



URBAN ENTOMOLOGY FACT SHEET

House Fly

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Identification: This is *Musca domestica*. It belongs to the insect family Muscidae. It is the most common fly in and around homes and has a worldwide distribution. They can be recognized by their sponging mouthparts, sharply bent 4th wing vein, dull gray body color with a pale-sided abdomen, and four longitudinal stripes on the top of the thorax.

Life Cycle and Habits: The entire life cycle ranges between 6 days and 5 weeks, depending on environmental conditions. Females lay eggs in batches of 75-150 eggs, and produce 5-6 batches during a lifetime. Larvae hatch from the eggs in 8-20 hours and can feed on a wide variety of substances, completing development in 3-7 days. Mature larvae migrate to a cool, dry place to pupate, often moving up to 50 feet per day. The pupal stage varies between 3 days and 4 weeks, depending on temperature. Adults emerge from the pupal case, feed, mate, and produce new offspring. There may be as many as 10-12 generations per summer.

Most house flies stay within 1-2 miles of their larval habitat if sufficient food is available. Females seek any warm, moist organic material in which to feed and lay eggs including: human food, manure, garbage, dead organisms, etc. Their mouthparts allow them to only feed on liquids. They liquefy many foods by regurgitating on the food before ingesting the liquid. During the day, house flies rest close to the ground (<5 ft.). At night they will move away from the ground (>5ft.) and typically nest near their food sources.

Damage: House flies are not only nuisance pests, but they have also been shown to harbor over 100 different pathogenic organisms. Their habits of visiting a wide variety of substances, regurgitating and ingesting at each, and depositing fecal materials, makes them in the least a threat to good sanitation.

Control Measures: House fly control is a four-step process. Inspecting suspected fly breeding and development sites is the first step. It might be good to do this at night when the adult flies are resting near these areas. Sanitation is the next step and is the most effective measure in eliminating the fly problem. It involves the removal or elimination of food and breeding sites. Since all wastes cannot be eliminated for practical purposes, mechanical control measures should be implemented following sanitation. Mechanical control includes the use of tight-fitting garbage containers, tight-fitting windows and doors, and secure screening on all openings. Finally, insecticidal control includes applying appropriately labeled pesticides. There are a variety of over-the-counter treatment formulations (powders, baits, aerosols) that can be used to treat walls, dumpsters, and other breeding sites after other control measures have been implemented.