

Some Facts about Flies and Dairy Farms

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There are several types of flies and they have different habits. Mostly face, horn, deer, and horse flies are associated with dairy facilities. Each one of them has different habits, life cycle, and behavior. A complete description and figures of these flies can be found at Gojmerac (1991). Some of them prefer fresh manure, others breed better in swamps, and others in decaying organic matter. In general, piles of manure would help reproduce them; however, it would depend of the type of fly. For example if the major problem is the horse fly, which require swamps to reproduce, it would not be because manure piles.

The housefly (*Musca domestica*) is the most common specie and cosmopolitan pest of both farms and houses. The house fly is probably the specie for which people complains the most regarding dairy farms. Let's take a closer look of it.

The housefly can complete its life cycle as fast as 10 days in summer or as long as to three months in winter. Each female can lie up between 350 and 900 eggs. Eggs hatch in about 6 to 24 hours, larvae are fully grown in around 4 to 10 days, and they pupate for 3 to 6 days. Females lay eggs two days after emergence and continue doing so for about a month. Adults live from 30 to 60 days. Houseflies can move between 4 and 6 miles within 24 hours and travel up to 28 miles carried by wind.

The housefly overwinters in larva or pupal stage under manure piles and adults may survive in protected locations as heated buildings or barns. Wetter locations have always shown higher incidence of flies. Manure that is wet but not saturated is conducive to fly production as for example manure floating or sticking to the sides in a liquid manure pit (Williams, 2003).

Manure stockpiled as well as composting organic materials in process of decomposition generates enough heat to keep housefly larvae away. However, if organic material in decomposition is not properly managed, it will have zones of favorable larvae development as in the edges, underneath, or in the borders. For example, if a pile of compost is not mixed within a two week period, it will have zones that will allow for a full cycle of larvae and pupae to grow.

Several studies have found that removal of stocked files within an 8 to 10 day period would reduce substantially the population of houseflies. Also, many housefly control publications recommend prompt removal of manure piles or pack them to prevent rain penetration as forms to decrease housefly populations.

References:

Gojmerac, W.L. 1991. Identifying and controlling flies on dairy, beef, other livestock, and pets. University of Wisconsin, Cooperative Extension. Guide R-08-91-1M-45-E. Madison. Available at: <http://s142412519.onlinehome.us/uw/pdfs/A2118.PDF>

Williams, R.E. 2003. Controlling flies on dairy farms. Purdue University, Cooperative Extension Service. Guide E-10-W. Available at: <http://www.entm.purdue.edu/Entomology/ext/targets/e-series/EseriesPDF/E-10.pdf>