## **Beautiful Moths**

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Io Moth Photograph by Joseph Scheer and Mark Klingensmith

For five years in the late 1990s I worked with entomologists Wayne Gall and Marc Potzler on the Buffalo Museum of Science moth collection. I went through tray after tray of moths, many contributed by Richard Rosche, to check on identification and sorting. It was a difficult job.

What made the task especially tough was the lack of good resources for moth identification. There is Charles Covell's "Moths" book in the Peterson field guide series, but I found it tough to use and I was often dissatisfied with my results.

What amazed me was the sheer number of moths. I am used to butterflies, trees, herps (salamanders, frogs, lizards and turtles), and mammals with a couple dozen or fewer species of each common to the area, and even birds -- with effort I can see two hundred in a year. Here on the other hand were well over a thousand moth species, most of them collected in western New York.

My work with those moths increased my interest in these insects and, whenever I got the chance, I joined entomologists collecting local species. There are two quite different methods of doing this. One is to paint trees with a gluey mess including such things as sugar, over-ripe bananas and molasses. Some collectors add beer or rum to the mixture to insure an intoxicating effect.

The other is to set out what is called a black light, a lamp with wavelengths in the nearultraviolet range, behind a white sheet. On one evening in particular, I joined a group collecting this way at Marcy's Woods near the Lake Erie north shore west of Buffalo. Specialists from the Royal Ontario Museum and the University of Toronto remarked a number of times that they were amazed at the number of species that appeared. They were also finding species they had never seen before.

Beautiful Moths

Although I did see several tiny moths fluttering through the woods just a few days ago, this is not the usual season to talk about them. There is, however, a reason for this column.

I write now because this coming Thursday, December 14, at 7:00 p.m. Mark Klingensmith of Alfred University will speak in the Trinity Lutheran Church at 470 North Main Street in Wellsville. His topic: "Night Visions: The Secret Designs of Moths." The talk is sponsored by Wellsville's Dyke Street Museum.

I have attended an earlier version of this talk by Klingensmith's collecting partner, artist Joseph Scheer, and I recommend it highly. The exhibits that will be displayed and discussed have been the subject of special shows in museums across the country. Many of them have also appeared in Scheer's book, whose title is the same as that of this talk.

Scheer was described in a May 2002 *National Geographic Magazine* article by writer Lynne Warren as "cheerfully moth-obsessed." The co-founder of Alfred's Institute for Electronic Arts, in 1999 he captured an owlet moth that had found its way into his office one evening. It was, he says, "in perfect condition, gleaming green wings, furry tufts down the body, gold wire antennae. Really exquisite." With great care he photographed the moth. It turned out to be a *Diachrysia balluca*, a species rare enough not even to have been assigned a common name. Scheer was hooked.



Io Moth Hindwing Detail Photo by Joseph Scheer and Mark Klingensmith

He soon joined forces with his university colleague, Mark Klingensmith, whose nearby garden attracted hundreds of moth species, to scan the moths they collected at very high resolution, 67 million data points per square inch. This allowed them to enlarge their photos as much as 27 times. Thus a moth with wingspread of an inch would enlarge to over two feet in length, thus displaying its exquisite patterns and color.

Their project is a perfect amalgamation of art and science. So far the two have collected over 15,000 specimens of more than a thousand species, providing a remarkable record of Allegany County moths.-- <u>Gerry Rising</u>