Dealing with Winter Flies

Barb Ogg
UNL Extension Educator

If your house has been invaded by flies on bright, sunny, winter days, you probably have either face or cluster flies. *Face flies* look like the common house fly. The less common *cluster flies* are a little larger and very sluggish.

In the fall of the year, face flies and cluster flies overwinter in cracks and crevices of structures. During warm spells, especially on bright, sunny days, flies inside the wall will warm up, become active and follow temperature gradients into the house.

Face flies (*Musca autumnalis*). The face fly is nearly identical to the common house fly. Both have four dark stripes on the top of their prothorax and 1/6- to 1/4-inch long. Face flies overwinter in the adult stage, differing from house flies that overwinter as larvae or pupae.

Face flies prefer to breed in fresh cattle/animal manure, so rural homes are especially vulnerable to infestations. Adult flies can travel considerable distances from their breeding areas. In late summer/early fall, face flies start congregating around buildings and rest on exterior walls, especially under the eaves, eventually squeezing into a crack or crawling into a vent. During warm periods in the winter, face flies become active and emerge into rooms.

Jim Kalisch, UNL Entomology Department

Cluster fly (left) and face fly (right)

Cluster flies (*Pollenia rudis*). Cluster flies are slightly larger than face flies. There are no distinct stripes on the prothorax. They are sluggish and fly around more slowly than other flies.

Cluster fly females lay eggs in cracks in the soil. Eggs hatch into tiny maggots which seek out earthworms to feed upon. After locating a host, the fly maggot burrows into the earthworm's body and feeds for about three weeks. After a two-week pupal stage, the fly emerges from the soil. Several generations are produced each year. The adult fly overwinters.

University of Nebraska–Lincoln Entomology Department

Dead flies in a windowsill

Controlling Face and Cluster Flies

The best and most effective solution to this problem — which may be an annual one — is to prevent entry in the first place. This includes screening vents and sealing cracks and crevices around windows, eaves and siding. Sealing must be done by late summer before flies start to move in fall. Both face and cluster flies may enter a building high in the eaves area or in attic vents, so don't forget these locations.

The vigorous use of a flyswatter is the best control for just a few flies. In the meantime, fly paper, coils of sticky paper, can be hung near windows. Hang fly paper about five to six feet above the floor near the window for best control. Be sure to secure window treatments to make sure they don't get stuck in the sticky paper. Also available are decorative sticky traps that can be placed in the corners of the window.

Chemical treatment inside walls is not practical and treatment in living areas is not recommended. Insecticide foggers (i.e., "bombs") can be used to kill flies that are active in unoccupied areas, like attics where exposure to family members and pets is not likely. Unfortunately, foggers do not have much residual activity and won't kill flies that emerge later. Be sure to read and follow label directions when using any pesticide.

Be My Valentine?

Consider these mating curiosities from the insect world...

Barb Ogg
UNL Extension Educator

Fireflies. Throughout the ages, kids of all ages have been intrigued by fireflies, also called lightening bugs. The flash of the firefly is really a love call. It's how these night-flying beetles find each other for mating. Both male and females flash during courtship. A male firefly flashes a specific flash sequence while he is flying. The female sits still on vegetation and, if she is receptive, she will flash back to the males. Tufts University biologists measured the length of the male fireflies' flashes and found females preferred males that displayed flashes slightly longer in duration. For the female, a male that flashes longer is a better mate.

Honey bees. Life is not sweet for males (drones) in a honey bee colony. Drones have no stinger and cannot feed themselves. They are only useful if the hive produces a new, unmated queen. The successful drone becomes eviscerated after leaving reproductive organs inside the queen and dies immediately afterward. In the fall of the year when resources become scarce, their sisters (the workers) cast drones out of the hive to die. And to add insult to injury, successful commercial beekeepers today purchase fertile queens for their colonies. These queens have been bred (in the lab) by artificial insemination to produce workers which are disease resistant and have other superior qualities.

Bed bugs. Bed bugs have a unique method of copulating known as traumatic insemination. The male bug pierces the surface of the female body cavity with a modified copulatory organ and injects sperm into her body cavity. The sperm migrate through the body cavity to the female's primary reproductive tract. Scientists who have studied this phenomenon have concluded it may be advantageous to the last male mating, but it reduces female longevity and reproductive success.

Peter J. Bryant, University of California, Irvine

Wingless female aphid giving birth

Scale insects. Because scale insects are stationary as adults and have limitations finding each other, they have unusual ways of reproducing. Cottony cushion scales have both male and female organs housed in the same body. (This is called hermaphroditic.) If you think this is unnatural, there are a number of other animals that do the same thing, including earthworms, leeches, some frogs and toads, but it's rare in mammals.

Aphids. Most of the year, aphids (also called plant lice) are wingless females. These females reproduce by parthenogenesis, which means that they give birth to live young, which are exact clones of the mother. A newly born aphid becomes a reproducing adult within about a week and can produce 50 to 100 offspring in the next month or so. It's easy to see how huge numbers of aphids can be produced in a short amount of time!

In many aphid species, winged males and females are produced in the fall; they mate and females lay eggs that overwinter. In the spring, they hatch into wingless females starting the cycle over again.

Beginning Beekeeping 2-Day Workshop

Saturday, Feb. 18, 9 a.m.–5 p.m.
Lancaster Extension Education Center, 444 Cherrycreek Road, Lincoln

Saturday, April 8, 9 a.m.–3 p.m.
Apiculture lab, Agricultural Research and Development Center (ARDC), near Mead

On Feb. 18, you will learn to:
- manage honey bees by understanding their biology and behavior
- identify the best Nebraska honey plants
- locate hives for best survival and production
- manage honey bee diseases

On April 8, you will learn to:
- install packaged bees
- assemble a hive
- harvest honey and beeswax
- prepare your crop for market

Registration fee: $20 per family (family to include parents and siblings living at home). Registration includes refreshments, one workbook and one lunch. Lunch for each additional family member is $8.
Pre-registration is required. Call Barb Ogg at (402) 441-7180 to pre-register.

Amazing Facts... About Honey and Honey bees

By Barb Ogg, UNL Extension Educator

The honey bee, *Apis mellifera*, was not known in North America until European settlers introduced colonies near the end of the 17th century. Native Americans called honey bees "white man's flies".

To produce one pound of honey, bees travel more than 55,000 miles, collecting nectar from two million flowers. The annual U.S. consumption of honey is about 1.3 pounds per person.

Honey bees do not die out over the winter, but feed on the honey collected during the warmer months. To keep the queen warm, they form a tight cluster in the hive and beat their wings to keep the temperatures around 93 degrees F. It takes about 35 pounds of honey to provide enough energy for a small colony of bees to survive the winter.

The phrase "making a beeline for", describes the most direct route from honey plants to the hive. Once a bee has collected all the nectar she can, she flies directly to the hive.

During the summertime when hives are growing very fast, a healthy queen bee can lay about 1,000 to 1,500 eggs per day.

Bees from each honey bee colony have a unique odor that is recognized by guard bees which prevent intruder bees from entering the colony.

Millions of acres of U.S. fruit, vegetable, oilseed and legume seed crops depend on insect pollination, including honey bees. A 1999 Cornell University study concluded the direct value of honey bee pollination annually to U.S. agriculture is $14.6 billion.

U.S. annual honey production is more than 180 million pounds. Consumption is about 400 million pounds, so honey is imported into the U.S. Major importers are China, Canada, Mexico and Argentina.