

# Bog Buckmoth

(*Hemileuca spp.*)

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Adult Bog Buckmoth courtesy of Elinor Osborn

# Bog Buckmoth



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## What is a bog buckmoth?

The bog buckmoth is a New York **endangered species** that belongs to a family of larger moths that also includes the giant silk moth. The adult bog buckmoth is white, black, and orange. The wingspan of males is approximately 5 to 6 cm. Females are slightly larger with a wingspan of 6 to 7 cm, about the size of your index finger. With a total approximate length of only 3.8 cm, the bog buckmoth is still a relatively large moth.

## Where do bog buckmoths live?

The bog buckmoth is found in only ten colonies in the world. Six of those colonies are found in Oswego County, NY. All but one of those six colonies occurs in the wetlands sheltered by the eastern Lake Ontario dunes!

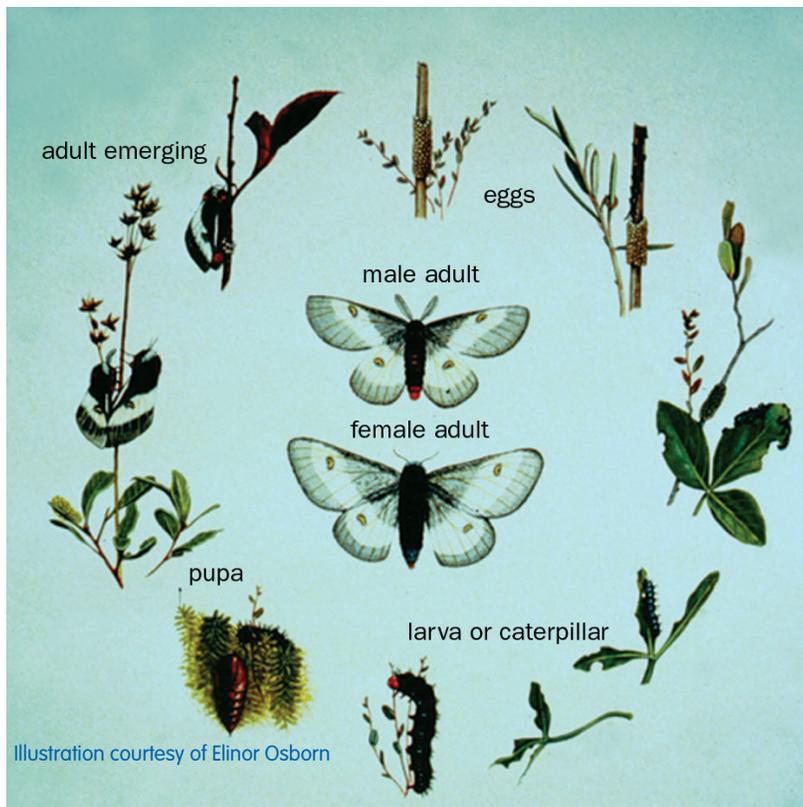
Bog buckmoths live in wetlands called **fens**. Fens and bogs are special types of wetlands where plant roots are held together to form a mat of floating plants resembling a thick rug of vegetation.

Such habitats naturally offer protection for rare creatures, but can be dangerous. Caution should always be used when hiking in fens. Beware of holes in the floating mat of vegetation and interesting but poisonous plants such as **poison sumac**.

## Importance

What good are bog buckmoths – what do they do for people? Bog buckmoths are another indication of how special and unique the Eastern Lake Ontario Dunes and Wetlands Area is. Bog buckmoths may also be indicative of changing conditions along the eastern Lake Ontario shore. We can be proud of our special resource, the bog buckmoth – one not shared by any other part of New York, and work to protect it so it remains healthy for future generations.

# Bog Buckmoth



## Threats

Why are bog buckmoths so rare? Scientists are not sure, but there are probably a number of reasons:

- Fen habitats tend to change over time, with shrubs shading out the bog buckbean plant that bog buckmoth larvae need for food.
- Females can't fly very far. It would be difficult for them to colonize new habitat if their old habitat became degraded.
- Predators like birds, spiders, and crickets may eat the moths, and parasites that lay their eggs in bog buckmoth eggs — possibly wiping out a single colony.
- Persistent high lake levels can also have the same negative impact on a colony. Occasional high lake levels are probably necessary to keep the proper conditions of the plant species found in the fen, though.
- Human activities like introducing non-native species, polluting, and filling (for development) threaten wetlands and the unique creatures, like the bog buckmoth, that are found in them.

## References

- Bonanno, S.E. 1997. Status of studies on the bog buckmoth (*Hemileuca* sp.1: *Saturniidae*). Report to U.S. Fish and Wildlife Service. 7p.
- Pryor, G.S. 1995. Life history of the Oswego County, New York populations of the bog buckmoth (*Hemileuca* sp.). Report to U.S. Fish and Wildlife Service. The Nature Conservancy. 24 pp.
- Pryor, G.S. In press 1997. Life history of the bog buckmoth (*Saturniidae*: *Hemileuca*) in New York State. *Journal of the Lepidopterists Society*. 22 pp. + figures and tables.
- Stanton, E.J. 1997. Life history of bog buckmoth (*Hemileuca* sp.) in Oswego County, New York. Report to The Nature Conservancy and New York State Biological Survey. Syracuse, NY 32 pp. + appendices.

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Buckmoth eggs



Buckmoth larva

## Life Cycle

Bog buckmoth caterpillars (**larvae**) are black, covered with stinging hairs, and feed on a common bog plant called **bog buckbean**.

The caterpillars hatch from eggs in early June. They feed until mid-July then burrow down into the peat moss portion of the vegetation mat and make cocoons called **pupae**.

In mid-September adults emerge from the pupae. As adults, bog buckmoths live for only about two weeks and do not feed. During that time, the adult males fly throughout the fens, busily looking for mates. After mating, the females lay eggs. Not all of the eggs will survive, but those that do, will survive through the winter on thin plant stems.

## Fun Fact:



The bog buckmoth flies during the day when many other moths are resting!

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