Indiana State Records and Notes on Some Rare and Endangered Lepidoptera in the State (1972-1980)

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Superfamily Hesperioidea Family Hesperiidae

Erynnis funeralis Scudder & Burgess-Funeral Dusky Wing

July 1, 1975 I collected one male *funeralis* in the Pigeon River State Fish and Game Area, Monogo, LaGrange Co. This essentially western species was identified by Dr. John M. Burns, Associate Curator of Entomology, National Museum of Natural History, Smithsonian Institution, Washington, D.C., where the specimen is deposited. *Funeralis* is the only Indiana *Erynnis* having distinct white fringes on the borders of the hind wings. It is a state record (8) (9).

Superfamily Papilionoidea

Family Lycaenidae

Epidemia dorcas (W. Kirby) - Dorcas Copper

Although I have been collecting a few dorcas each year, it has been only in the past two years that large colonies of them have been found. Dr. David Eiler of Manchester College and I found the first large colony on July 20, 1979 in the tamarack bog, Mongo, LaGrange Co. Dorcas, by the hundreds, were present on and near its larval foodplant, Potentilla fruticosa (11). July 14 and August 3, 1980 dorcas were widely distributed throughout the Pigeon River State Fish and Game area. July 26, 1980 more dorcas were found in the Binkley bog, Steuben Co. and in the Cedar Lake bog, LaGrange Co. Thus the survival of this one-brooded species in the state looks to be more encouraging.

Lycaeides melissa samuelis (Nabokov) - Karner Blue

In recent years there has been concern expressed for the survival of this species in Indiana. July 11, 1980 several dozen were observed, and only a few collected on a special permit in the Hoosier Prairie Preserve, Lake Co. Dr. Eiler photographed this lycaenid resting on its larval foodplant (*Lupinus perennis*), a plant not uncommon in the area. I concur with Dr. Jack R. Munsee of Terre Haute that the Karner Blue is an endangered species in Indiana; however, it is not uncommon in several areas of the United States.

Family Nymphalidae

Polygonia zephyrus Edwards - The Zephyr

September 1, 1975 I netted a perfect female of this rare western species 3½ miles east of Silver Lake and off Road 14 and the County Farm Road in a wooded area of southern Kosciusko Co. It was identified by Dr. Cyril dosPassos of the American Museum of Natural History, New York. In the United States the normal range of zephyrus is west of the Great Plains. It is a state record (8) (9).

Family Satyridae

Neonympha mitchelli (French) - Mitchell's Satyr

In the 1950s Mr. Homer Price of Payne, Ohio regularly found mitchelli on a

quaking bog on the east side of Cedar Lake, LaGrange Co. (3). On July 6, 1956 twenty-one fresh specimens were collected in the north bog, Cedar Lake. Likewise it has been found in Steuben Co.; however, I have been unable to find it in either county for the past ten or more years.

Mr. Lee Casebere, Assistant Director of the Indiana Division of Nature Preserves, gave me a damaged *mitchelli* which was captured with a handerchief on July 11, 1980 in the Cedar Lake bog. Concern for the survival of this endangered species in Indiana has increased because of recent land fills and the building of more cabins around Cedar Lake. Although the species seems to be holding its own in southern Michigan, habitat destruction may cause its extinction in Indiana.

HETEROCERA (Moths)

Superfamily Zygaenoidea Family Megalopygidae

Lago crispata Packard-White Flannel Moth

July 7, 1980 I collected one in the Whitewater Memorial State Park, Union Co., and another July 9, 1980 Brown County State Park, both at black light. These are the first collected in the state (12).

Superfamily Geometroidae Family Geometridae

Lytrosis unitaria (Herrich - Schaffer)

June 12 & 13, 1979 I collected three of these geometrids at light in the Brown County State Park. One was identified by Dr. Frederick H. Rindge of the American Museum of Natural History. When a 15-watt black light is placed on a white sheet covering the hood of an automobile, it attracks hundreds of moths and many obnoxious insect pests, which makes collecting sometimes uncomfortable. The specimen deposited in the American Museum is an Indiana state record (4) (11).

Lytrosis permagnaria (Packard)

July 13, 1979 I caught this very rare geometrid at black light, Silver Lake, Kosciusko Co. After Dr. Rindge had confirmed my tentative identification of the only specimen collected in Indiana, I agreed to deposit it in the American Museum (4) (11). This species is poorly represented in collections everywhere.

Lycia cognataria Guen'ee (= Biston betularia cognataria) - Pepper and Salt Moth

I first collected this interesting geometrid in the Brown County State Park on August 9, 1975 at the Nature Center's mercury vapor lamp; but, it was not until Dr. Rindge had identified my specimen netted on June 1, 1979 from the same park that I realized that it was an Indiana state record (5) (11). I now have both the light and the dark forms of cognataria, the species which provided an excellent example of industrial melanism in England.

Phigalia titea (P. Cramer) - Half-winged Geometer

August 5, 1979 I captured this species in the Brown County State Park at black light. It is a state record (5) (11). The 1980 summary report by the Indiana Department of Natural Resources states that it was also found in Jackson and Perry counties.

Cleora sublunaria (Guen'ee)

I collected this nondescript geometrid July 7, 1979 Silver Lake, Kosciusko Co.

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August 8, 1979 Brown Co., and July 8, 1980 Brown Co.—all at black light. According to Dr. Frederick H. Rindge's distribution maps, this species has been found in Illinois and Kentucky but not in Indiana (6); therefore, it is probably a state record.

Xanthotype sospeta (Drury)

Sospeta is a diurnal and nocturnal species. During the daytime June 3, 1979 I captured several in a woods near Liberty, Indiana. June 4, 1979 one came to my black light located in the Whitewater Memorial State Park, Union Co. It is a state record (11). June 5, 1980 another specimen was collected at black light in the Whitewater Memorial State Park. Dr. Rindge's recent revision of the genus Xanthotype hass clarified the status of several species (7).

Superfamily Sphingoidea

Family Sphingidae

Lapara coniferarum (J.E. Smith)

July 8, 1978 I collected this hawkmoth in the Brown County State Park, at light. Generally it is more southern in its distribution. It is an Indiana state record (2) (11).

Sphinx franckii Neumoegen

On July 6-7, 1977 Dr. David Eiler and I captured this species at the mercury vapor lamps in the Brown County State Park, but it was not identified until the fall of 1980. Normally it is a rare resident species everywhere in the United States where it has been found—thus a record of unusual interest. Since then I have collected it July 7, 1978 and July 7, 1980, both in the Brown County State Park at light (12).

Superfamily Noctuoidea Family Notodontidae

Hyperaeschra tortuosa Tepper

My first specimen was collected June 17, 1979 in the Brown County State Park. This rare species constitutes an Indiana state record (11). I captured another one June 21, 1980 in the city of Indianapolis, Marion Co. by using a black light.

Family Lymantriidae

Orygia definita Packard

June 18, 1979 one came to my black light placed near the Laketon tamarack bog, Wabash Co. This catch proved to be an Indiana state record (1) (11).

Leucoma salicis (Linnaeus) - Satin Moth

July 6, 1979 I took a single specimen at black light in the Brown County State Park. This delicately beautiful moth is an Indiana state record (1) (11).

Family Noctuidae

Spragueia dama Guen'ee

June 22, 1979 I collected dama in the Pigeon River State Fish and Game Area, Mongo, LaGrange Co. That night 42 species of moths were netted on the hood of my car which supported the black light. Dama is an Indiana state record (11). September 3, 1979 another one was captured with my small spiral net, near the edge of the Laketon tamarack bog, Wabash Co.

Metathorasa monetifera Guen'ee

During the day June 11, 1980 I collected two monetifera in the Hoosier Prairie Preserve, Lake Co. Waterproof boots and a special permit are essentials for collecting in this area. Montifera is an Indiana state record (12).

Family Arctiidae

Pygarctia abdominalis Grote-Orange-bodied Pygarctia

June 22, 1979 I collected this species with a black light, which was set near the boat landing area of the tamarack bog, Pigeon River State Fish and Game Area, LaGrange Co. It is an Indiana state record (11). July 8, 1980 I found it in the Brown County State Park and July 15, 1980 near the Laketon tamarack bog, Wabash Co. — both at black light.

Pygarctia spraguei Grote-Sprague's Pygarctia

Mr. Marc Minno, now a graduate student in Entomology, was the first to find this beautiful species in Indiana. He collected it May 30, 1978, Tippecanoe Co. (10).

I found one *spraguei* June 22, 1979 in the Pigeon River State Fish and Game Area, LaGrange Co., at black light (11).

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