Amazing ways insects survive the winter

Source: Blake Newton, 4-H extension entomologist

During winter, we take measures to protect ourselves from the cold, like wearing extra clothes or staying inside more. Some insects take similar precautions to survive.

Wintertime can be business as usual for insects like termites that live inside structures such as rotting logs or other environments that shield them from freezing temperatures. These insects may slow some, but they remain active.

Like termites, aquatic insects like the mayfly nymph remain active during the winter if the water does not completely freeze. A layer of ice that floats on the top of many Kentucky lakes and streams during the winter provides additional insulation for insects and helps keep water temperatures below the ice above freezing. Leaves that fall into the water provide food for these insects to continue to grow all winter long.

For some insects, like the praying mantis, wintertime marks the end of their life cycle, and they die in colder temperatures. When spring approaches, the next generation hatches from eggs laid in the fall.

Other insects like the monarch butterfly seek out warmer climates. Other migratory insects include some types of butterflies, dragonflies and grasshoppers.

Other butterflies, brown marmorated stink bugs and lady beetles enter diapause, a state that is very similar to hibernation. These insects will find a protected area underground or in a building and slow their bodies down to the point where they do not eat, drink or move much. When the temperatures warm, the insects wake again.

Centipedes have a substance in their bodies that is like antifreeze in a car. This substance helps protect their bodies from turning to ice, which would be deadly. These creatures can survive low temperatures that might kill others.

For more ways youth can learn about insects, contact the (COUNTY NAME) office of the University of Kentucky Cooperative Extension Service.

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