



Branching Out

Winter 2023

Where do all those insects go?



Huron Woods is home to approximately 1100 different species of insects. When winter sets in, where do they go? We are all aware of the long migration of our iconic Monarchs. In addition to the **Migration** strategy, there is a second interesting strategy, namely **Overwintering**. Both are described below:

1) MIGRATION



This famous strategy is not only practised by Monarchs. The Painted Lady Butterfly can fly up to 100 miles a day and up to 30 miles per hour with no set geographical or time destination. Often called the “thistle butterfly”, the larvae feed on this common weed and the adults like to sip the nectar from thistle blooms. This most ubiquitous of butterflies is found on every continent except Antarctica and Australia.

2) OVERWINTERING

○ **As Nymphs**

Dragonflies, mayflies and stone flies nymphs live in ponds and streams under the ice, feeding and growing all winter long.

○ **As Eggs**

As an example, Praying Mantis overwinters in leaf fall ready to develop in spring.

○ **As Larvae**

Caterpillars and other insects (e.g. solitary bees) often tuck themselves away in places that would be perfectly safe eg. in a forest but are dangerous for them in a yard or landscaped area. Caterpillars and solitary bees both use dead plant stocks to overwinter. Many hide inside the stems, but others attach

themselves to the outside. They attach themselves to twigs, dead plants, and tree trunks. Removing dead stems in gardens in the fall runs the risk of killing these butterflies and other pollinators. With some careful planning, you can keep your yard butterfly, moth, and bee friendly while also making it tidy and disease free.

○ **As Pupae**



Many insects use dead plant matter like dead leaves, fallen tree trunks, or standing dead vegetation for insulation and camouflage during the winter. Luna moths, for example, bind together leaves to make themselves a crunchy sleeping bag to spend the winter. Some species of swallowtail butterflies spend the winter as a chrysalis that looks like a dead leaf. They attach themselves to twigs, dead plants, and tree trunks.

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○ **As Adults**

- ***The Communal Cuddle*** - Honey bees have been found to be semi-active hiding in hollow trees or in groups keeping inhabitants warm by vibrating their wings. In the hive, bees crowd together exchanging positions with outermost bees so that every individual stays warm.
- ***The Glycerol Trick*** –



The beautiful Mourning Cloak Butterfly reduces its water content, while building up glycerol in its body, to act as antifreeze. Come spring thaw, this species is one of the first to emerge as adults in our forest.

- ***Diapause*** - Is a dormant condition experienced by bees, ladybugs and Monarchs. It is defined as a pause in development due to environmental conditions. Our best known insect example is the Monarch, huddled in the thousands in cool mountain forests in Mexico in a resting state to conserve energy. No breeding takes place during diapause.