



The Buzz



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Now you see them... now you don't

Insects aren't magical but they seem to pop out of nowhere every spring and then disappear again when it gets cold. So if it isn't magic, then what is going on? Well, the answer to that question depends on the insect. There are many different ways insects deal with the cold.

1. Run Away

Some insects escape the cold by migrating. Monarchs will avoid the cold by heading south from as far north as Canada to the warmth of Mexico. They can also avoid hot summer days by moving back north.



2. Wait it out

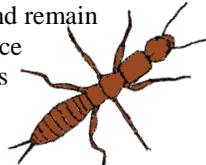
Insects can escape the hardships of winter by entering an inactive or sleep-like state (diapause or hibernation) to conserve their resources until the environmental conditions are in their favor once more. Some will spend the winter inside the wood of a tree, or others will head underground. The Arctic Woolly Bear

caterpillar does so much waiting that it takes it seven years to reach the adult life stage. There is more than one way to wait out winter though. Other insects will lay their eggs before winter hits, the babies will hatch in the spring, but insects aren't always ready to lay eggs when it gets cold. Some instead will spend the winter in a pupal stage that will last longer than usual until the temperature rises again.



3. Tough it out

In order to survive freezing temperatures some insects can produce a chemical in their buggy blood that works like antifreeze. This chemical keeps the insect from freezing and allows them to live and remain active when other insects cannot. Ice Crawler insects can live on glaciers thanks to the antifreeze in their bodies.



So they may not do any magic tricks but insects like Monarchs, Arctic Woolly Bear Moths, and Ice Crawlers are able to do some pretty amazing things to survive even when the climate is very harsh.

Ben Beal

Reader Drawings



Sage
Mrs. Kelly's 2nd grade

Ask an Entomologist

– **Charish**; Mrs. Othon's 2nd grade

Q: Where did you get all the bugs?

A: Some of the bugs like Madagascar Hissing Cockroaches, and millipedes that we use for Insect Discovery you can buy at pet stores here in Tucson. The pinned insects were collected by different entomologists.

– **Peter**; Mrs. Othon's 2nd grade

Q: How old are the cockroaches?

A: We have a bunch of cockroaches. I don't know how old any one particular roach is but they can live up to five years or so.

– **Henry**; Mrs. Lisa's Kindergarten

Q: What do ladybugs eat?

A: Gardeners love ladybugs because they eat a pest insect called an aphid. Aphids can quickly destroy garden plants if you aren't careful.