A Winter Disappearing Act

As the seasons turn, we notice the temperature drop, the shortened days, and the sudden lack of insects buzzing about as we walk the trails. We know they will be back as soon as the weather warms, but what happens to them in the meantime? As ectotherms, or cold-blooded animals, insects depend on their environment, not their metabolism to maintain their body temperature. When it gets cold, their metabolism no longer works well and they are unable to digest food or move their bodies.

So, what is an insect to do when the temperature drops? Some just succumb to the cold temperatures and die. These insects have left behind eggs that will hatch into the next generation next spring. Others are able to survive as larva, pupa, or adults. These insects either move to a space that does not freeze (below ground or into your house!) or are able to super cool, enabling their temperature to drop below freezing without forming damaging ice crystals. As you explore outdoors, see if you can find any signs of overwintering insects!

Keeping Cool

Mourning cloak butterflies overwinter as adults, tucked into the shaggy bark of a tree. They are some of the first butterflies to be seen on a warm spring evening.

Cecropia moths overwinter as pupae, tucked into a well-camouflaged cocoon. The Isabella tiger moth overwinters as a larva, known as a wooly bear caterpillar. They hide in the leaf litter until the weather warms next spring.