

## FLY CONTROL AROUND HORSE BARN AND STABLES

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House flies and stable flies are common pests around horse barns, stables, and corrals. Persistent house flies are very annoying and potential carriers of human and animal pathogens. Stable flies give painful bites making activities unpleasant for humans and making horses nervous and difficult to manage.

House flies visit most any moist material from manure and decaying organic matter to garbage to blot up a liquid meal with their sponging mouthparts. They can carry a range of pathogens for such things as intestinal disorders and eye infections on their restless journeys. Females may deposit batches of eggs as they feed on a variety of moist, fermenting organic matter, manure, rotting hay, feed silage, or garbage. The cycle from egg to adult takes from 7 to 14 days, depending on environmental conditions. Mature larvae will crawl to drier sites to pupate and emerge as adults.

The stable fly resembles a house fly but has a distinct piercing mouthpart that projects from the front of its head. Males and females are blood feeders, usually attacking the flanks or below the knee causing horses to stamp or kick themselves. The fly is on the animal for only a few minutes; after feeding it moves to walls, fences, or other surfaces to digest its meal. Stable fly maggots develop in decaying organic matter. A fermenting mixture of straw, spilled feed, or hay, and urine or water is ideal. Horse manure is usually too dry but becomes suitable if moistened. Females lay several batches of 40 to 80 eggs. Development from egg to adult takes 21 to 25 days during the summer.

House flies and stable flies need breeding material, moisture, and warmth to develop. A successful fly control program must rely on timely elimination of breeding sites and moisture control. Insecticides can help to provide some temporary reduction of house fly and stable fly populations but cannot be the basis of effective fly management.

Elimination of breeding site is the key to a successful fly control program. Barns and corrals should be cleaned once a week to break fly life cycles. Removed manure and other fly breeding materials should be spread thinly over an appropriate area or composted, if practical.

Maintain good drainage to eliminate wet manure, spilled feed, and hay or straw. Check for and correct wet areas around animal waterers. Dry manure and accumulated organic matter are not good breeding sites.

### Mechanical Control

- Screening is an excellent way to keep flies out of feed and tack rooms and box stalls.
- Fans that direct a downward and outward air flow will keep flies from entering barns.
- Fly traps and sticky paper will capture flies. They may be most useful as a means of documenting fly numbers over time. A significant increase in catch from one week to the next can be a warning to check on sanitation and to increase fly control measures.
- Several commercial firms offer a fly parasite (predator) release program that can be used to supplement fly control. Aspects of using biological control are covered in Entfact 502, Biological control of flies.

### Insecticides as Supplements to Fly Control

Insecticides are used to kill adult flies after a problem has developed. While they can help to reduce fly numbers, they do not address their source – moist breeding materials. There are many alternatives for fly control but they should be viewed as a temporary solution until the root cause of the problem can be corrected. Large numbers of flies mean lots of breeding sites and a situation that cannot be corrected by insecticides alone.

Residual insecticides are applied to walls, ceilings, and rafters of barns and sheds where flies rest. General observations and accumulations of fly specks (waste drops) will help to identify these spots. Be sure to protect water and feed when making applications. In order to minimize control failures due to insecticide resistance, do not apply the same insecticide or insecticide within the same chemical class repeatedly throughout an entire season.

Class	Common Name	Brand Name
Pyrethroid	Cyfluthrin I-Cyhalothrin Permethrin	Countdown Grenade Atroban EC, Gardstar, Permethrin II, Prozap, Insectrin
Spinosad	Spinosyn	Elector
Organophosphate	Stirofos	Rabon

Space sprays, fogs, and mists can provide a quick knockdown of flies, especially in enclosed areas. Systems vary from foggers to timed release aerosols. Usually, these are pyrethrins with very short residues so treatments have to be repeated.

Pyrethrins – many ready-to-use and concentrate formulations

Fly baits can be placed in bait stations. They are most effective when there are few competing food sources in an area. Baits attract and kill house flies but are not effective against blood-feeding stable flies. Animals must not have access to these materials.

Common Name	Brand Name
Imidacloprid	Quick Bayt
Methomyl	Apache, Blue Streak Fly Bait, Fatal Attraction, Golden Malrin, Tailspin
Trichlorfon	Dipterex

Larvicides are insecticides that can be applied to breeding sites where large numbers of maggots are present and the area cannot be cleaned in a timely manner.

Common Name	Brand Name
Stirofos	Rabon

Feed through insecticides are administered specific levels in animal feed and pass out in the feces making the manure toxic to developing maggots. Each animal must get the correct amount every day. While they can reduce fly production from manure, they do not address problems with wet spilled feed and straw.

Common Name	Brand Name
Cyromazine	Serene, Solitude IGR
Diflubenzuron	Equitrol II Feed-Thru Fly Control, SimpliFly with LarvaStop Feed-Thru Fly Control
Stirofos	Equitrol Feed-Thru Fly Control

The instructions for use of the recommended insecticides are not as comprehensive as the pesticide labels and are intended to be used as guidelines only. Before using any pesticide, READ THE LABEL for more specific instructions. Many insecticides are sold under brand names not listed in this publication.