

# BOGDIVERSITY THURSDAY



—*from Head Naturalist Clinton*

## Oddball Moths for National Moth Week!

POST #75—July 27, 2023

Happy National Moth Week!

This week is National Moth Week, a week celebrating moths and their wide diversity and importance. We have featured moths a few times in BogDiversity Thursday posts, as they are the most species diverse group of organisms in the Sax-Zim Bog! At present, we have documented 669 species of moth, with no end to ceiling of biodiversity in this group in our area.

A great way to begin learning moths is to learn the shapes of each major group. For example, sphinx moths (outside of being larger than most moths) have a very easy to recognize shape: long, angular wings and a broad and elongated body. The hindwings of sphinxes tend to be quite short compared to their forewings. Geometer moths, on the other hand, are very broad winged, typically holding their wings open and flat at rest, and their wings are often relatively similar in size. If you think about a classic moth shape, you are likely thinking about a geometer! And the comparisons between groups could go on.

Moths have diverse life histories and occupy many of the ecological niches available in an ecosystem. You have some moth species that are detritivores as caterpillars (Litter Moths and Clothes Moths). Other species are aquatic in their larval stages (the aptly named Aquatic Crambids). Still others are specialists, utilizing very specific plant species in their adult and larval stages (like flower moths in the genus *Schinia* and Yucca Moths). Many moths lack mouth parts as adults, but there are a wide range of species that have developed special relationships as pollinators for night-blooming plants.

As a reminder, moths are members of the order Lepidoptera. This is one of the most diverse groups of insects in the world, with around 180,000 described species, most of which are moths! In Minnesota, there are around 2200-2300 species of moth. Moths come in most colors, shapes, patterns, and sizes (as seen below by the selection of moths for today's BogDiversity Post!).

While most moths are nocturnal, there are a number of day-flying species of moth, even in Minnesota! Moths are also one of the most important foods for birds and bats, alike. Almost all the birds, excluding larger raptors, in our area include insects as part of their diet, especially when feeding chicks and moth caterpillars are incredibly important to fledgling birds. Moth caterpillars make up a significant part of the diet of number of birds in our area including Black-billed Cuckoo, Evening Grosbeak, Pine Siskin, Cape May Warbler, Bay-breasted Warbler, and Great Crested Flycatcher, just to name a few!

If you are interested in learning more about moths, moth-watching, or just want to experience the Bog at night, we have a Mothwatching Field Trip this Saturday, July 29th, one of the last days of National Moth Week! More details can be found on our website: <https://saxzim.org/events/>.

More information about the featured moth species can be found with the photos below!

(Photos of moths below by Head Naturalist Clinton)



Busck's Plume Moth is one of a wide number of odd looking plume moths! Most of which hold their wings out, with sections of their wings folded together. Some plume moths also have odd projections on their legs that look like spines, but are not stiff.



A moth with an odd name and weird shape, this is Canary Ypsolopha! This group of moths have curved tips to their wings, giving them a very distinct profile.



Dark Pine Knot-Horn moth is one a few moths in our area with odd palps in front of their heads. Palps are odd appendages that help moths sense their environment. Not all moths have these appendages and some moths have exaggerated palps!



This moth looks very much not like a moth! Maybe more similar to a beetle or caddisfly or even some other insect, but not a moth. This is Metallic Casebearer, one of the most distinctive Casebearer moths in our area.



Last, but not least, the slug moths! This is Yellow-shouldered Slug Moth! Named for their caterpillars unique shape, slug moths are distinct at every stage of development. At rest they tent their wings and stick their abdomen up through their wings!