

October 2007

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### Recommended Citation

Hamm, Christopher A. 2007. "Designation of a Neotype for Mitchell's Satyr, *Neonympha Mitchellii* (Lepidoptera: Nymphalidae)," *The Great Lakes Entomologist*, vol 40 (2)  
Available at: <https://scholar.valpo.edu/tgle/vol40/iss2/11>

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**DESIGNATION OF A NEOTYPE FOR MITCHELL'S SATYR,  
*NEONYMPHA MITCHELLII* (LEPIDOPTERA: NYMPHALIDAE)**Christopher A. Hamm<sup>1</sup>

The Mitchell's satyr, *Neonympha mitchellii* French 1889 (Lepidoptera: Nymphalidae) was described as a new species based on a series of six males and four females collected by J. N. Mitchell from "Wakelee bog" in Cass County, Michigan (French 1889). French did not designate a holotype from this series. Much of French's collection, and the original material included in the description, are thought to be lost (J. Shuey, M. Nielsen and J. Wilker, pers. comm.).

I did not find the syntype series of *Neonympha mitchellii* in potential repositories including the collections of the American Museum of Natural History, Michigan State University, the University of Michigan, and the Field Museum of Natural History. Also, lepidopterists throughout the Great Lakes region did not have any knowledge of the whereabouts of the syntype series.

There is an exceptional need to designate a neotype for *N. mitchellii* because its species boundaries have been questioned. Recently a new subspecies of *N. mitchellii* was described. *Neonympha mitchellii francisi* Parshall and Krall 1989 is thought to represent a southern regional morphological variant; the northern *N. mitchellii* were subsequently designated *N. m. mitchellii* (Parshall and Krall 1989). Aspects of this southern regional variation are present among individuals from northern populations. Also, the species boundary between *N. mitchellii* and *Neonympha areolatus* (Smith, 1797) (Lepidoptera: Nymphalidae) is blurred because the wing maculation characters used to distinguish species are continuous rather than discrete (Mather 1965, Scott 1986). Male genitalia characteristics were later used to distinguish *N. mitchellii* from *N. areolatus* (Parshall and Krall 1989), though these characters have subsequently been found to vary beyond the described limits (Goldstein *et al.* 2004, C. Hamm pers. obs.). Recent molecular work is also beginning to shed light on the relationships between *N. m. mitchellii* and *N. m. francisi* and a change in the taxonomic status of these subspecies may occur in the near future (Goldstein *et al.* 2004).

*Neotype.*- A male, vouchered in the Albert C. Cook Arthropod Collection at Michigan State University, bearing the following labels:

1) Cass Co., MI  
T5S R13W S30  
"Wakelee Bog"  
Tamarack Swamp  
4 July 1971  
M.C. Nielson

2) EUPTYCHIA  
MITCHELLII French  
McDunn No. 101  
Det M.C. Nielson

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3) 000705 MI Lep Survey  
(barcode label)

I designate this male as the neotype of *Neonympha mitchellii* and, therefore, of the nominate subspecies. This specimen does not vary in any distinguishable way from French's original description.

### ACKNOWLEDGMENTS

I would like to thank James Boone of the Field Museum of Natural History; David Grimaldi and Suzanne Rab Greene of the American Museum of Natural History; Mark O'Brien of the University of Michigan; Anthony Cognato, Gary Parsons and Mogens Nielson of Michigan State University; Jay McPherson of Southern Illinois University; and James Wilker for their invaluable assistance during my research. This research was partially supported by a Michigan State University Plant Science Fellowship to Christopher A. Hamm.

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