

The International Lepidoptera Survey

n e w s l e t t e r

2:3

November 2000

Chlosyne ismeria ismeria

By Ron Gatrell

Chlosyne ismeria nycteis is a common and widespread butterfly in the eastern United States. In 1989 I collected three male specimens of “*nycteis*” along the banks of the Savannah River, Burke County, Georgia. In November of 1998 I published an article in *The Taxonomic Report* (1:2) demonstrating that these specimens were examples of the butterfly named *ismeria* by Boisduval and Leconte in 1833. These three individuals are still the only known *ismeria* specimens from Georgia. The neotype is in the Allyn Museum of Entomology.

A few specimens of *Chlosyne ismeria ismeria* have been taken over the years in the panhandle of Florida. I located two Florida males in the Department of Plant Industry (DPI) collection, Gainesville, this summer. They were taken 23 May 1963, Marianna, Jackson County, Florida, leg. S.V. Fuller. (More recent specimens have been found in the Panhandle by John Calhoun.) I also found five probable *ismeria* specimens in the DPI collection from St. Helena Parish in southeast coastal Louisiana. A female of which is figured below.

These Louisiana specimens are of special interest because of the questions they raise about the biographical origin, evolutionary route, and range of this subspecies. The biogeographical movement of the vast majority of lepidopteran species along the Gulf coast has been from west to east, with most species (subspecifically) not reaching Florida. *Ismeria* may have followed this same route, or be an exception to the rule. In which case, it would be a Florida geologic island relict which has moved west along the coast. Some southeast Texas specimens are very interesting also. A lot of material needs to be collected from all across the Gulf coast region and examined carefully.

Because so few specimens exist in collections, we do not know what the normal variation of this subspecies is. Some of the characters that separate it from subspecies *nycteis* are as follows. The ventral hindwing of *ismeria* usually has a complete, or nearly complete, submarginal row of silvery or white spots. There is a definite orange line along the ventral margins of both the fore and hind wings. On the dorsal hindwings, the black postmedian line is thin or absent in *ismeria* while in *nycteis* it is often wide. Another interesting feature of the dorsal hindwings is that in some males the dark margin is expanded inward toward the band of submarginal spots. So much so in one of the Florida males as to almost obscure these spots. In these same specimens, the postmedian line remains thin. On the dorsal forewing, the submarginal spots are well developed to ½ the size of the postmedian spots in *ismeria* while in *nycteis* they are often absent.

This taxon has been a puzzle to lepidopterists ever since it was described in 1833. One of the main reasons for this is that the original figure (a female) is a very poor, almost fictitious, copy of an Abbot painting. The most accurate parts of the figure are the dorsal hindwing and the ventral forewing.

The holotype of *nycteis* is apparently in the British Museum of Natural History. I would like to eventually get a photo of this to reproduce in this Newsletter. Visit our web site www.tils-ttr.org for more info on *TTR* 1:2.



Fig. 1. Neotype ♂ *C. i. ismeria* (d/v): 20 Aug. 1989, Burke County, Georgia. **Fig. 2.** ♀ *C. i. ismeria* (d/v): 15 June 1968, Greensburg, St. Helena Parish, LA, leg. G. Strickland. (This is the first published figure of female *Chlosyne ismeria ismeria*.) **Fig. 3.** ♀ *ismeria* (d/v) original 1833 plate. **Fig. 4.** *C. i. nycteis* ♂ (d/v): 27 June 1992, Jones Knob, Macon County, North Carolina. **Fig. 5.** ♂ *C. i. nycteis* (d/v): 16 July 1966, Defiance, Shelby County, Iowa. All leg. Gatrell except 2. (d = dorsal, v = ventral)

TC-ISBN^ã

Taxonomically Correct - Index of Scientific Butterfly Names^ã

Systematics and taxonomy are fluid sciences and therefore in a constant state of flux. With the advent of the Internet and high-speed information exchange, this appears to be more evident today than ever. From previous centuries, we have had to deal mainly with synonymies. However, in today's age of modern science, through advances in genetics and evolution research, scientists are discovering a greater diversity in life than ever imagined. On one hand, as the definition of species is refined, new species are being discovered even in our midst. On the other hand, the lines separating other taxa have become more blurred or subjective. Thus, species and whole groups are being taxonomically realigned almost constantly. Taxonomic changes occur almost overnight, often themselves revised as quickly.

As one could imagine, all this leads to a considerable amount of confusion. Landmark lists such as the Miller & Brown and Hodges lists have become outdated. As a result, governmental agencies, entomological groups, environmental organizations, nature clubs and individuals attempt to maintain a grasp on what is happening by forming their own committees and generating new lists to suit their needs and purposes. To compound matters, the taxonomic treatment in each newly published book seems based more on the whim of authors than published scientific research. Browsing the Internet turns up several websites hosting additional lists. Many of these lists come as the result of some anonymous "expert opinion" rather than on published facts. One new species, *Colias pseudochristina*, described in 1974, has gone completely ignored for decades by these "experts," despite being described by one of the world's leading authorities on *Colias*. *Celastrina idella*, described in 1999 has been accepted by some "experts," but not others. Similarly, the recent taxonomic changes presented in *Systematics of Western North American Butterflies* have been selectively accepted or rejected, depending on which "expert" one talks to. In essence, the important scientific work of many taxonomic researchers is being unjustifiably ignored or rejected.

In a similar vein, despite recent advances in science that reveal greater diversity in living organisms than ever known and the corresponding need for documenting this evidence to further conservation efforts, there seems to be an unscientific trend toward "lumping" of organisms. An examination of many recent butterfly books and new lists shows a disturbing bias toward the suppression or elimination of an entire taxonomic group -- subspecies. Further, some long recognized species are being "consumed" within other species as the result of mere opinion. (This is very different from those species which have been incorporated into others based on recent scientific discoveries.) This produces a specter of "lost species" on paper. A disturbing development.

In response to this chaos, *TILS* has decided to sponsor a *Taxonomically Correct - Index of Scientific Butterfly Names (TC-ISBN)*. Conceived by *TILS* cofounder Harry Pavulaan, the **TC-ISBN** will take a "legalistic" approach to butterfly systematics and taxonomy. Rather than relying on self-appointed committee opinions on whether to accept, reject or realign taxa, the diligent work of the originating authors is given priority over these outside opinions. Taxonomic revisions will necessarily be the result of subsequently-published work. The key words here are "published work." *The International Committee of Zoological Nomenclature (ICZN)*, the highest and most respected body in the world dealing in this area of science, has set rules regarding published work. This is a legal code. Committee decisions and mere opinion, by any other group or individual (including *TILS*), cannot supersede or override the *ICZN* rules.

The **TC-ISBN** will be available via link from the *TILS* website at www.tils-ttr.org. In coming weeks, a sample page of the index will be displayed there, while the remainder of the index is under construction. Format will initially be a simple text document. Future plans include creation of a more versatile spreadsheet version that will offer much information for each species listing. Initially, the index will include butterflies of the continental United States and Canada, and will start from the Miller & Brown list and Ferris supplement. It will be updated from a wide variety of published sources. As time permits, old descriptions will be reexamined, revisions given fresh scrutiny. The *Zoological Record* will be consulted for the latest developments. The site will not be produced by a committee. It's sections will be the product of extensive consultation with and between specialists in all aspects of lepidopterology. Any researcher who specializes in any particular area of lepidopterological

research will be invited to provide comment and to send reprints of published papers to **TC-ISBN** compilers for consideration.

The index is designed to evolve and is projected to ultimately include all lepidoptera worldwide. The goal of the **TC-ISBN** is to provide a single, readily-available, up to date list of available scientific names and their valid rank based on the latest published research. *TILS* makes no claim that this list is the “best” source available (though we hope to become), nor do we insist that any institution, agency, group, or individual adopt it (though we hope it will gain wide acceptance over time).

All comments and inquires should be sent to Harry Pavulaan. His email address is: hpavulaan@aol.com or TC-ISBN@tils-ttr.org.

The Taxonomic Report Update

The following articles are in various stages of development for *TTR* publication. All are scheduled for Vol. 2.

***THE BIOLOGY, LIFE HISTORY, AND TAXONOMY OF *CELASTRINA NEGLECTAMAJOR* (LYCAENIDAE: POLYOMMATINAE).**

***A TAXONOMIC STUDY ON LECITHOCERIDAE (LEPIDOPTERA) FROM GUIZHOU, CHINA.**

***RECORDS FOR THE UTILIZATION OF *PRUNUS* AS A LARVAL FOODPLANT BY 72 SPECIES OF LEPIDOPTERA IN NORTHEAST CALIFORNIA**

Anyone interested in submitting an article for publication in *The Taxonomic Report* should write us at: Editor, 126 Wells Road, Goose Creek, SC USA 29445; or e-mail us at publish@tils-ttr.org.

On Line At: www.tils-ttr.org

We can't help being excited about our new web site. And although it is still under construction, it already has a lot going for it. Thus far, the Photo Library section has been getting the most hits. This has to be one of the more unique lepidopteran photo sites on the web. First, virtually all of the specimens are types – holotypes, neotypes, allotypes, paratypes, and topotypes. Many of the taxa pictured are also very unique and can not only not be found anywhere else on the web, but are not pictured in any field guides or books. The quality of the high resolution zooms of *Pterourus troilus fakahatcheensis*, *Speyeria aphrodite cullasaja*, *Celastrina idella*, and *Angulopsis puntalaraensis* are outstanding. There are also examples of seldom seen taxa like *Euphyes bayensis*, *Deciduphagus henrici viridissima* and *Anthocharis midea midea*. Many more pictures have yet to be put up.

The *TILS News Letters* are available in their entirety, and the cover page of all issues of *The Taxonomic Report* are posted. There is an informative About Us section, and Donation and Subscription sections. In the weeks ahead the TC-ISBN (*Taxonomically Correct – Index of Scientific Butterfly Names*) and MOTH (*Museum Of The Hemispheres*) sections will be added. Also, our web-master, Joe, will be adding more “bells and whistles.” (We hear from those with good audio cards, that Joe has put some pretty good elevator music on the home page.)

Our hope is that you will not only make www.tils-ttr.org a place you regularly visit, but that you will tell others about it too. We also need help in getting on some of the major search engines. In just two months of operation we have already had over 750 visits and 20,000 hits.

Donations Urgently Needed

The International Lepidoptera Survey, as a non-profit organization, greatly needs your financial help. There are several research projects we have undertaken. There are others which we would like to undertake. All of these require funding. We are not backed by a millionaire and our subscription fees barely cover the cost of *TTR* production and mailing.

One of the more exciting research opportunities that is now available to us is a joint project with the Chinese Academy of Sciences, Beijing, to explore remote areas of China for new Lepidopteran taxa. *TILS* needs approximately \$60,000 to get this project underway. Dr. Wu has agreed to coordinate and oversee this project in China. Dr. Kurt Johnson and others have responded positively to working in the field with Dr. Wu. To date, we have lots of vision and will, but no funding. Individual researchers are available to discover and document the unknown taxa in China – and other remote areas of the world. But the *TILS* focus is not just on far away places. There is a great deal of taxonomic and biological research that needs to be done even in the eastern United States.

Many of our readers could donate a thousand dollars, some more, and a very few could provide major financial assistance toward the discovery, determination, and documentation of undescribed species and subspecies of Lepidoptera around the world. Without this discovery, determination, and documentation there will be no preservation of these unknown taxa. Species will become extinct before they were even known to have existed!

The available personnel resources are spread very thin, but the financial resources are even thinner. They need our monetary help. Please help by sending a generous donation to *TILS* today. Designate your gift to: **TILS Field Research Fund**. All donations are US tax deductible.

2001 Subscription Rate Lowered For *TTR* Volume 3

The cost for new subscriptions to *The Taxonomic Report* in 2001 has been lowered by \$5.00 domestic and \$10.00 overseas. For those subscribing in the United States and Canada, the subscription to Volume 3 is \$45.00 (US). For all other areas, the 2001 rate is \$55.00 (US). All issues are mailed First Class for North America and Air Mail overseas to facilitate the most timely delivery and minimal handling. Eight to ten issues are projected for Volume 3. International orders may be paid by international bank draft or international postal money order.

TTR Volume 1 (10 issues) is available on CD only for \$25.00 post paid, or in paper and CD at the regular subscription price (see form below). Subscription to Volume 2 is \$50.00 (US) North America, and \$60.00 (US) overseas. Several non North American researchers receive free subscriptions due to their financial limitations. It costs between \$700 and \$1000 to produce and mail each issue of *TTR*. Please consider a special donation to the **TILS Publication Fund**.

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