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Cold Snaps and Insect Life

Now that nice weather has returned – for now... - it's easier to take a look back and see if anything beneficial resulted from the recent cold snap. One of the 'hopes' crop producers or gardeners often have is the potential (detrimental) effect of the cold snap on insect life.

Insects handle cold in a number of ways. Some (wireworms and Japanese Beetle, for example) overwinter in the soil. That soil provides them a good buffer against the coldest of temperatures. Data from the Kansas Mesonet (<https://mesonet.k-state.edu/>) stations in the District (Corning/Oskaloosa) show that on even the coldest days of February, two-inch soil temperatures dipped only in to the high 20's. Temperatures typically have to get much colder than that to cause any issues.

Bean leaf beetles and squash bugs winter above ground and would be more exposed to potential cold injury, but even they do quite well at adapting and tend to find ways to protect themselves as cold weather approaches. Natural body mechanisms (there are multiple) also help, but even many freeze susceptible insects aren't going to experience much mortality until temperatures drop to four degrees below zero – and often lower.

Bottom line: the cold snap we just experience likely didn't do much damage to most insect species. They were likely well protected and will live to fight another day. Even if they did not, it is unlikely that the cold caused a great enough level of mortality to rid us of them all, meaning there will be plenty of them to survive and reproduce through the summer.

What often results in greater mortality is cold snaps *after* insects have come out of a more dormant state later on in the spring. It *is* possible at that point to get some mortality from freezing temperatures (temperatures in the 20's for long periods or even in to the teens after alfalfa weevil larvae have become active for example), but even then, greatly reduced levels are not likely. In other words, keep scouting – the insects haven't gone away.