BLOW FLIES

Flies in and around my garbage? Flies in my house? Where are they coming from? As temperatures warm up, especially on those few sunny days that may occur in the Pacific Northwest in early spring, you may notice a large number of flies around and in hour home. Often, these flies are "blow flies", which become active on warmer days.

WHAT DO THEY LOOK LIKE? Blow flies (Calliphoridae) are metallic blue and green in color. They are also called bottle flies for their habit of depositing eggs on animal carcasses and meat products, casing it to "blow" or "bottle" with maggots. Eggs are white or pale yellow, about 1.5 mm long, and are elongate and tapered at one end. The larvae (maggots) are white or yellow with pointed heads, and range from 12 to 18 mm in length. The puparia are brown to black, and are 9 to 10 mm long. Winged adults are often metallic and are 6 to 14 mm in length. The development from egg to pupa ranges from 2-3 weeks, and the life span of an adult averages 35 days. Most species are common across the U.S. and are also found in many temperate areas of the world.

Photo by Dr. W. Tozer, DVECC Bangor

WHAT DO THEY DO? Most blow flies are scavengers, living in excrement and similar materials. However, the most commons species are those that breed in carrion. These species lay their eggs on bodies of dead animals, and the larvae feed on the decaying tissues. Blowfly species that are reared under laboratory conditions, specifically *Phaenicia sericata* (Meigen) and *Phormia regina* (Meigen), have been useful in treating osteomyelitis in humans. Blow flies may act as mechanical vectors of various diseases. The transmission of dysentery often accompanies high blow fly populations. In some cases blow flies may attack living tissue. For instance, the screwworm fly, *Cochliomyia hominivorax*, is a blow fly species which lays its eggs in wounds or nostrils of its hosts (cattle, sheep, horses, mules, goats, hogs, domestics and wild warm-blooded animals), and its larvae can cause substantial damage. In the South and Southwestern United States, the screwworm fly populations were significantly reduced with the release of sterile males. The females mate only once during a lifetime. If a female mates with a sterile male, the eggs become nonviable and fail to hatch. Other species of blow flies are the blue bottle fly, *Calliphora vomitoria*, and the green bottle fly, *Phaenicia sericata*.

MANAGEMENT. Sanitation through the removal of animal and breeding sites, and exclusion through proper disposal of garbage is essential for controlling the flies.

- Ensure that doors and windows are fitted properly to prevent flies from entering buildings. Check for damaged screens or vents that may need repair. Seal any cracks or openings around buildings, particularly around doors and windows where flies can enter. Ensure that all possible measures have been implemented before applying any chemical sprays to eliminate flies.
- If chemical control is deemed necessary, use a pyrethroid spray, which has a relatively low toxicity. **Always read and follow label directions carefully**.

MORE QUESTIONS? Please do not hesitate to give your "Bug Docs" a call at comm.: (360) 315-4450, DSN: 322-4450 or you can e-mail us at ndveccmei@pnw.med.navy.mil.