

# Bugs & Blights

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## How will that spell of freezing temperature or a warmer winter affect insect populations?

Insects have many ways of surviving low temperatures. Some overwinter as pupae or eggs which are often more resistant to freezing than larvae, nymphs or adults. But these mobile stages can move to find warmer spots in the landscape such as under a dark rock or log, or burrowing deep into the soil. The adult flying stage can migrate to warmer climates (think Monarch butterfly). An underfed insect can tolerate more cold than one that has just filled its belly and some insects produce an antifreeze of ethylene glycol to lower their freezing temperature. There are many survival strategies to survive weather fluctuations. Winter survival of insects by Whitney Cranshaw, Colorado State U. Extension: [www.colostate.edu/Depts/CoopExt/4DMG/Pests/winter.htm](http://www.colostate.edu/Depts/CoopExt/4DMG/Pests/winter.htm)



(Left) Tent Caterpillar. Photo by Sharon Collman, WSU Snohomish Extension.

(Below) Bluebottle fly. Photo provided by wikimedia Creative Commons.



- Tent caterpillars actually overwinter as little caterpillars inside the egg and can survive temperatures as low as -40°F.
- Slugs are somewhat sensitive to freezing but they can crawl inside a pot, or hide behind clods or vegetation.
- Snails can seal off their opening and also hide under protective sod or debris.
- Hemlock woolly adelgid in the east is killed when temperatures drop just a bit below 0°
- Fleas die at temperatures below 30.2°F for five days (unless of course they find a warmer hiding place).

So, the cold is not likely to seriously reduce many of our insect populations. Some may be killed, or the population may be somewhat reduced. However, mild winters can also affect insects. Like plant seeds, some insects need a period of cold before they can break their winter resting state (called diapause). If winter is too mild, they don't reach their chilling requirements and may either die or stay in diapause till the next year. So, unless we get an extended deep freeze of several weeks, plan to stay vigilant and monitor your plants. Early intervention will be much more successful than waiting till the infestation is raging and out of control.

**Flies in the house** on a warm winter's day is most disturbing. Why here? Why now? I'm not talking one fly, sometimes there may be 15 or 30 flies bouncing along the window and flying through the room. Take a close look to see the lovely iridescent green or blue abdomen. This beauty is a bit marred by knowing that they start out as maggots and feed on carrion. Just where do they come from? Often a dead mouse in a wall – thank goodness the flies digest it all leaving just a bit of skin and bones, then they have the courtesy of flying into your living room to let you know they have helped you. Usually these episodes, though sometimes overwhelming, are brief. The vacuum works well, or a fly swatter if you are a tiny game hunter. Enlist the kids or grandkids at a nickel a fly. (They are going to get that money out of you anyway.) There are also a number of sticky strips, interior fly zappers, and there is a kit with a funnel trap that is surprisingly effective.