

## Flies—oh my!

### Flies and Maggots in ALL compost

Davis is a good place to be a fly in the summer and fall—warm temperatures and abundant food sources both in town and in agricultural fields allow the fly population to increase throughout the summer and then peak during the warm days of fall.

The flies that are breeding in the ALL compost bins are "blow flies," also known as "green bottle" or "blue bottle" flies. There are several common species in Davis and they are recognizable by their metallic coloring. They love mixtures of protein and sugars and can detect sources from perhaps a half-mile away. The green-bottle fly (also known as the copper-bottom fly), scientifically named *Lucilia cuprina*, was identified from maggots found in the North Davis Elementary ALL compost on 10/18/12. Although this particular species was identified, any of the other common blowfly species could also have been the maggot culprits. The common housefly could also be another compost visitor.

Flies, like butterflies, have a lifecycle that includes a larva, a pupa and an adult. When the temperatures rise to 80-90 degrees, the blowflies can go from eggs to third instar larvae in 5 days. When the larvae reach this third stage, they enter a wandering phase where they will look for a sheltered place to pupate. If they don't find a suitable place they may just pupate wherever they end up! Thus, when our compost containers are at a nice, toasty temperature and are only picked up once a week, we are likely to get a population of maggots crawling out of the containers to search for that perfect pupation place.

When temperatures are lower, say 60-70 degrees, the lifecycle of the flies slows down, and it might take 2 weeks for the larvae to reach their wandering phase. Thus, in cooler cities like San Francisco, a once a week pickup can prevent occurrences of wandering maggots.



wandering maggot example



metallic colored blowfly

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