



UNIVERSITY OF MARYLAND
EASTERN SHORE
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NUISANCE FLIES ON POULTRY FARMS

Fact sheet No. 01.001

January 2024

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There are hundreds of species of flies, and not all of these flies are pests. In fact, some flies are beneficial. Therefore, in order to have effective control of the flies on your farm, it is important to determine the type of pest you have. There are four main pest flies found around poultry facilities. These flies can carry pathogens that can affect human and animal health. These flies are also called filth flies due to their association with organic matter such as household waste and manure.

Main Pest Flies

House Fly (*Musca domestica*): The house fly is about a ¼ inch long, is a dull grey color, has four black stripes on its thorax, yellow color on the side of its abdomen and has a bent wing vein. They are active during the day and are found resting on structures inside and outside of poultry facilities.

Little (Lesser) House Fly (*Fannia canicularis*): The little house fly is less tolerant of heat and typically emerges in early spring. They have three dark stripes on the thorax, no bent wing veins, and a yellow/orange color on the side of its abdomen. They are generally smaller than house flies, however, the size of a fly depends on the environment and nutrition it had when it



Image: Simon Zebelo

developed. The male little house fly displays an aimless hovering flight behavior of long duration in shaded cooler areas. The female little house fly is less active than the male, and does not usually rest in the same areas as house flies.

Black Dump Fly (*Hydrotaea aenescens*): The black dump fly is a less common pest and sometimes can be beneficial.

The larvae eats immature developing flies of other pest species. They are found in similar locations as house flies. They are a shiny black color, no bent wing vein and no stripes on their thorax.

Blow Fly (*Calliphora spp. or Lucilia spp.*): The blow fly is a bright metallic green, blue, or bronze color. They are important decomposers in the environment. They have a strong sense of smell and are attracted to manure at poultry facilities.

Nuisance fly life cycle

There are four distinct life stages (Figure 1).

The adult female flies lay eggs on decomposing organic matter. The eggs are small and can hatch in less than 24 hours in warm temperatures. The larvae grows over a few days to weeks.

As the larvae grows bigger, it will molt twice creating three distinct larval stages call instars. When the temperature and nutrition are right, it will molt into a pupae. The adult fly develops within the pupae, and will emerge when development is complete.

The time of development depends on food, moisture and heat conditions. The house fly can complete its life cycle between seven and 10 days, the little house fly completes its life cycle between two to three weeks, and the black dump fly completes its life cycle around two weeks.

All of these nuisance flies can be found around poultry facilities at the same time. Identifying the species of fly can determine the correct integrated pest management measure to implement. Additionally, different integrated pest management control measures can be used to target different developmental stages and break the fly's life cycle.



Image: Simon Zebelo

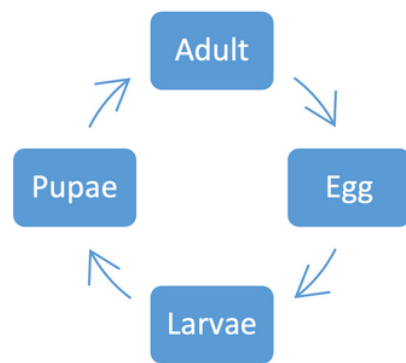


Figure 1. Life cycle of a fly

Other sources for information:

References

Fly Control on Poultry Farms, Penn State Extension. <https://extension.psu.edu/fly-control-on-poultry-farms> Accessed February 11, 2022.

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This work was supported in part by the U.S. Department of Agriculture, National Institute of Food and Agriculture, 2021-70006-35384, and in partnership with the Maryland Legislature.

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