

Moths, the under-appreciated pollinators

by Laura Jach Smith

Moths are often not recognized as pollinators; yet, they remain one of the most ecologically important groups of nocturnal pollinators (along with bats and some beetles). Not all moths are nocturnal though, some (like the Hummingbird clearwing and the Virginia ctenucha) can be seen pollinating and nectaring on flowers during the day. Moths have great diversity and outnumber butterfly species nearly ten to one! It is a good thing they have an entire week dedicated to their conservations. Happy National Moth Week!

<https://nationalmothweek.org/>



Hummingbird moth on Monarda flower. photo Amber Barnes



Virginia Ctenucha moth, photo credit Kate Redmond

Moths, whether flying day or night, are important pollinators that need our support because their populations are in decline, just like many of our pollinators. Researchers are finding that moths play an even more important role in pollination than previously thought. Moths may also help expand the genetic diversity in plant communities since moths have comparatively longer flight ranges than other pollinators (such as bees who remain relatively close to their nest), so their fuzzy

moth undersides are transporting pollen to reach distal populations of the same plant species that would otherwise not cross-pollinate.

Aside from pollination services, moths are a crucial source of food within our ecosystem's food webs. For example, most terrestrial birds feed their young primarily on insects, with caterpillars (butterfly or moth larvae) being a primary part of their diet. Moths also make up a large part of bat diets.

To support moths in Wisconsin, there are three major things you can do!

1). **Plant native!** Moths, similar to butterflies, have a life cycle that involves a host plant. Our native moths, not surprisingly, have native trees, shrubs, grasses, and forbs as their host plants and cannot complete their life cycle without them.

2). **Provide overwintering structure!** Many moths overwinter in cocoon or caterpillar form, and require safe overwintering sites. Fallen leaves, matted grass, woody debris and tree cavities are all important overwintering sites for moths. Having a “wild” or undisturbed area in your yard (don’t rake the leaves!) will naturally provide these important overwintering structures for moths.

3). **Reduce light pollution!** Artificial lights at night can impair moth behavior and reduce their ability to find mates, reproduce and pollinate plants.

If you would like know some more interesting facts about moths, or review how to differentiate a moth from a butterfly, see the “Lovely Lepidoptera” factsheet here:

<https://www.pollinator.org/pollinator.org/assets/generalFiles/Lepidoptera-Fact-Sheet.pdf>

For any questions or conversation, please feel free to reach out! Please email ljs@pollinator.org. Let me know what pollinator-related resources would help support your work and help you promote NRCS pollinator conservation practices for landowners.