

## NOTES ON W. H. EDWARDS SPECIMENS IN TWO MIDWESTERN COLLECTIONS

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### INTRODUCTION

Early in 1947, while studying some butterflies received from my friend Murray O. Glenn, of Henry, Illinois, my attention was attracted to a specimen of *Phyciodes texana* (Edw.) which bore a label reading "E. cincta ♂/bred Oct. 78." Recalling Holland's discussion of the name *cincta* (1931), I wrote Dr. W. R. Sweadner of the Carnegie Museum regarding this specimen, and although I had no reason to suppose there was anything unusual about the label other than the name in question, I sent it to Sweadner. He replied stating that he had compared it with holograph labels of W. H. Edwards in that institution, and that he believed it to be in the handwriting of Edwards. He suggested that I publish a note regarding the discovery of the specimen, tracing its history if possible. This, however, I did not do, although I found among the butterflies received from Glenn a considerable number of others bearing labels in the same handwriting.

In the spring of 1963 I again became interested in the Edwards specimens as a result of learning of F. Martin Brown's studies of the type material of Edwards, and I resolved to carry out the late Dr. Sweadner's suggestion, which had been so long deferred. I forwarded all of the Edwards specimens in my possession to the Carnegie Museum, where Brown examined them and pronounced them genuine. He reiterated the opinion that an account of their discovery was worthy of publication. Thus encouraged, I proceeded to attempt to trace the steps whereby these specimens had reached the collection of Glenn. Meanwhile, further examination of the latter's collection resulted in the finding of still more Edwards specimens, which Glenn, with his characteristic generosity, turned over to me in view of my interest in their historical importance. These subsequent specimens were also examined by Brown.

It is the purpose of this paper, not to advance any opinion upon possible taxonomic significance of these specimens, but merely to call attention to their existence and present location; and incidentally to present an interesting bit of entomological history, as well as brief and previously unpublished biographical sketches of two Illinois amateur collectors of an earlier day.

## HISTORY OF THE EDWARDS SPECIMENS

The specimens discussed in the present paper were sent by Edwards to Augustus H. Mundt, of Fairbury, Illinois. Mundt was born in Germany in 1847 and came to the United States during the first year of the Civil War. Two years later, he enlisted in the 11th Illinois Cavalry. Late in 1864, he was wounded in the foot and taken prisoner. His wound troubled him greatly for the rest of his life. He came to Fairbury in 1868, and operated a jewelry business there for 62 years. He was an enthusiastic amateur butterfly collector, and in addition was interested in such diverse fields of natural history as conchology, oölogy, and taxidermy, as well as in the formation of a collection of Indian relics. According to his son William, of Sullivan, Illinois, he was a personal friend of Dr. L. O. Howard.

Mundt was interested in the rearing of Lepidoptera. He contributed several short articles to *The Canadian Entomologist* and *Papilio*, which are listed in the references, and which have largely to do with immature stages and rearing techniques. It may have been this interest which led to his correspondence with Edwards, for in a letter to Edwards dated May 21, 1884, Mundt speaks of sending him a box containing some prickly ash, with detailed instructions as to planting and caring for it. Possibly it was in exchange for material such as this that Edwards sent butterflies to Mundt, but at least some of them were purchased, as will be shown later.

In later life Mundt's interest in butterflies appears to have diminished to the extent that by 1923 he was considering the sale of his collection to Judge R. M. Barnes, of Lacon, Illinois. Richard Magoon Barnes (1862-1945) was a distinguished lawyer and judge, and apparently was not related to Dr. William Barnes of Decatur, Illinois, who is more well known to Lepidopterists. Like Mundt, Judge Barnes was interested in many areas of natural history and in collections illustrative of them; but his specialty was North American birds' eggs, of which he built up an extensive collection, a large part of which is now in the Chicago Natural History Museum. Barnes served there at one time as curator of oölogy, and he was editor and publisher of *The Oölogist* for a number of years. His collections, embracing a nearly complete representation of the mammals, reptiles, and birds, and many of the insects of Illinois, were housed in a specially constructed museum adjacent to his home. His collection of Lepidoptera was worldwide in scope and was built up over a period of some twenty-five years by personal collecting in the field as well as through purchase and exchange.

A number of letters exchanged between Mundt and Barnes during

1923–1925 are in my hands. They give us an insight into the work of Mundt during the period of his active interest in Lepidoptera. In an effort to justify his asking price of five hundred dollars for his collection and cabinet, which Barnes apparently thought unreasonably high, Mundt enumerated some of the amounts that he had invested in it. In a letter to Barnes dated November 28, 1923 he says, "I paid . . . from \$100 to \$150.00 to Oscar T. Barron [sic] of California through W. H. Edwards for many of his specimens . . ."

In other letters he speaks of his dealings with Herman Strecker, which were apparently unsatisfactory. Mundt learned that schoolchildren in Utah were being paid to collect and destroy cocoons of *Platysamia gloveri*, as the larvae were believed responsible for widespread defoliation of plants. He offered more money to have the cocoons sent to him instead of being destroyed, so that he was soon receiving three or four boxes of cocoons a day, which he advertised for sale at \$1.50 per dozen through notices in *The Canadian Entomologist* and *Papilio*. In another letter to Barnes on December 18, 1923, he complains that "The fact is that Strecker did not treat me right . . . he ordered a number of dozens but never paid me cent for them making all sorts of excuses so at last I told him to send the Supplements [to Strecker's *Lepidoptera*, *Rhopaloceres* and *Heteroceres*, *Indigenous* and *Exotic*] . . . but never came through. I wrote him several times about them and when he died his wife wrote that as he had spent over \$15,000 on his collection she was obliged to sell it at a great sacrifice. . . ."

Although Barnes replied to these letters saying that "my experience with collections, which has probably been greater than that of any other in America, is that there is a limited market for collections unless they are exceedingly large and the property of some well-known author in the scientific line to which the collections pertain," still he says the following year that ". . . I always had the modest collection of Butterflies and Insects which you showed me in mind and I hope someday to be able to add them to my collection here." Eventually he did, but it must not have been until considerably later, as one of the Edwards specimens is labeled, "From A. H. Mundt collection December 1936 R. M. Barnes." Mundt died January 1, 1938 at the age of ninety.

Following the death of Barnes seven years later, his collection was broken up. The greater portion of the Lepidoptera went to the Illinois State Museum at Springfield, where it remains. A representative series of Illinois butterflies and moths was deposited in the collection of the Illinois Natural History Survey at Urbana, while Glenn, who had been a personal friend of Judge Barnes, also received a portion of his collection.

I examined the collections of both the above-mentioned institutions in a search for further Edwards specimens. None were found among the Barnes material in the Illinois Natural History Survey collection, probably because of the preferential selection of Illinois species that had been made. However, several specimens bearing labels in the handwriting of Edwards were found which apparently came from the collection of Selim H. Peabody. While a discussion of these is beyond the scope of the present article, they may form the subject of a future note. At the Illinois State Museum 23 more Edwards specimens were found, which with the 63 from the Glenn collection made a total of 86 discovered as a result of this investigation, exclusive of the Peabody material. Through the courtesy of Dr. Rupert Wenzel of the Chicago Natural History Museum, the 63 from Glenn's collection have been deposited there for safekeeping, although they remain a part of my collection and are so labelled. To all these, as well as to those in the State Museum, I have attached printed labels on yellow paper reading "From/W. H. Edwards."

When the material first came into my possession, I attached typewritten labels on blue paper reading "Metatype" to all those which represented Edwards' own names. Although these were for my own convenience and have no standing, I have not removed them unless more formal designation has since been made.

In listing the individual specimens discussed herein, I give first the name of the species using current nomenclature, for the most part following dos Passos (1964). Next I quote the exact wording of Edwards' holograph label, followed by the text of any other labels that may be present other than those which I have applied as indicated above. Finally, I append any pertinent remarks, as well as symbols indicating their present location, in my own collection (RRI) at the Chicago Natural History Museum, or in the collection of the Illinois State Museum (ISM).

Little of the material has thus far been the subject of critical study, either by myself or by specialists, for the purpose of confirming Edwards' determinations. Where this has been done, the fact will be evident from subsequent labels. A relatively few distinctive species, such as *Limenitis wiedemeyerii*, are incapable of confusion with any other. For the rest, I have been obliged to use Edwards' names for the purpose of this paper, since to have examined all of them would have delayed its preparation still further, while I think it desirable that it appear contemporaneously with Brown's studies. I am grateful to the latter for the information regarding Edwards' probable source of the various specimens.

Among the more frequently recurring abbreviations on Edwards' holograph labels which are not self-explanatory are: "W.T." for Washington Territory; "M." or "Morr." for H. K. Morrison, and "O.B." for Oscar T. Baron. Other abbreviations are explained where they appear.

## LIST OF THE EDWARDS SPECIMENS

### Hesperiidae

*Ochlodes sylvanoides* (Bdv.) "Agricola ♂ / W.T. M." "Ochlodes / sylvanoides / ♂ (Bdv.) / Det. J.W. Tilden" (RRI); another with identical labelling except for the omission of a sex sign on Edwards' label (RRI); "Agricola ♀" "Ochlodes / sylvanoides / ♀ (Bdv.) / Det. J.W. Tilden" (RRI).

*Ochlodes agricola* (Bdv.) "Agricola ♂ / Nev<sup>a</sup> Morr." "Ochlodes / agricola / ♂ (Bdv.) / Det. J.W. Tilden" (RRI). From Nevada.

*Atalopedes campestris* (Bdv.) "Huron / ♂ Kan<sup>a</sup>." (ISM). Kanawha County, West Virginia, probably taken by Edwards near his home in Coalburg.

*Wallengrenia otho egeremet* (Scud.) "Egeremet ♂ / Kan<sup>a</sup>." (RRI). Same source as the preceding specimen.

*Hesperia harpalus* (Edw.) "Comma ♂ / v. sylvanoides / Cal." "Hesperia / harpalus / (Edw.) / Prob. a coast range pop. / Det. J.W. Tilden" (RRI); another with similar labelling except that no locality is given on Edwards' label (RRI). A third specimen has no Edwards holograph label, the only one discussed in this paper which is so lacking; yet from the text of the following label in the handwriting of Mundt it is believed to be from Edwards: "Pamphila which I / believe to be sylvanoides / of Boisdvl / W.H. Edwards" (RRI). It bears Tilden's determination label similar in wording to the others.

*Erynnis propertius* (Scud. & Burg.) "Propertius" (ISM), "Propertius / Scudd.-Burg." "Sonoma Co. / California" (RRI). The latter label has the word "Sonoma Co." in the handwriting of Henry Edwards; the second line is printed.

### Riodinidae

*Apodemia mormo* (Felder) "L. cythera ♂" "Apodemia / mormo / ♂ (Feld.) / det. R.R. Irwin" (RRI).

*Lephelisca virginienensis* (Guérin-Ménéville) "Caenius / ♂ Ga." (RRI).

### Lycaenidae

*Hypaurotis crysalus* (Edw.) "Thecla / crysalus ♂ / Colorado" (RRI).

*Callipsyche behrii* (Edw.) "Behrii ♂ / Nev. Morr." (RRI); "Behrii ♀ / Nev<sup>a</sup>." (RRI).

*Incisalia iroides* (Bdv.) "Iroides ♀ / Nev. Morr." (RRI).

*Incisalia eryphon* (Bdv.) "Eryphon ♀ / Cal<sup>a</sup>." (RRI).

*Strymon melinus franki* Field. "Melinus / ♂ Col." "Strymon / melinus franki / ♂ Field / Det. F.M. Brown." (RRI).

*Strymon adenostomatis* (Hy. Edw.) "Adenostomatis ♂ / Cal. O.B." (ISM); "Adenostomatis ♀ / Cal. O.B." (RRI); "Adenostomatis ♀ / Nevada" (ISM).

*Strymon saepium* (Bdv.) "Saepium ♂ / Cal." "222" "Havilah / California" (partly printed; RRI). Probably from Richard Stretch through Henry Edwards. The label "222" is a manuscript number of the latter, and the word "Havilah" is in his handwriting. A second specimen is labelled: "Saepium ♀ / W.T. M." (RRI).

*Callophrys* sp. undetermined. "Dumetorum / Cal." "Callophrys / sp. possibly / viridis Edw. but / antennae needed for / positive identification / J.W. Tilden" (RRI). Possibly from Herman Behr.

*Lycaena gorgon* (Bdv.) "Gorgon ♀ / Cal." (ISM).

*Lycaena xanthoides* (Bdv.) "Xanthoides ♂ / Cal<sup>a</sup>." (RRI); "Xanthoides ♀ / Cal<sup>a</sup>." (ISM).

*Lycaena rubidus sirius* (Edw.) "Sirius / ♂ Colo." (RRI); "Sirius ♀ / Colo." (RRI).

*Lycaena nivalis* (Bdv.) "87 zeroe ♂" (RRI); "zeroe ♂" (RRI). Both are additionally labelled "Lycaena / nivalis / ♂ (Bdv.) / Det. R.R. Irwin." For a discussion of Edwards' use of the name *zeroe* in this connection, see Brown, Eff, and Rotger (1955) p. 158.

*Lycaena helloides* (Bdv.) "Helloides ♂ / W.T. M." (RRI); "Helloides ♀ / W.T. M." (RRI).

*Brephidium exilis* (Bdv.) "Fea / Texas" (RRI); "Fea / Texas" (ISM). Probably from the type series of *fea*.

*Hemiargus isola* (Reakirt) "Alce ♂ / Texas" (RRI); "Alce ♂ / Texas" (ISM). Probable syntypes of *alce* according to Brown.

*Lycaeides melissa* (Edw.) "Melissa ♂ / Col." (RRI).

*Plebeius icarioides lycea* (Edw.) "Lycea ♂ / Cal. O.B." (RRI); "Lycea ♀ / Cal. O.B." (RRI).

*Plebeius acmon* (Westwood and Hewitson) "Acmon / W.T. M." (RRI); "Acmon ♂ / Nev. Morr." (RRI).

#### Nymphalidae

*Mestra amymone* (Ménétriés) "Amymone ♂ / Texas" "Dallas, / Texas." (printed label; RRI); "Maidania / Texas" "Id. USNM / 11-23-36 / No. 3553" (typewritten label; RRI). Brown believes that "maidania" represents an unpublished manuscript name of Edwards.

*Limnitis wiedemeyerii* Edw. "Wiedemeyerii ♂ / So. Colo." (RRI). Probably from H. K. Morrison.

*Vanessa carye* Hübn. "caryae ♂ / Cal." (ISM).

*Polygonia satyrus* (Edw.) "Satyrus ♂ / Meads" (RRI). From Colorado and Theodore L. Mead, and probably one of the type series. Another specimen is of the subspecies *marsyas* (Edw.) and is labelled: "Marsyas ♀ / Colo." (RRI).

*Polygonia zephyrus* (Edw.) Two with identical labels "Zephyrus / ♂ Col." (RRI). Brown believes that these are members of the type series.

*Polygonia gracilis* (Grote and Robinson) "Gracilis / W. Mts. 75" (RRI). White Mountains of New Hampshire.

*Phyciodes texana* (Edw.) "E. cincta ♂ / bred Oct 78" (RRI). Brown (1965) discusses the taxonomic significance of this specimen. I have applied an additional label reading "Phyciodes / texana / ♂ (Edw.) / Det. R.R. Irwin."

*Phyciodes phaon* (Edw.) "Phaon ♂ / Texas / July" (RRI); another male and a female similarly labelled but with small additional labels reading only "19" and "22" respectively (RRI); and another female also thus labelled but with no number (ISM). The meaning of the numbers is not known.

*Phyciodes mylitta* (Edw.) "Mylitta ♂ / W.T. M." (RRI).

*Phyciodes campestris* (Behr) "Pratensis ♂ / Neva." (RRI); an identically labelled specimen (ISM); "Pratensis ♂" "April" "Havilah / California" (RRI). As in the case of the specimen of *Strymon saepium* discussed previously, this is from Henry Edwards, probably having come originally from Stretch. The words "April" and "Havilah" are in the handwriting of Henry Edwards, while "California" is printed.

*Phyciodes campestris montana* (Behr) "Montana ♂ / Cal<sup>a</sup>." (RRI); "Montana ♂ / Summit 7/17/76" (RRI). The latter is from the summit of Donner Pass, California, probably taken by Mead.

*Phyciodes vesta* (Edw.) "Vesta ♂ / Texas" "5" (RRI); "Vesta ♀ / Texas" "13" (RRI). As in the case of *phaon*, the significance of the numbers on separate bits of paper is unknown.

#### Satyridae

*Coenonympha ampelos* Edw. "Ampelos ♂ / W.T. M." (RRI).

*Coenonympha californica* (Westwood) "Galactina ♂ / Lab." (ISM).

*Cercyonis pegala pegala* (Fabr.) "Pegala ♀ / Fla." "110 *Cercyonis pegala* Fbr. / From A.H. Mundt Collection / December 1936 R.M. Barnes" (RRI).

*Cercyonis pegala nephele* (Kirby) "Nephele ♂ / Catskills" (ISM); "Nephele ♀ / N York" (RRI).

*Cercyonis pegala ariane* (Bdv.) "Ariane ♂" (2 specimens ISM); "Ariane ♂ / Cal." (2 specimens ISM); "Ariane ♂ / Sod. Sp." (ISM); "Ariane ♂ / Sod. Sp. / Cala." (ISM); "Boopis / ♂ Oregon" (ISM); "Boopis ♂ / Oregon / Dodge" (ISM); "Boopis ♀ / Soda Sp. Cala." (ISM); "Boopis ♀" (ISM).

*Oeneis ivallda* (Mead) "Ivallda ♂ / Nev". M." (RRI).

*Oeneis chryxus* (Doubleday) "Chryxus ♂ / Big Horn 77" (RRI). Taken by Lt. Carpenter.

*Oeneis jutta* (Hüb.) "Jutta ♀ / Quebec" (RRI).

*Oeneis melissa semidea* (Say) "Semidea / ♂ W. Mts." (RRI); "Semidea / ♀ W. Mts. 75" (RRI). Probably from Denton or Scudder.

*Erebia epipsodea* Butler. "Erebia / rhodia / Colo." "Syntype / Erebia rhodia / W.H. Edwards / designated by / F.M. Brown '63" (RRI). See Brown (1964) for a discussion of *rhodia* with a reference to this specimen.

#### ACKNOWLEDGMENTS

I am very grateful to F. Martin Brown for his encouragement, aid and suggestions, and for reading a draft of this paper. Without his help it could not have been written. I am much indebted to Murray O. Glenn for the information on the life and activities of Judge Barnes, and for the specimens which are the subject of this study. The staffs of the Illinois State Museum and the Illinois Natural History Survey were most cooperative. Finally, I acknowledge with thanks the help of Professor J. W. Tilden, who determined many of the Hesperidae, as noted, and also examined the specimen of *Callophrys*.

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