

COOPERATIVE EXTENSION WORK
IN
AGRICULTURE AND HOME ECONOMICS
STATE OF OKLAHOMA

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CONTROL OF THE STABLE FLY

By C. E. SANBORN, Entomologist.

There is not much difference between the stable fly and the house fly. The former, however, is very vicious and has a harmful bite in comparison with the latter which can not inflict a wound at all.

The stable fly, known also as the stock fly and straw fly, especially infests cattle and horses. It began to infest stock earlier this year than common, due perhaps to the mild winter.

The ordinary methods in use for preventing infestation of animals by this pest are very ineffective. It is absolutely necessary for every person concerned to study its habits and know more about it in order to practice more effective methods and bring about the desired results.

Breeding Places.

Straw stacks are perhaps the best and most common breeding places, although they will breed in horse and cow manure, especially when combined with other materials such as straw and similar bedding material. The most satisfactory material in which they can pass through their developmental stages is piles of wet straw which are sufficiently large not to dry out rapidly. Straw used for bedding and laden with moisture and manure is an excellent medium for their development.

Ill kept horse stables and dairy barns offer the most common general, continuous incubators for the eggs and consequent development of flies. Any cumulative manure should be placed in screened repositories or other enclosures from which the flies can not escape. The blood of animals serves as food for the adult flies and the mixture of bedding and manure furnishes food and protection for the larvae or maggots and protection for the pupae.

Method of Control.

All straw that is to be retained for feeding or bedding purposes should be cared for in such a way as to be kept perfectly dry. Straw not intended for feeding should be scattered thinly in fields where it may be plowed under. If it can not be used in any economical way it should be burned.

Stable manure should either be placed in fly proof enclosures or scattered so thinly in open fields that it will dry out quickly. Flies can not develop in perfectly dry material of any kind.

Straw should not be scattered during the early fall in wheat fields for winter protection to the wheat because chinch bugs are likely to seek winter quarters in it and be ready to destroy the growing wheat the following spring.

Bins for containing manure during the summer breeding time of the flies may be constructed and screened so that infested manure may be easily placed therein but from which the flies can not issue. The undeveloped flies placed therein in the manure will die as in a trap. During the winter the manure may be scattered in fields as a fertilizer with good results.

Fly Repellents.

There are some proprietary remedies on the market that are partially effective. They are, however, expensive and troublesome to use. They may be used to a good advantage at certain times during severe epidemics of flies but they are not wholly satisfactory.

The following formula is recommended by the Iowa Experiment Station, and has been found to be good here: "A good fly spray for cows can be made from the following materials: It will keep the barns free from these pests—4½ quarts of coal tar dip, 4½ quarts of fish oil, 3 quarts whale oil and 1½ quarts of oil of tar. Dissolve 3 pounds of laundry soap, add the spray mixture and bring the whole up to 30 gallons with luke warm soft water. This spray will be cheaper than commercial mixtures and will keep off the flies and also keep the hide in good shape. Thirty gallons of this mixture will spray 40 cows, twice daily for ten days."

Fly Covers.

Covers of properly tailored, cheap, serviceable material are considered by some as being more satisfactory than fly repellents. They are frequently used on both work and dairy animals with good results.

Repellents and covers do not eliminate the pest. *General cooperation in the elimination of straw stacks and manure or the proper care for the same will bring about the abatement and consequent control of the pest in the most practical and economical manner.*

Brief Life History of the Stable Fly.

The average life of the adult fly is twenty days.

The average number of eggs deposited by each female is about two hundred.

The eggs hatch in from two to five days, the average being three days.

The larvae or maggots develop in from fourteen to twenty-six days, the average time being fifteen days.

The pupal period ranges from six to twenty-six days, the average being ten days.

The minimum time for development from the egg to the adult stage is twenty-two days and the average time is twenty-eight days.

Flies become old enough to lay eggs about eighteen days after they emerge from the pupal stage.

The stock fly is a blood sucker.

It causes work animals to become emaciated; and in case of mules, fatal results are not uncommon.

Infested dairy animals frequently lose from forty to sixty percent in milk production.

The dissemination of poliomyelitis, known as infantile paralysis, is a mooted question. There has been reason to believe that persons may become inoculated with it by the bite of the stable fly. It is a very dangerous disease. We should take no risk with the stable fly any way. Cleanliness of the premises as above outlined will eliminate the pest.