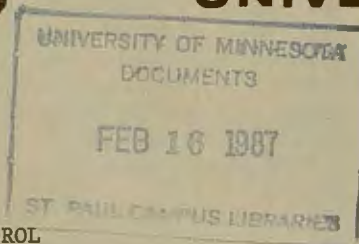




# Poultry Patter

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## FLY CONTROL

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Flies become a problem around most poultry operations during the summer. They usually cause no direct harm to the birds, but they can carry diseases and are particularly objectionable to humans since they feed on filth between visits to people and their food supplies.

Farmers may be more tolerant of flies than their nonfarm neighbors. Complaints frequently arise against commercial poultry farms as the main source of flies in the neighborhood. As housing areas expand, many farmers live close to the nonfarm community. An effective fly control program is essential to prevent neighbors' complaints and to emphasize that a poultry operation need not be a fly breeding establishment. When I attended a recent open house of a new commercial egg operation, one of the major complaints raised by the community was that the operation would be a fly hatchery. Fly control is one of the management factors that requires periodic attention to make poultry farming more pleasant and to prevent the farm from being labeled a nuisance by the neighbors.

The little and common houseflies are the most numerous around poultry operations. In their development flies pass through four stages—egg, larva, pupa, and adult. The length of time spent in each stage is influenced by temperature and moisture conditions.

The eggs are laid in poultry manure, moist feed, on dead carcasses, or other sources of moist, decaying organic matter. Many will hatch in less than a day. The larvae or maggots develop in 3 to 7 days, then move to a drier place to enter the pupa stage. The pupa is a dark brown, oval-shaped, tough shell in which the fly makes its transition from the larva to adult stage in 3 to 6 days. In

the adult fly's short lifetime of about 30 days, she may lay as many as 3,000 eggs.

Fly control can be best accomplished by a combination of management practices and insecticide application. A successful control program needs more than occasional consideration. With a good sanitation program and daily attention to sound management practices, periodic chemical treatment should keep fly problems at a minimum.

### Management Practices

Proper disposal of dead birds is poorly handled on many poultry farms. Carcasses may become infested with maggots if they are left lying in the open even for a short time. Dead birds should be removed from pens or cages as soon as noticed during the time the poultryman is feeding, gathering eggs, or checking the flock. If not disposed of immediately, a tightly covered container, conveniently placed, can be temporary holding space for the birds.

Wet manure makes an excellent fly breeding place. Runoff from water troughs should be properly channeled to avoid wet manure and stagnating pools around the building. Water troughs should be kept at proper levels to avoid spillover and valves and watering devices should be properly maintained so that leakage does not contribute to wet manure problems. Restricting the water, results in drier droppings with many strains of birds and is not harmful to production. Fresh manure contains 70 to 80 percent water. The moisture level must be reduced below the 20 to 30 percent moisture range or the manure will be a fly breeding ground. Manure piled in the open will be a source of flies. Moisture from rain will create odors and encourage fly breeding.

Weeds and grass growing around the house and drains provide potential fly breeding places. Controlling vegetative growth increases air movement and sun penetration. Spilled feed and broken eggs should be cleaned up immediately.

The workroom and the egg room should be kept clean. These areas frequently become storage for miscellaneous equipment which makes cleaning difficult. Flies are quickly attracted to egg residue which is not properly removed from floors and egg handling equipment.



Housefly

## Chemical Control



*Use Pesticides Safely*  
FOLLOW THE LABEL

A number of chemicals are available for fly control. They can be used as residual sprays, space sprays, baits, larvacides, or treated cords and strips. Choose the insecticide and method of application that best meets the needs of your control problem.

Always read the label on the container and use materials only as directed. Since yearly changes can occur in regulations concerned with approved insecticide usage, the latest recommendations should always be obtained. Extension Bulletin 263, Insecticides and Their Uses, is revised yearly and is available from your county agent or the Bulletin Room, University of Minnesota, St. Paul, Minnesota 55101. Entomology Fact Sheet 17 gives more detailed information on insect pests of poultry.

Synergized pyrethrins or thiocyanates can be used as space sprays. As a fine mist or aerosol, they can be used daily or as needed. They have no residual value and are only effective on the flies present at the time of spraying.

Residual sprays should be applied to the interior walls and ceiling of the house after thorough cleaning and between flocks. These sprays will usually be effective for several weeks. Ronnel

(Korlan) or malathion can be used while the birds are in the house. Avoid spraying the birds directly. Gather eggs and cover waterers and feeders before spraying. Consult more detailed directions for use of other recommended residual sprays. Caution must be used in applying insecticides that can contact the birds or surfaces the birds contact. The poultryman is legally responsible for chemical residues in his birds and in their eggs.

Baits are especially effective in cage houses since the birds are confined and can be kept from the fly control material. They should be used to supplement residual sprays where fly populations are heavy. Follow the instructions on the label of ready-to-use baits containing diazinon, naled, trichlorfon, dichlorvos, or malathion. Liquid baits can be prepared from these insecticides following the directions in Entomology Fact Sheet 17. Bait stations can be made from bait-saturated pieces of burlap placed near areas of greatest fly concentrations.

Commercially available fly cords and "slow release" resin strands can be used as a supplement to other control measures. They are not satisfactory for use with heavy fly populations. A larvacide can be used to kill developing larvae in wet droppings under cages.

There is no easy way to fly control. It takes a planned combination of management practices and chemical control to get the job done.

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