foremost in any fly control plan. Manure and other organic fly breeding material should be regularly removed from barn and stable areas and disposed of by spreading evenly over pastures. Another method is to compost the manure and bedding. The heat generated by a properly maintained compost pile will kill fly eggs, therefore reducing fly populations. Additionally, be sure to clean up spilled feed and other organic materials to prevent additional fly breeding grounds. Reducing moisture in pasture and paddock areas can also reduce fly development. Corrals and working areas should be designed to promote adequate drainage and eliminate wet areas too. Automatic waters in or around the barn should be properly maintained to avoid wet spots. If sanitation is not practiced, chemical control may be unsuccessful.

One of the most common means of mechanical control is the use of screens. Screens do a good job of keeping flies out of barns. The disadvantage is the maintenance and additional cost of installation. Most people are also familiar with the electric bug zappers and jug traps. These can eliminate many flies, but will not usually give satisfactory control when active fly breeding is taking place.

Finally, the use of an insecticide plays an important role in any fly control program. Insecticides can be delivered to livestock in a variety of manners, including: insecticide-impregnated ear tags, self-treatment dust bags and oilers, animal sprays, pour-ons and feed additives. All methods have their advantages and disadvantages. Even with good sanitation and mechanical control practices in place, flies still often become a problem. Insecticides are usually needed as the final piece in a complete fly control plan. One insecticide product to consider in your fly control program is the **Sweetlix[®] Rabon[®] Molasses Pressed Block**. The Sweetlix[®] Rabon[®] Molasses Pressed Block contains Rabon[®] (tetrachlorvinphos), which prevents the development of horn flies, face flies, house flies and stable flies in the manure of treated cattle and prevents development of house flies and stable flies in the manure of treated horses. In addition, essential vitamins, minerals and salt are provided in one convenient block. Just place the weather-resistant Sweetlix[®] Rabon[®] Molasses Pressed Block out in the pasture or paddock with cattle or horses.

What is Rabon[®]?

Rabon[®] is a nontoxic oral larvicide (meaning it kills fly larvae). Rabon[®] controls fly populations by preventing larvae from developing into adults. Rabon[®] is not absorbed by the animal and passes through the digestive system and remains in the manure to kill developing larvae through physical contact.

Are Sweetlix[®] Rabon[®] Blocks Safe?

Yes, research has shown Rabon[®] to be safe when used as directed. Rabon[®] requires no withdrawal for cattle and can be safely fed up until slaughter and to pregnant and lactating cows. However, because Rabon[®] is a cholinesterase inhibitor, it is recommended that it not be used in conjunction with other cholinesterase inhibiting compounds. Owners of debilitated, aged, breeding, nursing or pregnant horses should consult a veterinarian

before use for an added level of safety. Rabon[®] is environmentally safe and does not adversely affect dung beetles or other beneficial insects.

Using Sweetlix[®] Rabon[®] Blocks Effectively

It is vital that all horses and/or cattle on the premises are treated with proper amounts of Rabon[®] for effective fly control. Read and follow label instructions carefully and monitor consumption. Remember that just one female can result in over 300 MILLION flies in 60 days! Neglecting to treat or under supplementing even one animal can sabotage your fly control efforts. For maximum benefit, offer Sweetlix[®] Rabon[®] Molasses Pressed Blocks 3-4 weeks prior to the start of fly season and continue until the first killing frost. When introducing Rabon[®] later in the fly season, remember that Rabon[®] will not kill existing adult flies. Other fly control methods will need to be used to control these adult flies.

In summary, you shouldn't wait until a problem exists to begin a fly control program. A good program needs to be set in place before fly numbers increase. The more flies present when control measures are started, the longer it will take to lower the population to a satisfactory level. If you choose to use insecticides, make sure you read and understand the directions. Unfortunately, there is no "silver bullet" in the war on flies; however use of Sweetlix[®] Rabon[®] Molasses Pressed Blocks provides a sound foundation for your fly control program. Sweetlix[®] Rabon[®] Molasses Pressed Blocks offer fly control together with needed mineral/vitamin supplementation in one convenient block. A successful fly control program utilizing Rabon[®] also includes removal of all other forms of organic material – spilled feed, bedding, weeds, etc – in which flies can breed and lay eggs. By minimizing exposure to other organic materials, the likelihood that fly larvae will come in contact with the larvicide in the manure and be killed will increase. Also included in an effective fly control program are other methods to control adult flies such as sprays, fly traps, etc. For more information on the use of Sweetlix[®] Rabon[®] Molasses Pressed Blocks, call Sweetlix[®] at 1-87SWEETLIX or visit our website at www.sweetlix.com.

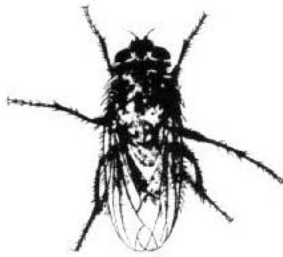


Figure 1.
Face Fly



Figure 2.
Stable Fly



Figure 3.
House Fly

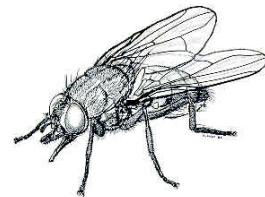


Figure 4.
Horn Fly

Jackie Nix is an animal nutritionist with Sweetlix (<http://www.sweetlix.com>). You can contact her at jnix@sweetlix.com or 1-800-325-1486 for questions or to learn more about the Sweetlix line of mineral and protein supplement products for horses, goats, cattle, sheep and wildlife.

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