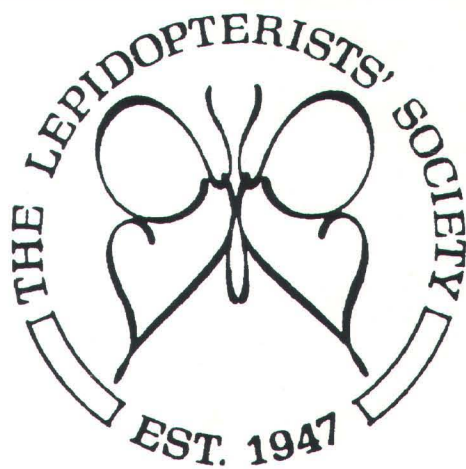


NEWS

OF THE

LEPIDOPTERISTS' SOCIETY



Volume 40, Number 1

Spring 1998



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New Leps from Texas: *Vitacea admiranda* & *Enodia anthedon*

New Hosts for the Dotted Skipper and the Ello Sphinx

Tagging Monarchs revisited...

News, Books, Photos

...and more!

NEWS OF THE LEPIDOPTERISTS' SOCIETY

Volume 40, No. 1 Spring 1998



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The Lepidopterists' Society is a non-profit educational and scientific organization. The object of the Society, which was formed in May 1947 and formally constituted in December 1950, is "to promote internationally the science of lepidopterology in all its branches; to further the scientifically sound and progressive study of Lepidoptera, to issue periodicals and other publications on Lepidoptera; to facilitate the exchange of specimens and ideas by both the professional worker and the amateur in the field; to compile and distribute information to other organizations and individuals for purposes of education and conservation and appreciation of Lepidoptera; and to secure cooperation in all measures" directed towards these aims. (Article II, Constitution of The Lepidopterists' Society.)

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Cover: 1st Place winner, Butterflies, 1997 Annual Photo Contest:
Leroy Simon, *Parathyma sulpita* (Nymphalidae).
Winners list on page 6, more photos on page 8.

Personal Reflections on the 50th Anniversary Meeting

Charles V. Covell, Jr.

Department of Biology, University of Louisville, Louisville, KY 40292-0001

My first annual meeting was in 1962 in New York City, where I attended along with my boyhood collecting friend, Bob Butler. There were about 35 members present, and the papers were mostly about systematics of butterflies. Everyone wore a necktie and jacket, and the atmosphere must have typified such meetings at the turn of the century: lepidopterology was serious business. Fine points of speciation and range of butterfly populations were argued by colleagues who knew each other well. I had already been a member of the Society 11 years. I was 15 when I joined what has proved to be the most rewarding organization I have ever been associated with. Still, I had come along a bit too late to be on the ground floor, and earn in 1997 what the several Charter Members in attendance received: a name tag that was also a "type specimen" label! That was one of the small touches that helped make the Yale meeting of July 9-13, 1997 a memorable occasion.

Two years earlier I had volunteered to assist in planning this meeting, because I had visions of it being the appropriately special occasion it was. Early planning was solidified when Larry Gall tendered the invitation to host the meeting at the Peabody Museum at Yale University, the official home of the Society for nearly the first half of its life. (While Charles Remington and Harry Clench started it all while at Harvard, Charles was the first Editor of the Lepidopterists' News as the original publication was called, ably assisted by his wife Jeanne, whom we were fortunate to have with us to receive our thanks at the meeting). I cannot think we could have been blessed with a better venue

or a more energetic and efficient host than Larry.

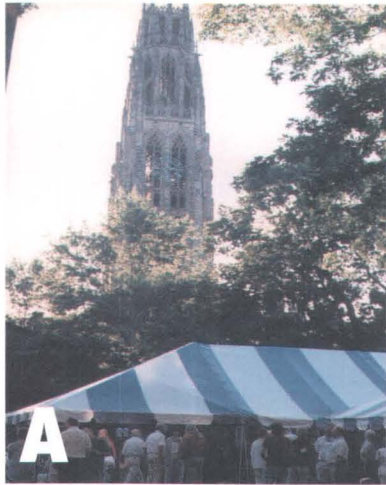
The meeting site and date chosen, several special aspects were discussed, modified and put into motion. Larry set up a list-serv called "Leps50-I" for all of us who were involved in the planning. This feature set the tone for efficient planning. We discussed, for example, a possible special title for the meeting, because professional lepidopterists from outside North America needed the label "congress" to assist them in obtaining travel funds. While our final choice could not be misleading and call it the "First International Congress of Lepidopterology," we did add the "congress" label after "Fiftieth Anniversary Meeting of the Lepidopterists' Society," which it was, in fact. We were gratified that colleagues from the United Kingdom, Finland, Germany, Mexico, Brazil, Peru, and Australia were able to be with us. Susan Weller was in charge of arranging the symposia, and lined up the conveners well in advance, so they could obtain participants. We were delighted that Eric W. Classey and his son Peter brought their fine books and prints on Lepidoptera "over the pond" as exhibitors, and that Richard and Louise Fall brought "a bit of BioQuip" as well, putting on the vendor exhibit they do yearly at the Entomological Society of America meetings. They also graciously hosted a mixer for all of us, to celebrate the "50th" of BioQuip as well as that of the Society. Several other vendors added to offerings for those in attendance. I hope we can continue to have this sort of feature at our meetings. Another "special feature" was the silent auction of a number of William Howe's acrylic butterfly paintings by

the Smithsonian Institution that owned them. The money from the sale was divided between the Society and the Smithsonian. Several regional societies had displays, including the Ohio Lepidopterists, Idalia Society, Kentucky Lepidopterists, Philatelic Lepidopterists' Association, and the Connecticut Valley Lepidopterists' Society. There was a lot to look at during breaks from some of the best presentations I have heard at our annual meetings.

One of the best features in addition to the extra meeting day (we began on Thursday) was the return of workshops, initiated at the 1978 meeting in Louisville. There were two excellent "hands on" rearing programs, one by Dave Wagner and Tim McCabe and the other by Annette Aiello of the Smithsonian lab on Barro Colorado Island, Panama. Dave Ahrenholz presented a photography workshop featuring some of his superb Lepidoptera slides and technical secrets to his success. The only problems with the workshops were time constraints and restrictions on the numbers of people who could be participants.

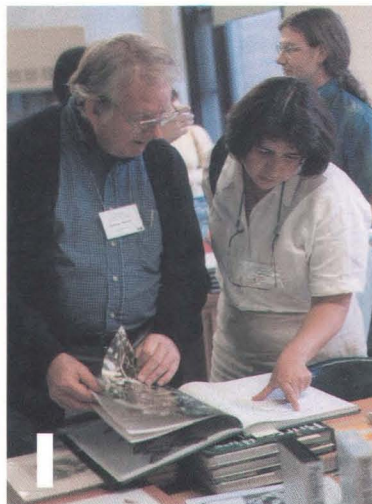
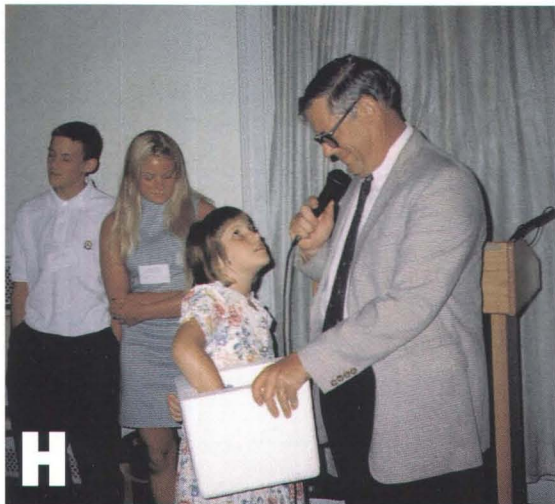
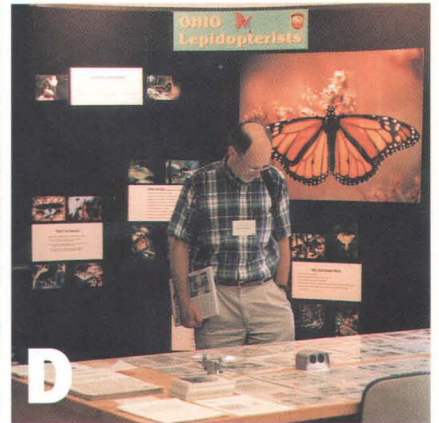
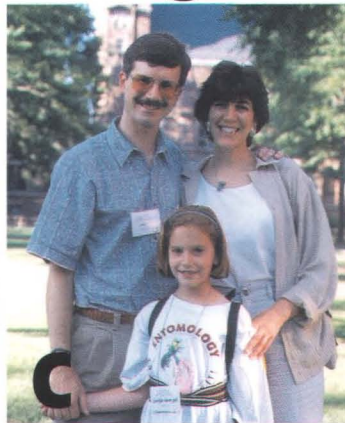
The landmark tower of the Yale campus was the backdrop for our Friday picnic, where old friends reminisced and discussed mutual interests. A slide fest in the big tent after supper gave everyone a chance to "show and tell" about some of their interesting experiences and discoveries in the winged world. Saturday night was banquet time, with the traditional lineup for photos of Lepidoptera ties, shirts, skirts and table gatherings. After dinner, Dr. Ron Hodges, amidst a retirement move from Maryland to Oregon, was there to receive a well-earned

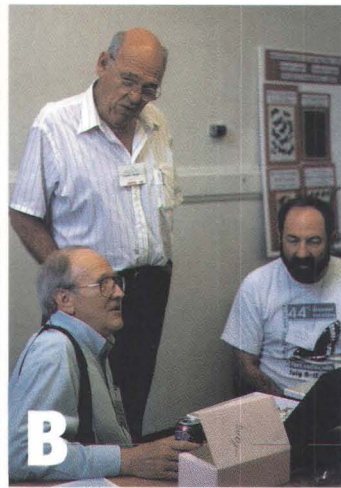
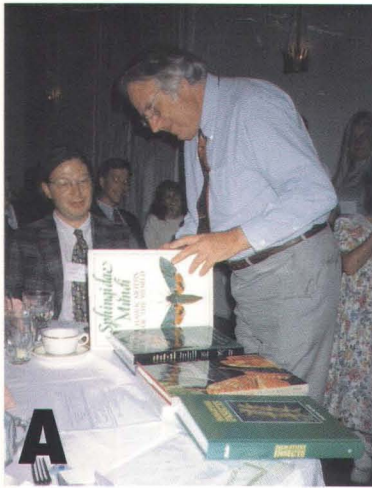
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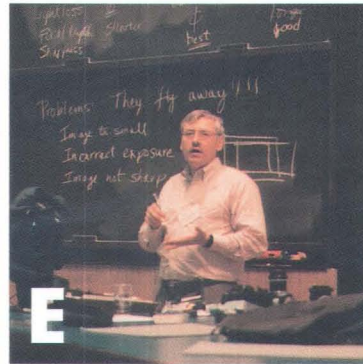
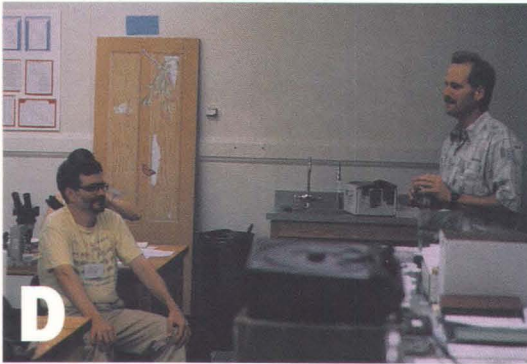
50th Anniversary Meeting

A: Picnicing under the Harkness Tower, Yale University, July 1997; **B:** the Tie Brigade keeps on growing (obviously, the bow tie wins!); **C:** The Larry Gall Family; **D:** admiring the Ohio Lepidopterists' and Philatelic Lepidopterist' displays; **E:** Bob Robbins (left) with the "Brazilian Contingent" (Astrid Caldas, Mirina Casagrande and Olaf Mielke); **F:** the ubiquitous "box lunch" (Sally and Andy Warren); **G:** Eric Metzler presented Hazel Tilden (widow of the late Bill Tilden) with a certificate; **H:** Charlie Covell attempts to telepathically influence Emily Hildebrandt and the door prize give-away extravaganza (Steve and Marissa Davis pretend not to notice); **I:** Lincoln Brower and Alma Solis at the book displays; **J:** Julian Donahue in repose (photos by Charlie Covell except B and H by Kit (not Ray!) Stanford). Smart alecky comments by the Ed.

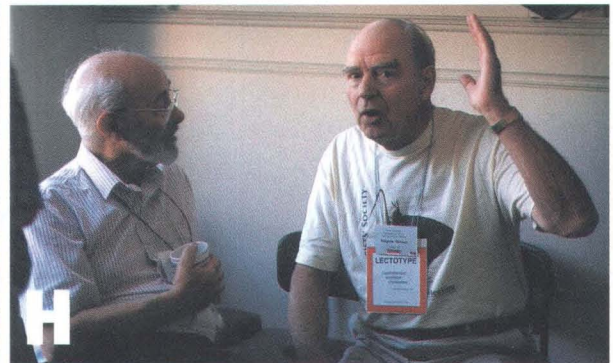
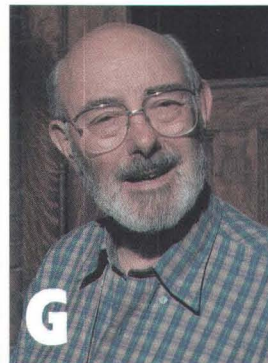




Yale University, July 1997



A: Andrew and Lincoln Brower; **B:** Moth talk with Doug Ferguson, Fred Rindge and Paul Opler; **C:** The New Jersey contingent (Ben Ziegler, Ken Bliss, Dave Iftner, Jima Popelka, Dale Schweitzer and Fred Rindge); **D:** Dave Wagner presents larval workshop; **E:** David Ahrenholz presents photography workshop; **F:** an enigmatic Phil DeVries has a secret (do you know what it is?); **G:** Portrait of Eric W. Classey; **H:** Lectotype of *Mo Nielsen* with his collector, Eric Classey; **I:** the Picnic in full swing; **J:** the original Sunshine Boys (Eric Metzler and Charlie Covell). Photos by Charlie Covell except A by Kit (not Ray!) Stanford and J by ?.



Reflections...cont'd from page 3

Karl Jordan Medal for his major contributions in revising parts of the American microlepidopteran superfamily Gelechioidea. The meeting could not have been without him and Elaine, a premier scientific illustrator and wonderful friend to many of us. Receiving a special recognition from President Metzler was Hazel Tilden, whose late husband Bill had for years been one of the most devoted and colorful members of the Society. She remains passionately devoted to the Society, and often attends our meetings. I had the pleasure, as Chair of the Awards and Endowments Committee, of presenting Harry Clench awards to Soowon Cho, K. A. Rogg and Mark Travassos (see the article on page 7 of this issue). We had 7 fine papers in the student competition – the best representation ever.

At the end was the traditional door prize drawing, which was begun at the 1971 meeting in Louisville. Over the intervening years I have had the pleasure of giving hundreds of books, specimens, artwork, and many other Lepidoptera-related items to the drawing winners, assisted by many of the young members of our company – this time Steven and Marissa Davis and young Emily Hildebrandt. I would like to take this opportunity to thank all of you who have been donors. This feature of the meetings has always been lots of fun for me.

After the Sunday morning talks and business meeting, where Andy Warren gave his poetic thank-you resolution (in the tradition of Jo Brewer and Jackie Miller), we hauled our heavy bags down the steps of the dorms and said our good-byes. I joined Larry Gall and a few others on a brief field trip to the nearby West Rock area, where we found very little on the wing, but it was a fine chance to unwind. Then it was time to take off for home, and enjoy the memories and the photos.

At this point, after fifty years, I believe the Society is in a state of transition, as is the whole area of professional and amateur lepidopterology. It has always

been a characteristic of the Society to bring together the professional and the amateur, each with much to give each other and to this unique part of biology. With the rise of public interest in butterflies and moths – especially in rearing, gardening, “releasing”, photography and visits to butterfly houses – our activities are much more public. Having been founded by collectors and researchers, the Lepidopterists' Society has traditionally focused on these areas. But we exist for people interested in “any aspect” of lepidopterology, and I hope we will continue to move even more toward providing resources and leadership in all these areas. That will mean tolerance for those who do or do not collect, but self-policing as well in cases where flagrant disregard for environmental and property laws and rights are brought to our attention.

We have recently withstood a terrible period in which collecting has endured major legal actions involving not only perpetrators of illegal collecting and trafficking, but many responsible amateur and professional lepidopterists who communicated with these people. In recent years the Society has also had to expel members for unethical and even criminal transactions with other members. More restrictions on foreign collecting, importation and exportation of specimens, collection on public lands, and media coverage of a most negative sort – all have been sobering rites of passage, and caused excessive turmoil. A number of individuals have given up collecting altogether. However, with a revised statement on collecting ethics, and a conscious effort to provide additional coverage in our publications for all aspects of Lepidoptera appreciation, I believe we can move forward, strengthen our organization, and continue to enjoy the many facets of lepidopterology in our Society's second half-century.



1997 Photo Contest Winners

Jackie Miller

See the winning photos on the cover and page 8 of this issue.

Life History:

1st place: Leroy Simon, *Eupackardia calleta* (Saturniidae)

2nd place: Leroy Simon, *Citheronia azteca* (Saturniidae)

3rd place: Leroy Simon, *Automeria naranja* (Saturniidae)

Moths:

1st place: Mark Schmidt, *Citheronia regalis* (Saturniidae)

2nd place: Leroy Simon, *Eumorpha fasciata* (Sphingidae)

3rd place: Leroy Simon, *Holocerina smilax* (Saturniidae)

Butterflies:

1st place: Leroy Simon, *Parathyma sulpita* (Nymphalidae), front cover.

2nd place: Kojiro Shirawa, *Icaricia icarioides* (Lycaenidae)

3rd place: Andre Sourakov, *Tomares romanovi* (Lycaenidae)

Congratulations to all! Maybe we'll see a few more entries this year (hint, hint!)

High Country Lepidopterists' Meet

The High Country Lepidopterists held their 7th Annual Meeting at Colorado State University in Fort Collins on September 20, 1997. A Friday evening reception was held at Paul Opler and Evi Buckner's home in Loveland. A museum open house was held Saturday morning in the C. P. Gillette Arthropod Diversity Museum, a short program of talks was held in the afternoon, followed by an evening banquet, and door prize drawing. About 20 persons attended. The 1998 Meeting will be held at the University of Colorado, Boulder.

Winners of the Student Competition Lepidopterists' Society Meeting, July 1997

M. Alma Solis, Chair,

Awards & Endowment Committee

The Harry K. Clench Memorial Award for Outstanding Student Presentations is awarded to students who have not yet completed their degrees or have received their degree within the six months preceding a meeting. In 1997 there were 10 excellent student presentations. The moderator for the student presentations was Charlie Covell, past Chair of the Awards & Endowment Committee. This year's judges were Bernard Landry, Paul Opler, and M. Alma Solis. Due to the high quality of so many papers 3 students were selected for Outstanding Student Presentations. Each student received an honorary certificate and \$250.00.

Soowon Cho, University of California, Berkeley

"Molecular phylogenetics of Heliethinae (Noctuidae) based on elongation factor 1-alpha and dopa decarboxylase"

The results confirmed most previously supported relationships and resolved many uncertainties in heliothine relationships, particularly in relation to the placement of the major pests and the origins of polyphagous life histories.

K. A. Rogg, University of Kansas, Lawrence

"A preliminary analysis of 40 years of Monarch butterfly tagging"

A comparison of the mean direction of flight for six geographic quadrants in the eastern U.S. indicated that monarchs farther east and further south

move in a more westerly direction indicating that monarchs turn to the west as they move through the U.S.

Mark Travassos, Harvard University, Cambridge

"Vibrational communication in larvae and pupae of the lycaenid butterfly *Jalmenus evagoras*"

Pupal sounds were shown to be important in attracting *Iridomyrmex anceps* workers and maintaining a large ant guard using pupal pair choice tests where one pupa is muted. In addition, one larval call shares the same sound characteristics of the primary signal of a pupa suggesting that larval sounds also play a role in caterpillar-ant symbioses.

Dotted Skipper Laying on Weeping Love Grass in central New Jersey

Michael Gochfeld

Division of Occupational Health, Environmental and Occupational Health Sciences Institute
681 Freilinghuysen Road, Piscataway, NJ 08855-1179

The Dotted Skipper (*Hesperia attalus* Edwards) has a disjunct distribution from central New Jersey to Florida and along the Gulf Coast to Texas. The subspecies *H. a. slossonae* has been considered rare and local in New Jersey, but has been found at an increasing number of locations as more observers have sought it throughout the pine barrens of central New Jersey (Gochfeld and Burger 1997). In the 1960's its host was not known (Shapiro 1966), but it was reported in association with Switchgrass (*Panicum virgatum*; Shapiro & Shapiro 1973) and Schweitzer (in litt) reported it using Little Bluestem (*Schizachryium scoparius*) and possibly

African Lovegrass (*Eragrostis*). In Florida it uses Wire Grass (*Aristida virgata*). Scott (1986) also mentions *Leptoloma cognatum* and *Bouteloua curtipendula*.

On 29 June 1997 near Fort Dix, Ocean County, NJ, Chris and Paula Williams, Steven Walters and I found the species nectaring on Pine Barrens Sandwort (*Arenaria caroliniana*) among stands of Weeping Love Grass (*Aragrostis curbulla*) on which Chris Williams photographed it laying an egg. The egg was laid about 10 cm above the sand in a clump of grass ca. 90cm tall. We found at least eight females fluttering through the "canopy" of this grass, as well as

freshly emerged adults (a total of 20 in 3 hectares) clinging to stems of this species. Whether it can mature on this host remains to be studied.

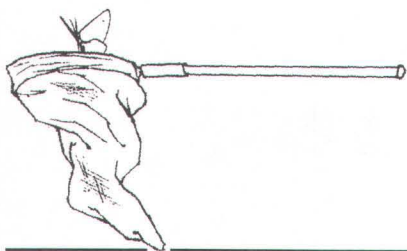
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- Gochfeld, M and J. Burger. 1997. Butterflies of New Jersey, Rutgers Press, New Brunswick.
Opler, P.A. and G.O. Krizek. 1984. Butterflies East of the Great Plains. Johns Hopkins Univ Press, Baltimore.
Scott, J.A. 1986. The Butterflies of North America. Stanford Univ Press, Stanford CA.
Shapiro, A. 1966. Butterflies of the Delaware Valley. Amer. Entomological Soc, Philadelphia.
Shapiro, A.M. and A.R. Shapiro. 1973. The ecological associations of the butterflies of Staten Island. J. Res. Lepid. 12:65-126.



1997 Photo Contest Winners...

Clockwise from upper left: *Tomares romanovi* (Lycaenidae), Andrei Sourakov, 3rd Place, Butterflies; *Automeria naranja* (Saturniidae), Leroy Simon, 3rd Place, Life History; *Icaria icarioides* (Lycaenidae), Kojiro Shirawa, 2nd Place, Butterflies; *Eupackardia calleta* (Saturniidae), Leroy Simon, 1st Place, Life History; *Holocerina smilax* (Saturniidae), Leroy Simon, 3rd Place, Moths; *Citheronia azteca* (Saturniidae), Leroy Simon, 2nd Place, Life History; *Eumorpha fasciata* (Sphingidae), Leroy Simon, 2nd Place, Moths; Center: *Citheronia regalis* (Saturniidae), Mark D. Schmidt, 1st Place, Moths.



Mailbag...

Possessive and Other Common Forms of Butterfly Names

"The species was named in honor of W. C. Dukes, who lived in Mobile, Alabama." (Opler & Krizek, 1984). The common name provided for *Euphyes dukesi* (Lindsey, 1923) on page 249 of Opler and Krizek's book is Duke's Skipper.

I believe that it is this misspelling of the common name for this species that is the first recorded misuse. Many others have admired the excellent contribution of this publication by Opler and Krizek and followed their example by using these common names, thus the corruption has continued. An example of the continued misuse is on page 28 of Miller (1992) where she attributes the oldest use of the common name, Duke's Skipper to Opler and Krizek (1984). She also attributes that name to Klots (1951), however, she didn't use the form that Klots used, that is, Dukes' Skipper! The common name given as **Dukes' Skipper** on page 255 of Klots (1951) is the grammatically correct form. The common name was correctly given as **Dukes' Skipper** in Nielsen (1992).

When a name which ends in s shows possession, the apostrophe follows the s as in Perkins'.

In 1893, Scudder used the now archaic form of Edwards's when naming, on page 121, *Thecla edwardsii* - Edwards's Hair-Streak. However, now the s following the apostrophe in proper grammar is understood to be present and thus the form Dukes'. Other examples of the form s' are Persius' Dusky Wing and Harris' Checkerspot.

If one is not showing possession, but is just using the name of the person

honored along with the continuation of the name as a compound name, such as in Cloudless Sulphur, Dorcas Copper, Saepiolus Blue, and Chryxus Arctic, no apostrophe is required. Thus, in none of the cases is a second s required, appropriate or contemporarily correct.

When possessive, but the name of the person honored ends in some letter other than s, the 's is used such as in Juvenal's Dusky Wing, Horace's Dusky Wing, Leonard's Skipper, Henry's Elfin, Reakirt's Blue, Krautwurm's Fritillary, Mitchell's Satyr and Macoun's Arctic.

Therefore, I suggest that *Euphyes dukesi* (Lindsey) be known as **Dukes' Skipper** whenever a common name is applied, as Alexander B. Klots properly used this form in 1951.

Literature Cited:

- Klots, Alexander B., 1951, fifth printing 1969. A Field Guide to the Butterflies.
 Miller, Jacqueline Y., editor, 1992. The Common Names of North American Butterflies.
 Nielsen, Mogens C., March 1992. Newsletter of the Michigan Entomological Society. Preliminary Checklist of Michigan Butterflies and Skippers.
 Opler, Paul A. and George O. Krizek, 1984. Butterflies East of the Great Plains.
 Scudder, Samuel Hubbard, 1893. Brief Guide to the Commoner Butterflies of the Northern United States and Canada.

Owen A. Perkins

2806 Linwood, Royal Oak MI
48073-3023



Power Line Proposed for Poverty Hollow

American Electric Power wishes to build a 765kV transmission line through several countries in southern West Virginia and adjacent Virginia, and their latest proposal would run the length of the val-

ley system that includes Poverty Hollow along the northern edge of Montgomery Co., Virginia. Poverty Hollow has been for many years the best known and perhaps most accessible locality of *Speyeria diana*, and although Diana breeding habitat is not precisely known it seems to be in valley bottom forest, of which little remains intact in the counties around Blacksburg. AEP's route maps show a 1000-foot wide corridor within which a 200-foot wide clearcut would eventually be chosen for the 130-foot pylons, and in Poverty Hollow that corridor lies low along the north side of the valley and even touches the valley bottom road at one point. The clearcut would take about 2.5% of the land in the Hollow, essentially all of it in National Forest, and there is some concern about its effect on Diana habitat, as well as its visual impact on such a well-used recreational forest area. The Jefferson/George Washington National Forest rejected any Forest crossings of an earlier proposed route, but the outcome of this one is still in doubt.

Dianas may not be rare, but they are definitely local, and members of the Society who have visited Poverty Hollow might like to know of this latest development. The final decision on the line and its routing will be made by the State Corporation Commission, which will hold hearings in March, but comments referring to case number PUE970766 can be addressed to:

William Bridge, Clerk,
State Corp. Commission of Virginia,
P. O. Box 1197, Richmond VA 23209

David A. West

607 Giles Road, Blacksburg VA 24060
can supply further information.



Estimated Losses of *Battus philenor* (Papilionidae) Pupae at Goethe Park, Rancho Cordova, California From the Flood of January, 1997

When the historic American River turned angry in Rancho Cordova, Sacramento County, California, dark waters flowed through Goethe Park for about ten days in early January, 1997, inundating pupae of the Hairy Pipevine Swallowtail, *Battus philenor hirsuta*, whose locations I had recorded as part of an ongoing study of their spatial distribution. The January 1997 floods came on the heels of a severe wind and rain storm in December which undoubtedly also caused losses, which had not yet been recorded.

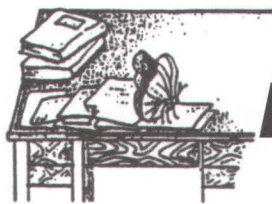
At the entrance to the park, a beautiful green pupa was lost from a post by the side of the road, replaced by a fibrous mass of brown debris. A young pine (*Pinus sabiniana*) and a nearby cluster of planted *Eucalyptus* were inundated to a depth of 1.7m. The pine bore 11 brown pupae on its trunk, all of which remained in place. Five of 13 pupae on the *Eucalyptus* remained, but all were coated with a thin film of gray sediment. This material, sometimes deposited only on the wing cases, was washed away by subsequent rain in mid-January but I cannot tell if the pupae are alive or dead and this will not be known until mid-March when emergence takes place.

Near the west end of the flood plain, 18 pupae formerly on the south bank and 12 on an Osage Orange (*Maclura pomifera*) bush were lost, as was a cluster of 8 on Valley Oak (*Quercus lobata*) roots.

"Noah" (aka Leslie Smith)

9847 Folsom Boulevard
Sacramento, CA 95827

(Ed. Note: Leslie Smith passed away recently (see *Metamorphosis*, News 39(5): 101). My thanks to Art Shapiro for commenting on this note. I hope that there are pupae wherever you are, Leslie...)



From the Editor's Desk

Phil Schappert

I always seem to start this column by apologizing. Why should this time be any different? Once again, my apologies for the late issue(s) of the **News**. They say "there's no rest for the wicked" and from this you should know how truly wicked I am!

In addition to apologizing for lateness I also must apologize for some silly typographical errors in the last two issues. My specific apologies to Oakley Shields for making not one, not two but four, count 'em, four mistakes in his *Fossil Butterfly Update* (39(5): 99). Respectively they were the use of "or" in lieu of "of" (twice! That's what I get for depending on OCR software), *Acacia* is a specific epithet which should be italicized and Leestmans' first initial is R. not H. (another OCR error?)

Another oversight from that same issue was omitting contact information from the *Announcement* of the issuing of Scott's **Butterflies of North America** on CD-ROM (39(5): 110). The information was there, however, because Jim Scott had provided an ad (which can also be found in this issue)

Dear Editor,

I've really enjoyed your tidy editorial work on the Lep. Soc. News. One small thing caught my eye in the winter 1997 issue, however. There is no way to write this without sounding hopelessly pedantic, but here goes...

In 1994, I published a short note in *J. Lepid. Soc.* (48:166-168), which detailed the history of the name of the beast that graced the cover of the 1997 winter issue of the **News**. I was disappointed to see that my efforts have gone unheeded. As I explained then in some detail, the

under "Audio/Visual". Thanks, Jim, for saving my electronic bacon, as it were.

I also have to apologize for some miscredited photos. It was all my fault, Kit, please let Ray back in the house now!

The caption for the 1997 Meeting Photos (39(4): 86-87) contained an astounding four (hey, at least I'm consistent) major gaffes in only 1 paragraph – must be some kind of record! *Visiting* (sic) someone is difficult, especially so when they're in the hospital, Peg Tuttle is *standing* in photo B (Jim Tuttle and Mike Smith are the ones *sitting*!), I hope that Dave Iftner *counts* better than I *tipe* (sic), and I fervently hope that Bryant, David and Ron have something other than "poits" (points) to discuss!

Of course, you know that as soon as I let this issue out of sight it will promptly take on a life of its own and develop a whole slough of typos that, I *swear*, on my honor as a member of the Royal Order of Butterfly Folks that Edit Newsletters in their Non-existent Spare Time, were not there the last time that I looked at it!

I swear a lot...

correct name is *Heliconius charithonia* (L.), not "charitonius." If readers are interested in why this is so, I refer them to my note for the details. To repeat my closing line from 1994, "I hope that this minor, yet irritating detail will be corrected in future publications."

Best wishes,

Dr. Andrew V. Z. Brower

*Rice Chair of Systematic Entomology,
Dept. of Entomology, Oregon State
University, Corvallis, OR 97331-2907*

(I knew this! *Mea culpa*, etc. It won't happen again! Much chagrined Ed.)

Proposed Constitutional Amendments

Jim Tuttle, President

3838 Fernleigh Street, Troy MI 48083-5715

Over the past dozen years and five Treasurers, concern has been expressed about the solvency of the Life Membership Fund, and the strain that it produces on the finances of the Society. The one-time payment has been upwardly increased three times during that time frame and now stands at 40× the annual dues for a regular member (currently that calculation is $40 \times \$35.00 = \$1,400.00$). Yet as any retiree on a fixed income can tell you, this places the Society in a very precarious position. General inflation, increased specialized publication costs, deficit spending, and fluctuations in foreign exchange rates can all reduce the value of that fund and force the general membership to pick up this financial obligation. If this all sounds like high finance on an international level, it is (well O.K., I doubt General Motors would consider it high finance). The financial concerns are, however, the same.

A Steering Committee of former and current Treasurers (Eric Metzler, Jim Tuttle, and David Iftner) was appointed by the Executive Council at the annual meeting in Houston in 1996 to once again explore the Life Membership issue and make appropriate recommendations. The below listed language was approved by the Executive Council at the annual meeting in New Haven in 1997 for inclusion on the next ballot. An effective date of June 1, 1999 is proposed, which will allow for the submission of the issue to a vote of the general membership in the fall of 1998, and adequate notice following the outcome of the general membership vote for implementation.

Constitution [Current Status]

Article III. Membership

Section 5. Application for Active, Affiliate, Student, Sustaining, and Life Membership in the Society, received by the Secretary of Treasurer and accompanied

by the appropriate dues for the current year, shall constitute formalization of membership, and no nomination or election to membership shall be necessary. The annual and life dues shall be fixed by the By-Laws.

Section 6. Any member may become a life member upon the payment, at one time, of such sum as shall be fixed by the By-Laws, and shall be exempt from further assessment. He shall receive during his life a subscription to the *Journal* and the *News of the Lepidopterists' Society*. Life membership fees shall be placed in a permanent Publication Fund.

By-laws [Current Status]

Article I. Dues

Section 9. Beginning June 16th, 1996 Life Members shall pay a sum equal to 40 times the current annual dues for Active Membership (e.g., $40 \times \$35$ for annual Active Dues = \$1,400.00, One Thousand Four Hundred Dollars, U.S.A., for Life Membership in 1996). Each Life Member shall receive a subscription to the regular Society publications during his life.

Section 10. Beginning in 1995, Institutional subscription fees shall be Fifty Dollars, U.S.A. (\$50.00). This will include the *Journal of the Lepidopterists' Society*, including *Supplements*, and the *News of the Lepidopterists' Society*.

Section 11. Beginning 1 January 1978, annual dues will be waived for retired members who are unable to pay their dues, who have been members for at least ten (10) years, and who are more than 65 years of age, upon written request to the Treasurer. The President of the Society must approve each transfer to retired status, and will be given by the Treasurer an annual list of all members so carried. The name of the member will be carried in the Membership Directory,

but no further dues will be collected. Subscriptions to the *News* (but no other Society publications) will be continued upon request.

Proposed Constitutional Amendments

Article III. Membership

Section 5. Application for Active, Affiliate, Student, and Sustaining Membership in the Society, received by the Secretary of Treasurer and accompanied by the appropriate dues for the current year, shall constitute formalization of membership, and no nomination or election to membership shall be necessary. The annual dues shall be fixed by the By-Laws.

Section 6. Beginning June 1, 1998 new Life Membership applications will no longer be accepted by the Society. Those persons obtaining Life Membership status prior to that date will be afforded all Society benefits, shall be exempt from further assessment, and shall receive during their life a subscription to the *Journal* and the *News of the Lepidopterists' Society*. Life membership fees shall be maintained in a permanent Publication Fund until such time as, through attrition, the fund is no longer needed. At that time the President shall direct the Treasurer to transfer any remaining funds to the General Fund of the Society.

Proposed By-laws Amendments

Article I. Dues

Section 9. Beginning in 1995, Institutional subscription fees shall be Fifty Dollars, U.S.A. (\$50.00). This will include the *Journal of the Lepidopterists' Society*, including *Supplements*, and the *News of the Lepidopterists' Society*.

Section 10. Beginning 1 January 1978, annual dues will be waived for retired

continued on next page...



Metamorphosis...

The Society has learned of the deaths of the following members. Our condolences to their families.

Glenn M. Musser

Glenn Marion Musser passed from this world on February 10, 1997 for a more divine world, perhaps only to be touched by the wings of the butterflies that he cherished.

Born March 10, 1927, on a Greene Co., Ohio farm upon which Wright-Patterson Air Force Base now sets, Glenn had been a member of the Lepidopterists' Society since the early 1960's. His interest in butterflies and moths began at age five, charmed by the bright colors as well as the amazement of any young person for things that can fly. He had the rare privilege of recalling vivid images of large numbers of butterflies puddling and of times when the cabbage white was not Ohio's most plentiful butterfly.

Quiet enjoyment summarizes his participation in the hobby and the Society. Dedication would aptly describe his attitude towards his favorite of nature's creations. His life probably represented a good majority of fellow lepidopterists' lifestyles – working full time and enjoying what little time was left for his avocation. In fact, not only did he work 38 years, full time, as a glue mixer at Gummed Products (which made postage stamp adhesives) in Troy, Ohio, but he also farmed. He was years ahead of his time, refusing to use any form of pesticide or herbicide that would compromise the numbers of butterflies. His property in Sidney, Ohio, has, since 1952, been appropriately named Musser's Butterfly Farm and has been part of a conservation reserve for ten years.

Despite competition for his attentions, he raised a loving and dedicated family. Like many of us, he had an understanding spouse who permitted his indulgences and the frequent intrusions of ova, wandering larvae, pupae in the refrigerator, and imagoes fluttering about the windows. His beloved Dorothy preceded him in death almost a year earlier. His children, Marion, Timothy and Dale, six grandchildren, two brothers and one sister survive him.

Though not interested in performing experiments or writing papers, Glenn contributed to the field of lepidopterology in two, perhaps the most important, ways: First, he never missed an opportunity to spark the interest of anyone – particularly the more impressionable young – with the splendor of moths and butterflies. Second, he did the most important thing that anyone dedicated to the conservation and preservation of nature can do: he lived the example of an enlightened man by sharing the few acres of the planet under his custodianship. Simply, he gave butterflies and moths a home.

Mark D. Schmidt

*8780 Red Lino-Five Points Rd.,
Springboro, OH 45066*

Gerhard A. Holzbaur

Of Philadelphia, Pennsylvania, had been a member since 1995; he passed away 15 June 1997.

Earl L. Hoke

Of Byron Center, Michigan, a member of the Society since 1990, died of pancreatic cancer on 18 June 1997. Ethel, his wife for 50 years, writes of enjoying many vacations where there were butterflies to collect, and greatly admired his skill at mounting and framing the catch. Earl derived great pleasure from corresponding and exchanging with fellow lepidopterists around the world.

John G. Williams

Of Rutland, Leicester, England, on 28 December 1997, of heart and renal failure. Dr. Williams was an internationally-known naturalist and author of numerous publications, including field guides to birds of East Africa and orchids of the world. His keen interests included birds, bats, butterflies, dragonflies, and beetles; he had been a member of the Society since 1967.

Constitution...cont'd from p. 11

members who are unable to pay their dues, who have been members for at least ten (10) years, and who are more than 65 years of age, upon written request to the Treasurer. The President of the Society must approve each transfer to retired status, and will be given by the Treasurer an annual list of all members so carried. The name of the member will be carried in the Membership Directory, but no further dues will be collected. Subscriptions to the *News* (but no other Society publications) will be continued upon request.

Purple Loosestrife (*Lythrum salicaria*): a widely accepted silkworm foodplant

Mark D. Schmidt

8780 Red Lion-Five Points Rd., Springboro, OH 45066

"It must have gotten lost during a sleeve change," was my first thought as I discovered a fifth instar *Eacles imperialis* larva contentedly munching on a purple loosestrife leaf. I had been raising a batch of these caterpillars on the branches of a sassafras tree, just above a grouping of the perennial. It could have even fallen on to the plant when the newly emerged larvae were being introduced into the sleeve weeks earlier.

Since *E. imperialis* is polyphagous, it did not surprise me that a stray larva could adapt to an alternative food source. What did surprise me was a question posed to me during a casual conversation with Paul Cavalcante of the Bronx, New York. He inquired if I had ever raised *Hyalophora cecropia*, *Automeris io*, or *Antheraea polyphemus* on purple loosestrife. He had come across an article by Spider Barbour (1991) entitled, "Moths of the Long Purples". A copy of the article soon found its way into my mailbox. It discussed the history of the alien loosestrife and its arrival to America from Europe in the late 18th Century - and its aggressive spread since (see F on page 29).

Now the finding of the stray *E. imperialis* had more significant meaning. A fourth species was now added to the list of silkworms accepting loosestrife as a food plant. Could there be more? Stephen Stone (1991) listed one additional species, *Saturnia pavonia*, in his book and Tuskes, Tuttle and Collins (1996) noted that the *Hemileuca maia* Great Lakes complex had adopted purple loosestrife as a foodplant.

Hoping to add to this list, hatchling larvae of different species were placed on the plants. Not wanting to condemn

too many freshly emerging larvae to uncertain life or death, I placed only one or two caterpillars of any one species on the plant. Admittedly, the numbers of larvae are small but the ornamental loosestrife was in limited supply! Sibling larvae, sleeve reared on traditional foodplants, served as controls. Below are my findings:

Species	Acceptability
<i>Actias luna</i>	1 of 2 maturing
<i>Actias selene</i>	1 of 1 maturing
<i>Antheraea pernyi</i>	1 of 1 maturing
<i>Antheraea polyphemus</i>	Barbour 1991
<i>Automeris io</i>	Barbour 1991
<i>Callosamia angulifera</i>	1 of 1 matured into late 5 th instar, 3 others failed in early instars
<i>Callosamia promethea</i>	2 of 2 maturing
<i>Citheronia regalis</i>	1 of 1 maturing
<i>Citheronia sepulcralis</i>	failed
<i>Dryocampa rubicunda</i>	0 of 1 maturing
<i>Eacles imperialis</i>	1 of 1 maturing
<i>Hemileuca maia</i>	Tuskes, et al. 1996
<i>Hemileuca nevadensis</i>	failed
<i>Hyalophora cecropia</i>	Barbour 1991
<i>Hyalophora gloveri</i>	2 of 2 maturing
<i>Rothschildia lebeau forbesi</i>	2 of 2 maturing
<i>Samia cynthia</i>	2 of 2 maturing
<i>Saturnia pavonia</i>	Stone 1991
<i>Saturnia pyri</i>	1 of 1 maturing

Noting only three failures within the species listed above, the prospect of identifying purple loosestrife as a broadly acceptable foodplant looked promising. Interestingly, when a species accepted it, there was 100% survival with the only exception of *A. luna*. Even 50% survival isn't bad! The loss of the other *A. luna* or the late loss of *C. angulifera* may have been due to other factors besides foodplant inadequacy. *C. promethea* deserves to be re-tested.

Of those accepting the foodplant, only *A. luna* and *C. angulifera* lagged, developmentally, behind their sibling cohorts on usual foodplants. *R. forbesi* actually spun up one week faster than cohorts on ash.

I made an initial attempt to explore the possibility that the phenomena extends beyond the Saturniids. Single larvae of *Heraclides cresphontes*, *Pterourus glaucus*, and *Eurytides marcellus* were introduced after emerging from their eggs. None survived the first instar.

It might be considered unusual for one plant species to serve as an acceptable food plant for so many species of moths. Some moths can be very narrow in their foodplant menu. It leaves one wondering why one species of plant can be so right for one species of moth, and yet is rejected completely by another. One could postulate that the loosestrife might be lacking in, or have low concentrations of, defensive chemicals such as alkaloids or other toxins that could be lethal to feeding larvae. Stone (1991) lists over 1100 foodplants. Counting only those moths of full species rank (i.e. subspecies excluded) only 14 other species of plants equaled or exceeded purple loosestrife in their reported acceptance (list available on request). Purple loosestrife ranks in the top 1.3% of acceptable foodplants.

Practically, loosestrife may have an important place among hobbyists and breeders with space limitations. Lepidopterists know that a diverse selection of foodplant sources must be available in order to feed the subjects of their studies. One oak tree occupies a large amount of space, reducing available space for potentially many other varieties of trees. Waiting for trees to get big

enough to raise more than just a handful of larvae takes years and, once mature, many branches of the large trees are out of reach. Loosestrife may obviate many of these hindrances by reducing the need for planting a large variety of foodplants. It is hardy, available, perennial, decorative, fast-growing and all of its leaves are within easy reach. It is an excellent choice for cage rearing because cuttings are hardy and may even take root!

Although I was thrilled to discover large stands of purple loosestrife in full bloom during a recent trip near the Great Lakes, few others seem to be thrilled with the invasion of native wetlands by this prolific, and aggressive plant which crowds out many other wetland plants, forms monoclonal stands and disrupts ecosystems. It is, however, a small consolation to know that while aggressive species like *Lythrum salicaria* can opportunistically exploit habitats, other species such as Saturniids may be able to opportunistically exploit this potential new habitat.

I would like to take this small project further but, due to increasing regulations, my activities may be limited to locally available species. Thus, I invite any interested parties to raise their local moth species on purple loosestrife. I will happily include their results in future tabulations.

Acknowledgements

Many thanks to Michael Collins, Richard Peigler and Mike Smith for comments on an earlier draft of this article. I am certain that it is a better article because of their input.

Literature Cited

- Barbour, S., 1991. Moths of the Long Purples. Up River/Down River.
 Stone, Stephen, E., 1991. Foodplants of World Saturniidae. The Lepidopterists' Society Memoir No. 4.
 Tuskes, P. M., Tuttle, J. and Collins, M., 1996. The Wild Silk Moths of North America. Comstock Pub. Assoc., Cornell Press, Ithaca, NY.



1998 Meeting Schedule

Mike Toliver submits this tentative schedule for the upcoming 1998 Meeting of the Lepidopterists' Society in Eureka, IL.

Thursday, July 30th

7:00am – 8:00am – Breakfast buffet in Terrill Room
 8:00am – 9:00am – Editorial Board Meeting
 9:00am – 10:00am – Executive Council Meeting
 10:00am – 10:15am – Coffee Break
 10:15am – Noon – Executive Council meeting.
 Noon – 1:00pm – Working lunch (buffet) – Terrill Room
 1:00pm – 3:00pm – Executive Council meeting.
 3:00pm – 3:15pm. – Coffee Break
 3:15pm – 5:00pm – Executive Council meeting.
 5:00pm – 6:30pm – Dinner (on your own)
 6:30pm – 9:00pm – Open House (Moser Lobby)

Friday, July 31st

7:30am – 8:15am – Coffee and danish in Terrill Room
 8:15am – 10:15am – Sessions - Becker Auditorium [Symposium 1: Prairie Lepidoptera]
 10:15am – 10:45am – Coffee Break (Group Photograph?)

10:45am – 12:15pm – Sessions
 12:15pm – 1:30pm – Lunch
 1:30pm – 3:15pm – Sessions
 3:15pm – 3:30pm – Coffee Break
 3:30pm – 5:00pm – Sessions
 5:00pm – 6:00pm – ??
 6:00pm – 8:00pm – Barbeque – Wood Lawn (Terrill as Rain Backup)
 8:00pm – 10:00pm – Slide fest (Becker Auditorium)

Saturday, August 1st

7:30am – 8:15am – Coffee and danish in Terrill Room
 8:15am – 10:15am – Sessions – Becker Auditorium [Symposium 2: Microlepidoptology]
 10:15am – 10:30am – Coffee Break
 10:30am – Noon – Sessions
 Noon – 1:30pm – Lunch
 1:30pm – 3:15pm – Sessions
 3:15pm – 3:30pm – Coffee Break
 3:30pm – 5:00pm – Sessions
 5:00pm – 6:30pm – ??
 6:30pm – 10:00pm – Banquet (incl. door prizes) – Terrill

Sunday, August 2nd

7:30am – 8:15am – Coffee and danish in Terrill Room
 8:15am – 10:15am – Sessions – Becker Auditorium
 10:15am – 10:45am – Coffee Break
 10:45am – 12:15pm – Business meeting & Finish

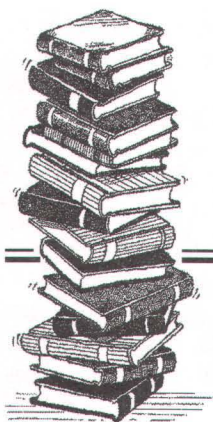
Announcement

New Publication: Butterflies of Micronesia

The Agricultural Experiment Station at the College of Agriculture and Life Sciences, University of Guam has a new publication entitled "Butterflies of Micronesia" by Drs. Isle H. Schreiner and Donald M. Nafus. There are 36 pages including Front (colored) & Back (no illustration) cover, 9 colored plates and it is spiral bound. Host Plants and

distribution maps are not listed. Price is US \$10 + 1.25 s/h airmail for the US and US \$10 + 3.00 s/h airmail elsewhere. Contact:

University of Guam
 College of Agriculture and Life Sciences
 Agricultural Experiment Station
 UOG Station
 Mangilao, GU 96923



The Lepidopterists' Bookshelf

M. Alma Solis, Editor

Recently Published Books...

Anyone knowing of the publication of new titles of books, video, or audio tapes of interest to lepidopterists, and especially of books published outside the United States, are requested to send full particulars to the Book Review Editor, The Lepidopterists' Society, both for announcement in this column and to allow for timely review in the Journal or News of The Lepidopterists' Society.

Publishers are invited to send review copies directly to the Book Review Editor for consideration for review in the News or Journal. Members interested in reviewing books for the News or the Journal should send their requests or interests to:

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Lepidopterorum Catalogus (New Series), Vol. 1: Primitive Microlepidoptera; Fasc. 7: Neopseustidae

by Donald R. Davis. 1997. Association for Tropical Lepidoptera & Scientific Publishers, 8 pp. Available from Association for Tropical Lepidoptera, Inc. P. O. Box 141210, Gainesville, FL 32614-1210. ISBN 945417-51-9 (fasc.), \$1.50 (members), \$4.50 (non-members).

This world catalog of the family Neopseustidae enumerates 11 species in 4 genera from the Oriental and Neotropical regions. All valid names, synonyms, and literature references to illustrations and biological information are given. Host records are unknown for any of the species. There are no known pest species.

Lepidopterorum Catalogus (New Series), Vol. 1: Primitive Microlepidoptera; Fasc. 62: Oxychirotidae

by J. B. Heppner. 1997. Association for Tropical Lepidoptera & Scientific Publishers, 7 pp. Available from Association for Tropical Lepidoptera, Inc. P. O. Box 141210, Gainesville, FL 32614-1210. ISBN 945417-58-6 (fasc.), \$1.50 (members), \$4.50 (non-members).

This world catalog of the Indo-Australian family Oxychirotidae enumerates 6 species in 3 genera. All valid names, synonyms, and literature references to illustrations and biological information are given. One host record, *Cenoloba oblitalis* (Walker) on

Avicennia marina from Australia, is given. There are no known pest species.

70 Common Butterflies of the Southwest

by Richard Bailowitz & Douglas Danforth. 1997. Southwest Parks and Monuments Association, Tucson, AZ, 64 pp. Available from Southwest Parks and Monuments Association, 221 N. Court. St., Tucson, AZ 85701. ISBN 877856-84-3, \$6.95.

Seventy full-color photographs of live butterflies help you identify them in their natural environment in the Southwestern United States. Each photograph is accompanied by descriptions of what plant each species frequents, when and in what region you are likely to find them, and how you can distinguish species by their distinctive flight patterns.

20 Years of Butterfly Revelations

by Henry F. Swanson. 1998. Presbyterian Women, First Presbyterian Church of Orlando, Orlando, FL, 99 pp. Available from First Presbyterian Church of Orlando, 106 East Church Street, Orlando, FL 328901-3390. LOC Card Catalog Number: 98-90034, \$7.00 + \$3.00 (mail charge)=\$10.00 [with a notation "for butterfly book(s)"].

The author has recorded 4,406 daily visits by Red Admiral butterflies over a span of 17 years. Red Admirals only have a life span of approximately 4 months. There is also a section with a

discussion of his hypothesis that the memory of a particular mating site is passed from generation to generation and the author's response to comments made by reviewers when his results were submitted to a scientific journal.

Microlepidoptera of Europe, Vol. 2: Scythrididae

by Bengt Å. Bengtsson. 1997. Apollo Books, Stenstrup, 301 pp. Available from Apollo Books, Kirkeby Sand 19, DK-5771, Stenstrup, DENMARK. ISBN 87-88757-11-0, 500.00 DK (Danish Kroner) [10% discount to subscribers to "Microlepidoptera of Europe"].

A total of 237 species in 7 genera of the family Scythrididae (Gelechioidea) from Europe and North Africa are included. The genus *Scythris* with 204 species is divided into 64 species groups. In the systematic treatment the author provides for each species a diagnosis, male and female genitalia description, distribution, biology, and remarks. There are 14 plates of color paintings of the adults and 419 genitalia illustrations. Also included is a distributional chart by country.

Microlepidoptera of Europe, Vol. 1: Pterophoridae

by Cees Gielis. 1997. Apollo Books, Stenstrup, 222 pp. Available from Apollo Books, Kirkeby Sand 19, DK-5771, Stenstrup, DENMARK. ISBN 87-88757-36-6, 400.00 DK (Danish Kroner) [10% discount to subscribers to "Microlepidoptera of Europe"].

The Pterophoridae of Europe (excluding the former Soviet Union) and the Canary Islands and Madeira includes 138 species. In the systematic treatment the author provides for each species a diagnosis, male and female genitalia description, distribution, biology, and remarks. There are 14 plates of color photographs of the adults, 2 plates of color photographs of immatures, and 274 genitalia illustrations. Also included is a distributional chart by country and an index to hostplants.

Checklist of the Geometridae (Lepidoptera) of the former U.S.S.R.

by Jaan Viidalepp. 1996. Apollo Books, Stenstrup, 111 pp. Available from Apollo Books, Kirkeby Sand 19, DK-5771, Stenstrup, DENMARK. ISBN 87-88757-05-6, 200.00 DK (Danish Kroner).

This checklist contains 1486 valid species names and are classified into their respective subfamilies, tribes, and genera. Each species name includes the author, date of publication, synonyms, and the range of the species within the former U.S.S.R. and its distribution elsewhere.

The Afrotropical Tiger-Moths

by David T. Goodger & Allan Watson. 1995. Apollo Books, Stenstrup, 65 pp. Available from Apollo Books, Kirkeby Sand 19, DK-5771, Stenstrup, DENMARK. ISBN 87-88757-32-3, 200.00 DK (Danish Kroner).

This illustrated catalogue of tiger-moths (Arctiidae) from the Afrotropical Region includes 411 species. The genera are listed alphabetically. Each genus entry includes the author, date of publication and page, the type species, a brief description of the external appearance of the adult, and the male genitalia of the type species. Each species en-

try includes author, date of publication, type material description, and possible distribution of the species. Synonyms and association information are listed below the valid name. There are 4 plates of 89 color photographs of the adults and 13 plates of black & white photographs of male genitalia.

The Lepidoptera of Europe: A Distributional Checklist

edited by Ole Karsholt & József Razowski. 1996. Apollo Books, Stenstrup, 380 pp. + CD-Rom. Available from Apollo Books, Kirkeby Sand 19, DK-5771, Stenstrup, DENMARK. ISBN 87-88757-01-3, 600.00 DK (Danish Kroner).

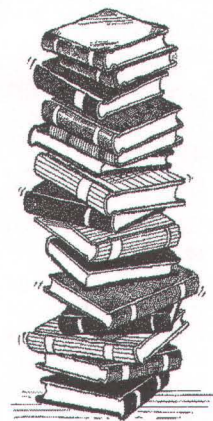
This checklist by 39 authors includes the distribution of 8470 species of Lepidoptera in 31 European countries and 5 larger Mediterranean islands. It is a chart with the taxa listed on the left and the countries where the species occurs appearing to the right of the species name. The species are included in the following categories: superfamily, family, subfamily, tribe, genus, subgenus, and species. A section entitled "Notes" includes supplementary information mainly on nomenclature and taxonomy for some species; synonyms are included in this section.

Caterpillars of Eastern Forests

by David L. Wagner, Valerie Giles, Richard C. Reardon, and Michael L. McManus. 1997. U.S. Dept. of Agriculture, Forest Service, FHTET-96-34. 133 pp. Available from Richard Reardon, USDA Forest Service, 180 Canfield Ave., Morgantown, WV 26505. Available at no cost [But I understand from the senior author that it is almost out of print].

This guide includes 245 macrolepidopteran species (but also Limacodidae and Megalopygidae) from the Northeastern United States. There are 210 color photographs of larvae that

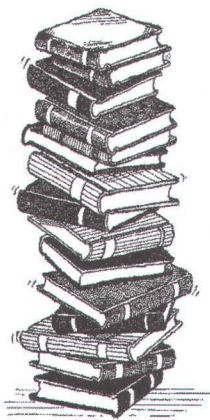
are mainly tree feeders. Species accounts include a telegraphic description of diagnostic characters that are present in the last larval instar, species that could be mistaken for the one treated, food or host plant associations, time of year they are found and number of yearly generations. It also includes a glossary, a section on "Helpful Literature on Caterpillars", and index to common names of host plants.



Butterfly Gardeners' Quarterly

Those of you who enjoy gardening for butterflies should already be aware of this publication. If you're not, then you should consider subscribing...

BGQ is published in January, March, June and September, costs only \$10 per year (\$11 US for Canada, \$12 US international), and provides a wealth of information about the plants you could be growing and the butterflies that you might attract. Contact Claire Hagen Dole, Editor, P. O. Box 30931, Seattle, WA 98103, SKIPPER@SCN.ORG for more information.



Debunking *Mitoura millerorum*: The Untold Saga

Richard Holland

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In June, 1986, Bob Robbins of the USNM came to New Mexico for a collecting expedition to the south-central part of the state (near Weed, NM), with the intent of seeing whether *Mitoura millerorum* ever breeds true in the U.S. The possible option was that the specimen cited and illustrated in a discussion of the status of *millerorum* in the U.S. (K. Johnson, *J. Lepid. Soc.* 39(2): 119-124) was an aberrant *Mitoura spinetorum*. On this expedition, Bob was accompanied by Steve Cary of Santa Fe, and by myself. At the suggestion of several fellow lepidopterists, I have decided to write out the bizarre way this expedition unfolded.

We first drove to La Luz, just outside Alamogordo, NM, on the west face of the Sacramento Mts., opposite the main part of the range from Weed. Here we visited with some of Bob's family. The next morning, we drove about half way up the west side of the range to High Rolls, where we made a collecting stop in a swale just off the road. I did not know it at the time, but this stop provided me the opportunity to enjoy an attack of chiggers, one of only two such attacks I have experienced in 35 years of New Mexico field work. We next proceeded up the West Side Forrest Service Road to Alamo Canyon. Of all the butterfly species in New Mexico, *Anaea andria* is probably the most wary and difficult to net. While Bob and Steve were looking for *Mitoura*, I happened to see an unfortunate *andria* perch on a leaf above my head in such an orientation that I could see its shadow through the leaf, but it could not see me.

We next drove over the crest of the Sacramentos, and were heading down a dirt road on the east slope, near Weed,

with Bob and Steve in the lead vehicle and me in pursuit. As we flew past a patch of thistles, I thought I saw some dark silhouettes of about *Mitoura* size perching and nectaring. By the time Bob and Steve realized I was no longer following them, I had 25 *spinetorum*, out of an eventual 128 we took at the site. This sample, the second largest I ever encountered anywhere, provided was more than adequate material to establish statistically the fact that only one in nine individuals was of the *millerorum* phenotype, and that this phenotype graded continuously into typical *spinetorum* (R. Robbins, *J. Lepid. Soc.* 44(2): 63-76).

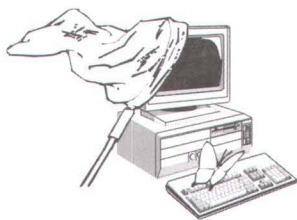
Having accomplished our primary objective in record time, the three of us then proceeded to the Guadalupe Mts. near Carlsbad, NM, where things got really exciting. First of all, Bob and Steve decided to camp at Dog Canyon in the Guadalupe Mts. National Park, while I elected to camp outside the Park at Dark Canyon Lookout and run my light trap. In the early dawn, a storm came up, and I awoke to see a funnel cloud bearing down on me from the direction of Sitting Bull Falls! Eventually the show ended without the funnel's actually touching ground, and I papered the night's catch and started driving along an extremely rough dirt track to the edge of the mesa overlooking Dark Canyon. After about two miles, I became aware that my Toyota Land Cruiser was rattling even more than could be attributed to the horrendous nature of the "road". I got out, and discovered that the main leaf of my right front spring had broken in front of the wheel. To this day, I do not understand what kept the front axle from pivoting about the transfer case and

coming off, wheels and all. There was absolutely nothing holding the right front wheel in place from the front! The rest of the expedition was performed at a much slower pace.

I next drove off the mesa, and down to the main road from Carlsbad to the Guadalupe Mts. N.P. Just east of the park, there is a hill with a road leading up to some radio towers. In the past, I had had good luck finding unusual things like *Thessalia chinatiensis*, "*Amblyscirtes*" *simius*, and *Polites (Yvretta) carus* hilltopping at the towers. Just as I unhooked the gate leading to the towers, there was a deafening crash, and the next thing I knew, I was flat on my back a good ten feet from the gate. Lightning had struck the fence about 50 yards away!

The following night, Steve, Bob, and I moteled it in Carlsbad, NM, and got started back on the road around 6 AM. We stopped at a Stuckey's/Texaco establishment to get gas and supplies. As I was tanking up, a girl of about 20, tough looking in a sort of attractive way, approached me. I did not know that Bob, Steve, and all the Stuckey's personnel were watching with amusement to see what I would do, nor was I aware that the girl's male partner was parked in a car on the edge of the tarmac. The girl got right to the point, and asked if I would like to buy a little "*****". When I declined, she asked what I was doing that I was "too busy for a little fun." When I explained that I was collecting butterflies, she asked, "What kind of a man is more interested in butterflies than *****?" (In Mexican Spanish, butterfly [*mariposa*] is slang for *****, and she may have thought I was being coy.) She was prob-

continued on page 33...



Out of the Net...

by Jim Taylor, 1_IRON@MSN.COM

Please note that Bill Gates has changed my e-mail address again. I don't know why; perhaps because he can...

Entomology, California Academy of Sciences

[HTTP://WWW.CALACADEMY.ORG/RESEARCH/ENTOMOLOGY/WEBSITE1/](http://www.calacademy.org/research/entomology/website1/)

This webpage belongs to the Department of Entomology of the California Academy of Sciences. From here you can go to the General Collection. (You can also go to the Primary Types Collection, but there is nothing there yet.) The collection includes all arthropods (except Crustaceans), not just Lepidoptera.

Each Order in the General Collection is clickable, and each successive page so invoked provides a listing of the next level down. For example, click "General Collection" to see a list of all the Orders, click an Order for a listing of Families in that Order, etc.

Bill's Lepidoptera Photos

[HTTP://WWW.MED.VIRGINIA.EDU/~WTH2M/MENU.HTML](http://www.med.virginia.edu/~wth2m/menu.html)

"Bill's Lepidoptera Photos" are pictures taken by William Hark in 1996 and 1997. The man knows how to use a camera, and he includes on the webpage camera and film details. Most of the photos were taken in Virginia, but others were snapped in Florida, Mexico, Costa Rica and the Day Butterfly Center near Pine Mountain, Georgia.

I didn't count, but there are hundreds of pictures here. Best of all, since I am moth oriented, Bill includes a goodly variety of moths and caterpillars of all sorts. A good site.

Cecropia Moths

[HTTP://WWW.GEOCITIES.COM/RAINFOREST/5479/](http://www.geocities.com/RainForest/5479/)

Here is a good write-up of the life cycle of the Cecropia Moth, the largest Moth in MY universe, at any rate, and some good pictures of the critter. When I was a kid in Kentucky during the Earth's coal-forming period I found one fall day a cocoon fastened firmly to the side of a wooden fence. The following spring I had a Cecropia 6-1/2 inches from wing-tip to wing-tip. Most authorities list 6 inches as the topside of the range, but I distinctly remember during the Carboniferous we had dragonflies a foot or so across and cockroaches big enough to attack small cars. They all had six wings, too.

Saturniid Moths

[HTTP://WWW.UKY.EDU/AGRICULTURE/ENTOMOLOGY/ENTFACTS/MISC/EF008.HTM](http://www.uky.edu/agriculture/entomology/entfacts/misc/ef008.htm)

And while we are on big moths, you might try "Saturniid Moths" from the University of Kentucky. Here is a description of most of the giant silkworms, what they eat, how to control them, etc. No pictures, but the text is in English and parses. By the way, this author gives the Cecropia a range of 5-7 inches. Maybe Kentucky moths just run a size larger.

Pheromone Index

[HTTP://WWW.NYSAES.CORNELL.EDU/FST/FACULTY/ACREE/PHERONET/PHEROLIST.HTML](http://www.nysaes.cornell.edu/fst/faculty/acree/pheronet/pherolist.html)

This is a neat site. It is an index of pheromones, but it is accessible by Family, Genera, Species, common names, and compounds. Within each Family the Genera are listed alphabetically, as are species under each Genus. I don't have an interest in mixing any of the recipes (or the talent to do so), but accompany-

ing many of the more common species are pictures usable for ID purposes. Clue: if there is a picture symbol beside the name, click on it. Read HELP to navigate.

Paul Sammut's Homepage

[HTTP://WWW.GEOCITIES.COM/CAPECANAVERAL/1153/](http://www.geocities.com/CapeCanaveral/1153/)

This is the Homepage of Paul Sammut and covers the butterflies of the Maltese Islands just south of Sicily. There is a description of Malta, a checklist of the butterflies of Malta (with pictures of two families: Papilionidae and Pieiridae), and a "personal" homepage reference. At the personal page I learned that Paul is a member of this Society (Hi, Paul!).

There are six other clickable sites run by a son and five friends. Some of these are under construction, and none is devoted exclusively to Lepidoptera. The first friend has the same last name as Paul, and I suppose he is an uncle. His interest is physics. The second friend's site is devoted to Mineralogy, the third to Biology and First Aid, the fourth to an Entomology book dealer, and the last to football in Malta, with all the news of how Malta fared against the Faroe Islands team. (I think football there is played wearing boxer shorts and with a ball without points.) A diverse site.

Lymantriidae Home Page

[HTTP://WWW.SFU.CA/~DGHOLDEN/LYMANTR.HTM](http://www.sfu.ca/~dgholden/lymantr.htm)

This is the Lymantriidae Home Page, which is maintained by Dave Holden, a Canadian. There are eleven places to go from the home page with "New" first, but the second, "Taxonomy & Natural History" the most interesting. Here is an alphabetic list of Genera - not yet complete, but with 72 entries. A click on one

of these gives a species list, with most species including a geographical range and a list of food plants. Some include a picture.

There is a listing of collections and a listing of collectors. There are announcements, pleas for help, and offers of exchange. An extensive bibliography on the Family is included, along with a list of Lymantriid and Lepidoptera web sites. Dave also runs a mailing list you can sign up for here. A friendly place to visit.

Hong Kong Moths

[HTTP://WEB.HKU.HK/~KENDRICK/HKMOTH.HTM](http://WEB.HKU.HK/~KENDRICK/HKMOTH.HTM)

Finally, another Home Page similar to the above but geographically oriented. These are the Hong Kong moths, a Ph.D. research project by Roger Kendrick. A "What's New?" section contains a chronological list of all revisions to the site since its beginning in April, 1997. The Main Page gives objectives and methods of the study, and recording sites are to be detailed on a page still under construction.

I am a sucker for good pictures, however, so I think the Hong Kong Moth Photos are the best part of the visit. A listing of the Families to be included is on this page, and a click on one in heavy type with an underscore will bring a picture of a representative of the Family. And don't miss the "Facts and Figures" section.

Editor's Note: Don't forget to check out the Home Page of The Lepidopterists' Society at WWW.FURMAN.EDU/~SNYDER/LEP/LEP.HTML (maintained by John Snyder, one of the Society's many unsung heros) and the new Home Page for the News of the Lepidopterists' Society at WWW.ESB.UTEXAS.EDU/PHILJS/NEWS/NEWS.HTML (maintained by yours truly, one of the Society's many unwashed zeros)...

These pages contain a wealth of information about your society and exist for the use of members, as well as to provide links to sites of interest and more... The News pages also contain forms to let you submit Letters to the Editor and Members Advertisements. What could be easier?

Satinleaf, *Chrysophyllum oliviforme*, a New Larval Hostplant Record for the Ello Sphinx, *Erinnyis ello*

Roger L. Hammer

17360 Avocado Drive, Homestead FL 33030

The Ello Sphinx, *Erinnyis ello*, is a tropical moth with its northern breeding range extending into Florida and southern Texas. Strays have been reported as far north as New York and Michigan from August to October (Covell, 1984). Like many moths, little is known about its life history, although larvae have been reared on Guava, *Psidium guajava* (Myrtaceae), Poinsettia, *Euphorbia pulcherrima* (Euphorbiaceae), and other members of the Euphorbiaceae, or Spurge Family. Florida native larval host plant records include members of the Sapodilla Family (Sapotaceae), most notably Saffron-Plum, *Bumelia celastrina*, and Willow Busic, *Sideroxylon [Bumelia/Dipholis] salicifolia*.

On August 20, 1997, the author received a call from Becky Centoducati, a Miami resident who had discovered caterpillars feeding on the leaves of a cultivated Satinleaf, *Chrysophyllum oliviforme* (Sapotaceae). Satinleaf is a tropical native tree found in the hardwood hammocks throughout southern Florida, including the Florida Keys, and also cultivated by native plant enthusiasts. The description of the larvae fit that of a sphingid, and two larvae were collected and reared to adults. These turned out to be *Erinnyis ello*. A literature search by the author and a phone call to Jim Tuttle, a noted moth expert residing in Michigan, indicated that this is a new larval host plant record.

The Ello Sphinx is rather non-descript when resting. The wings conceal the body and the FW is uniformly gray with indiscernible hints of darker gray. The HW is rusty orange bordered with black, and the gray abdomen is banded with black bars. Wingspan is between 7.7 and 8.5 cm. This sphinx rests on tree bark and buildings during the day, and has been observed by the author nectaring at dusk on the spicy-fragrant white flowers of Lady-of-the-Night, *Brunfelsia nitida*, a member of the Nightshade Family (Solanaceae). They also have been observed by the author nectaring on the white flowers of a native epiphytic orchid, *Epidendrum nocturnum*, which emit a pungent nocturnal odor reminiscent of Vick's Vapo-Rub.

Lepidopterists interested in the Ello Sphinx should inspect wild and cultivated Satinleaf trees in southern Florida to document how commonly it utilizes this tree as larval food. Satinleaf can be easily identified by its glossy, dark green upper leaf surface and the dense, bronze-colored pubescence that covers the lower leaf surface. Wild trees can be observed along the elevated boardwalk through Mahogany Hammock in Everglades National Park as well as in other tropical hardwood forests of southern Florida.

Literature cited

Covell, Charles V., Jr. 1984. A Field Guide to the Moths of Eastern North America. Houghton Mifflin Company, Boston, MA.

Members...cont'd from page 21

Williams, Matthew T.: 531 Knickerbocker Place #1, Kansas City, MO 64111-2852.

Zavortink, Thomas J.: Dept. of Biology, University of San Francisco, San Francisco, CA 94117-1080.

Membership Update...

Julian Donahue

This update includes all changes received by 28 February 1998.

"Lost" Members

(publications returned: "temporarily away," "moved," "left no address," or "addressee unknown"):

Christian Adams (Life Member: Mabank, Texas);

Ron Bottner (Austin, Texas);

David Rice (Itta Bena, Mississippi);

Soren Sorensen (St. Paul, Minnesota).

Corrections and Minor Revisions to the '96 Membership Directory

(make appropriate changes in *Alphabetical List of Members*)

Ellis, George: change street number to "1791"

Himmelman, John: change street address to: "17 Hunter's Ridge Road"

Kohler, Steve: new ZIP Code is: "59804-3199"

Loechelt, Hans: "new" name is "Hans Loechelt-Yoshioka"

Medina, Mirian: "new" name is: "Mirian Medina Hay-Roe"

O'connor, Marcie: correct street name from "Hott" to "Hoyt"

Owen, Graham J.: change street address to "12 Park Avenue"

Romack, Howard, Jr.: add street number "28 Irish Lane"

Rutowski, Ronald L.: change Department from "Zoology" to "Biology"

Weyland, Carol: "new" name is "Carol Weyland-Sabourin"

New & Reinstated Members

Members who have joined/renewed/ been found/or rescinded their request to be omitted since publication of the 1996 membership directory (NOT included in the 1996 Membership Directory; all in U.S.A. unless noted otherwise)

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The Marketplace

IMPORTANT NOTICE TO ADVERTISERS: If the number following your advertisement is "394" then you must renew your advertisement before the next issue! Remember that all revisions are required in writing.

Books For Sale

Updated List of the **Butterflies and Skippers of Florida** (Lepidoptera: Papilionoidea and Hesperioidea), recently published in **Holarctic Lepidoptera** 4(2): 39-50. Treats 193 species. English common names are provided. Type localities are given for species and subspecies described from Florida material. Also included are synonymous and infrasubspecific taxa that possess Florida type localities. The status (resident, naturalized resident, immigrant, accidental introduction, stray or status unknown) and general geographic range of each species and subspecies in Florida are indicated. Endemic, as well as rare and imperiled taxa are recognized. Erroneous records are noted in an Appendix. Copies can be obtained by sending \$.78 postage to John V. Calhoun, 977 Wicks Dr., Palm Harbor, FL 34684-4656. 401

New & Forthcoming Lepidoptera Books: **The Butterflies of Greece** by L. N. Pamperis. 574 pages. 1,174 colour photos. \$120.00. **The Butterflies of Papua New Guinea: Their Systematics & Biology** by M. Parsons. \$285.00. **The Butterflies of Ceylon** by Bernard DAbrrera. \$160.00. **Guide to the Butterflies of Russia & Adjacent Territories** by V. Tuzov & L. V. Kabak. Vol.1: Hesperiiidae, Papilionidae, Pieridae, Satyridae. \$154.00. **The Life Histories of Asian Butterflies Vol. 1.** (Papilionidae, Pieridae, Danaidae, Satyridae, Amathusiidae, Nymphalidae, Lycaenidae and Hesperidae). \$344.00. A new butterfly video: **Wonders of the East** by John Banks. Price include mailing. For full details of these and over 500 more Lepidoptera books contact: BUGBOOKS@CLASSEY.DEMON.CO.UK, +44 1367 244700, Fax: +44 1367 244800, E.W.Classey Ltd. Oxford

House, Marlborough Street, Faringdon, Oxfordshire SN7 7JP England. 401

Journal of the Lepidopterists' Society, Volume 14 through 31, with supplements to volumes 24 & 25, with all but three of the Newsletters. All in good condition. Offers (posted by surface mail) to R. T. Shannon, 1/24 Lauderdale Road, Birkdale, Auckland 1310, New Zealand. 401

Now available: **Monograph to the North American Heliothentinae** by D.F. Hardwick. A comprehensive treatise on species of *Schinia*, *Heliothis* and related genera. Adults and over half of the larvae of the 147 species are illustrated in color. Species discussions include descriptions of immatures, food plants, distributions and periods of flight. The 7"x10" book has 279 pages including 25 full-page colored plates. A check list to species and a food-plant list

The aim of the Marketplace in the **News of the Lepidopterists' Society** is to be consistent with the goals of the Society: "to promote the science of lepidopterology...to facilitate the exchange of specimens and ideas by both the professional worker and the amateur in the field,..." Therefore, the Editor will print notices which are deemed to meet the above criteria, *without quoting prices*, except for those of publications or lists.

No mention may be made in any notice in the **News** of any species on any federal threatened or endangered species list. For species listed under CITES, advertisers must provide a copy of the export permit from the country of origin to buyers. **Buyers must beware and be aware.** Advertisements for credit, debit, or charge cards or similar financial instruments or accounts, insurance policies and those for travel or travel arrangements cannot be accepted be-

cause they jeopardize our nonprofit status.

Only members in good standing may place ads. All advertisements are accepted, in writing, for two (2) issues unless a single issue is specifically requested and must be renewed before the deadline of the following issue to remain in place. All ads contain a code in the lower right corner (eg. 386, 391) which denote the volume and number of the **News** in which the ad. first appeared.

Advertisements must be under 100 words in length, or **they will be returned for editing.** Ads for Lepidoptera or plants must include full latin binomials for all taxa listed in your advertisement. **Send all advertisements to the Editor of the News.**

The Lepidopterists' Society and the Editor take no responsibility whatsoever for the integrity and legality of any advertiser or advertisement. Disputes arising from such notices must be re-

solved by the parties involved, outside of the structure of The Lepidopterists' Society. Aggrieved members may request information from the Secretary regarding steps which they may take in the event of alleged unsatisfactory business transactions. A member may be expelled from The Lepidopterists' Society, given adequate indication of dishonest activity.

Buyers, sellers, and traders are advised to contact your state department of agriculture and/or PPQAPHIS, Hyatsville, Maryland, regarding US Department of Agriculture or other permits required for transport of live insects or plants. Buyers are responsible for being aware that many countries have laws restricting the possession, collection, import, and export of some insect and plant species. Plant Traders: Check with USDA and local agencies for permits to transport plants. Shipping of agricultural weeds across borders is often restricted.

is included. Eight new species are described, 23 lectotypes are designated, and 40 nominal species reduced to synonymy. Price Canadian: perfect binding, \$70+\$10 S&H; hard covered, cloth-bound, \$95+\$10. Price U.S. \$ soft covered, \$50 + \$10; hard covered, \$70+\$10. Available from Ms. Julia Hardwick, 535 Highland Avenue, Ottawa, Canada, K2A 2J5. Cheques payable to D.F. Hardwick. ³⁹⁴

Apollo Books is Europe's leading mail order bookseller specializing in entomology supplying museums and university libraries as well as amateur and professional entomologists world wide. We have probably the world's largest selection of new books on insects and now and then we also produce a list of second hand and antiquarian books and journals. We also publish high quality book series such as *Noctuidae europaeae* and *Microlepidoptera of Europe*. Ask for free prospectuses as well as a copy of our 1997-98 catalogue. Easy ordering, easy payment. Apollo Books, Kirkeby Sand 19, DK-5771 Stenstrup, Denmark, + 45 62 26 37 37 Fax: + 45 62 26 37 80. ³⁹⁴

New issues of **Papilio (New Series)** for sale: No. 8, *Speyeria hesperus* and *S. atlantis* are distinct species, J. A. Scott, N. G. Kondla and S. M. Spomer, 26 pp., \$3.00; No. 9, A New *Celastrina* for the eastern slope of Colorado, J. A. Scott & D. M. Wright, 18 pp., \$2.00; No. 10, *Phyciodes (Phyciodes)*: new discoveries, new subspecies and convergence, J. A. Scott, 44 pp. \$4.00; No. 11, New western North American butterflies, J. A. Scott, 10 pp., \$1.00; Nos. 8-11, \$9.00; Nos. 1-11, \$29.00. All postpaid U.S. James A. Scott, 60 Estes St., Lakewood, CO 80226-1254. ³⁹⁴

Atlas of New Jersey Butterflies by David C. Iftner and David M. Wright. Twenty eight page Atlas consists of a checklist and plotted county maps for all 151 species of skippers and butterflies that have been recorded for New Jersey. Copies can be ordered for \$5 (postage paid) from Dr. David C. Iftner, 8 Alpine Trail, Sparta NJ 07871. ³⁹⁴

Livestock

Cocoons & papered specimens of *Actias luna* for sale. Send a self-addressed stamped envelope to Ronald A. Royer, RD 4 Box 2295, Lebanon, PA 17042-9433, (717) 867-1021. ⁴⁰¹

For sale or trade: ova of *Catocala obscura*, *C. cara*, *C. vidua*, *C. judith*, *C. residua*, *C. cerogama*, *C. meskei*, *C. resecta*, *C. amica*, *C. ilia*, *C. mira*, *C. blandula*, *C. minuta*, *C. ultronia*, *C. piatrix*, and *C. robinsoni*. Also, cocoons of *A. luna*. SASE please to James Mouw, 245 Sarah Avenue, Iowa Falls, Ia. 50126 ⁴⁰¹

Livestock: Saturniidae, Sphingidae, and Papilionidae of north eastern North America available in summer and fall of 1998. For a complete listing visit WWW3.PE1.SYMPATICO.CA/OEHLKEW or in Canada send SASE, in U.S.A. send SAE (no stamp) and 50 cents to Bill Oehlke, Box 476, Montague, PE.I., Canada, C0A 1R0, OEHLKEW@MONTAGUEINT.EDU.PE.CA, 902-838-3455, Fax: 902-838-0866. ⁴⁰¹

Wanted to buy: ovae and or pupae of *Battus philenor*, *Heraclides cressphontes*, *H. anchisiades*, *Papilio indra*, *Papilio palamedes*, *Agraulis vanillae*, *Heliconius erato* and *H. charitonius*. I would also like to buy plants or seeds of *Passiflora lutea* and/or *P. suberosa* and *Aristolochia tagala* or similar species. Please contact David E. Stewart, P.O. Box 1206, Laytonville CA 95454, 707-984-8368, Fax: 707-984-7330, TROIDES@SABER.NET ⁴⁰¹

For sale or trade: *A. polyphemus*, *C. promethia* and *Actias luna*. Bill Kenney, 671 RR #1, Dixmont ME 04932, 207-257-2047. ⁴⁰¹

I have cocoons of the following Saturnidae moths for sale: *A. polyphemus*, *A. luna* and *C. promethia*. My address is Gardiner E. Gregory, HCR 79 Box 259, Castine ME 04421-9706, 207-326-4639. ⁴⁰¹

Wanted: Eggs of second generation of *Antheraea polyphmus* and *Callosamia promethia*. I will purchase subject to price and availability. Contact: T. Ritchie Peery, 1304 Ware Road, Richmond, VA 23229-5941. ⁴⁰¹

Wanted: Suppliers of Saturniidae livestock. Ova and/or cocoons are urgently sought especially from South Africa, South and Central America and Asia. Good prices paid. Please contact Mark Pickup, 2 Westburg Court, Westbury Street, Derby, England DE22 3PQ, 0044-1332-297928. ⁴⁰¹

For sale: pupae of *C.regalis* and cocoons of *Attacus atlas*. For prices and info. contact Mike Benton at 6102 NW111th Pl., Alachua, FL 32615, (904)418-0472, SAM0128@JUNO.COM ³⁹⁴

I'm interested in trading, buying or selling saturniidae or sphingidae livestock. I'm also interested in exchanging information or articles on rearing, collecting, field guide, butterfly gardening, etc.). Contact Patrick Marceau, 1470 St-Oliver, Ancienne-Lorette, Québec G2E 2N9, Canada, PMARCEAU@CMQ.QC.CA ³⁹⁴

Wild collected cocoons of *Hyalophora gloveri* for sale. Send a self-addressed envelope to: Bruce Duncan, 10132 Buttermcup Drive, Sandy, Utah 84092 ³⁹⁴

H. Cecropia for sale. Call Nathan Barry at 716-682-4285 or write at 14259 Oak Orchard on the Lake Waterport, New York 14571, SAAQ18A@PRODIGY.COM ³⁹⁴

Wanted: Specimens or eggs of any Saturniidae species, foreign or U.S. Especially: *Citheronia* species, *Argema mittrei*, *Argema mimosae*, *Coscinocera hercules*, *Antheraea* species, *Copiopteryx semiramis*, *Eupackardia calleta*, *Auto-meris* species, *Actias* spp., *Eochroa tri-meni*, *Arsenura* spp., etc. I am especially interested in South American, African and Australian species. I'm also interested in Epicopeidae, Uraniidae and Papilionidae. Will exchange with ova, specimens or pupas of *Actias luna*, *Antheraea polyphemus*, *Hyalophora cecropia* and many more. Send your offerings to Randy Lyttle, 901 Cayuga Street, Hannibal, NY 13074 U.S.A. ³⁹⁴

Specimens

For ale/exchange: China *Acoptolabrus*, *Coptolabrus* (rare), Lucanidae (rare), *Mecynorhina oberthuri*, *Argyroprohpegges kolbei*, *Cheirotonos szetshuanus* 71mm,

C. jambar, *Xixuthrus heros* 130mm, etc. Color pictures/list ¥1000 (Japanese yen) or \$8 US cash. Send me your list for exchange. Yoshiaki Furumi, 97-71 Komizo, Iwatsuki-Shi, Saitama-Ken, 339-0003, Japan. 401

For Sale: Lepidoptera from Russia at minimal prices. Large stocks, excellent quality, super-rarities (*Parnassius*, *Colias*, *Oeneis*, *Erebia*, moths, etc.). Guaranteed delivery to any place in the world. Fulfilling of firm orders possible. Mr. Sergei Gundorov, Plant Protection Department, Agricultural Institute, Teatralnaia Square, Saratov, 410710, Russia Fax 8452-264963 394

Free to a good home: Several hundred, mostly western U.S. butterflies, all papered and with full data. "Home" will be chosen by a random drawing 3-4 weeks after ad comes out. All specimens show natural damage or wear. They may be used for dissections, practice mountings, jewelry, art, study, or for display for any collector to whom condition is not a prime concern. No calls please. Dr. Bruce O'Hara, 24211 Cross Street, Newhall, Calif. 91321 394

Wanted: Contacts for purchase, sale or exchange. I am seeking collectors and dealers world wide, who interested in a large selection of butterflies from former USSR, especially *Parnassius* and *Colias*. Request a free price lists in US\$. I am interested in purchase or exchange large quantities of all attractive and colorful butterfly, moth, beetles and other insects for decorative collections and art works. Dr. Ilya Osipov, Novogireevskaja str. 53-8, Moscow, 111394, RUSSIA. Tel./FAX: (7-095) - 301-25-14, OSIPOV@GLAS.APC.ORG 394

Wanted to buy: Oriental Lycaenidae (Polyommata), especially of the genera *Jamides* and *Nacaduba*. Will consider small or large quantities of these. Full collecting data are mandatory but determination is not needed. Stefan Schroeder, Auf dem Rosenhügel 15, D-50997 Koeln, Germany; STEFAN.SCHROEDER@UNI-KOELN.DE 394

Equipment

Wanted: Interior steel 21 drawer insect cabinet, Model P500; for Cornell drawers (23"W x 19"D x 72"H); color: beige. Contact: John W. Peacock, 185 Benzler Lust Road, Marion, OH 43302-8369, 740-389-4886. 401

For Sale: Light traps, 12 volt DC or 110 volt AC with 15 watt or 8 watt black lights. The traps are portable and easy to use. Rain drains and beetle screens protect specimens from damage. Free brochure and price list available. Also: Battery charging system for 12 volt batteries (car, yard tractor, marine & deep cycle) for use in cars, RV and pickup trucks while traveling. System plugs into cigarette lighter and will safely charge up to four 12 volt batteries in three hours. Great for the traveling lepidopterists with light traps. Also: Custom made light fixtures for permanent and/or stationary light traps. Stainless steel design; Mercury Vapor, Sun Lamp, Black Light and Black Light Dark; together or any combination. Electrical control with photo-cells and/or timers. Includes plans for enclosures with rain drains and sorting trays. For more information, contact: Leroy C. Koehn, 207 Quail Trail, Greenwood MS 38930-7315, 601-455-5498. 401

For Sale: 12 drawer walnut covered Cornell cabinet (Bioquip Number 2512FWL) and 12 Cornell drawers (Bioquip Number 1012AF). SASE for details. Russell Rahn, 3205 W. Rochelle Road, Irving, Texas 75062-4127. 394

Art

Wanted: As part of a research project into insects in poetry, I would like to hear from anyone who knows of poems by any poet, classical or contemporary, published or unpublished, in which an insect or insects of and Order are featured, specifically or generally. All correspondence acknowledged. John Tennent, 1 Middlewood Close, Fylingthorpe, Whitby, N. Yorkshire YO22 4UD, England. 401

Information Wanted

Correspondence wanted: with individuals who have collected butterflies and skippers from New Jersey or have specimens in their collections from New Jersey. I am particularly interested in specimen data, larval host plant records, nectar resources, observations, etc. for an ongoing study of New Jersey's butterflies and skippers. Contact Dr. David C. Iftner, 8 Alpine Trail, Sparta NJ 07871. 394

Audio/Visual

A 3.5" personalized diskette of website WWW3.PEL.SYMPATICO.CA/OEHLKEW is available for PC's. The diskette can be run without logging onto the internet, but a browser is needed. The diskette offers the opportunity to enter your own collecting, rearing, etc., notes on attractively pictured web pages in html format. The files may also be copied to your hard drive to help you build a virtually unlimited library resource. Free technical support is available. \$8.00 U.S. includes postage and handling. Bill Oehlke, Box 476, Montague, PE.I., Canada, COA 1R0 email: OEHLKEW@MONTAGUEINT.EDU.PE.CA, 902-838-3455, Fax: 902-838-0866. 401

New Video, Spring 1998: **Common Butterflies of the Southeast**. Spectacular digital video footage of the region's 55 common species. Field identification, butterfly habitats, and basic resources provide an excellent introduction to butterflying. 30 min. VHS. Also available: **Common Butterflies of the Northeast**. 30 min. VHS, **Skippers of the Northeast**. 48 min. VHS, **Common Dragonflies of the Northeast**. 30 min. VHS. Orders: 1-800-343-5540. Each video is \$24.95. S&H is \$5 for the first and \$2 for each additional unit. Credit cards accepted or mail check to Natural History Services, 22-D Hollywood Ave., Ho-Ho-Kus, NJ 07423. Details: WWW.CONCORD.ORG/~DICK/ 401

CD-ROM: Butterflies of North America. Lepidoptery hits the computer age with the publication of this CD-ROM by James A. Scott. Everything in the 600 page Stanford Univ. Press book plus

about 1000 new color photos of eggs, larvae, pupae and adults (about 5000 photos overall). Features include a new section on butterfly gardening, videos, instantaneous search capabilities for words or topics, species photos now grouped together, print photos and text, online glossary, background music. Windows only. \$49.95 + \$5 shipping/handling. Order from Hopkins Technology, 421 Hazel Lane, Hopkins, Minn. 55343-7116, 1-800-397-9211, www.hoptechno.com.

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Help Needed

Wanted: Seeds of the following plants: Wall Pellitory – *Parietaria officinalis*, Stinging Nettle – *Urtica dioica*, Water Soldier or Crab Claws – *Stratiotes aloides*. Also would like 6 to 8 small cuttings of Gray Sallow – *Salix atrocinerea*. Contact: Randy Robinette, 7302 Midland Trail Rd, Ashland KY 41102-9294.

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The Philatelic Lepidopterists' Association was founded in 1992 to provide a means of communication among those interested in butterfly and moth stamp collecting. Dues of \$10 per year (\$12 if outside the USA) pay for first class mailing of the 4 quarterly newsletters. New issues of worldwide butterfly and moth stamps are the main feature of the "Philatelic Aurelian," edited by Alan Hanks. For information or membership, contact Charles V. Covell Jr., Dept. of Biology, University of Louisville, Louisville, KY 40292-0001 U.S.A., CVCOVE01@HOMER.LOUISVILLE.EDU

Help Offered

Wish to collect legally in Costa Rica? Whether you decide to visit Costa Rica for leisure or work we can help you obtain your Official Collecting Permit for the time of your stay. You would be allowed to collect in all the country (except National Parks). Costa Rica rain forests are unique in what you can get species coming from the north (Mexico) or the south (South America). Contact Miguel E. Chumpitasi, P.O. Box 1105-2150 Moravia, San Jose, Costa Rica or phone/fax (506) 235-5160.

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Announcement:

Fabriques' Supplement no. 7: List of the Lepidoptera of Québec and Labrador

We are happy to announce the publication of Fabriques' Supplement no. 7, "Liste des Lépidoptères du Québec et du Labrador" (List of the Lepidoptera of Québec and Labrador).

Authored by Louis Handfield, with the collaboration of Jean-François Landry, Bernard Landry and J. Donald Lafontaine, this checklist records 2576 species representing 954 genera, 64 families and 29 superfamilies; an additional 278 species found in adjacent territories and whose occurrence in Québec is possible are also mentioned. All species recorded have been validated by examination of specimens in collections. This is the first comprehensive list of Lepidoptera of Québec since 1912. No new nomenclatural changes are proposed. However, the nomenclature has been thoroughly updated; many names, reflecting either recently introduced species or recent nomenclatural changes published in Europe, appear for the first time in North American literature. The list is accompanied by synoptic tables, 259 nomenclatural and faunistic notes, an annotated list of 52 species erroneously recorded from Québec, references to taxonomic works useful for species identification, comments on the adopted classification of higher taxa, an exhaustive list of references consulted, and a complete index of all taxonomic names. The text is in French, but there is an English abstract.

Fabriques' Supplement 7 is available from the "Association des entomologistes amateurs du Québec" (address below) at CDN\$15.00 for Canadian

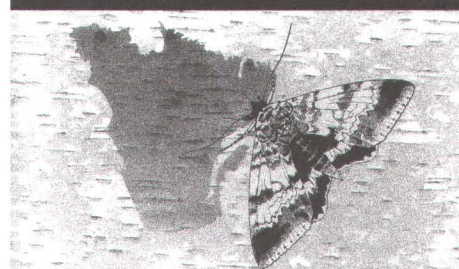
members of AEAQ, the "Société d'entomologie du Québec", and the Entomological Society of Canada. The cost for non-members of these three organizations will be CDN\$ 18.00. Additional mail and handling fees are CDN\$ 3.50 for Canadian residents, CDN\$ 5.50 for residents of the U.S.A. and CDN\$ 6.00 (surface mail) or CDN\$ 12.50 (air mail) for residents of other countries. Only cheques and money-orders in Canadian dollars will be accepted. Payment should be made to the order of A.E.A.Q.

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Liste des Lépidoptères du Québec et du Labrador

Louis Handfield

avec la collaboration de
Jean-François Landry, Bernard Landry et J. Donald Lafontaine



Association des entomologistes amateurs du Québec

Fabriques
Supplément 7
1997

"If you plant it, they will come"

Claire Hagen Dole

(See page 17 for more...)

New Observations of Three Fritillaries (*Speyeria* sp.; Argynninae) in the Southern Sierra

Ken Davenport

6601 Eucalyptus Dr., #325, Bakersfield, CA. 93306

In recent years it has become apparent that: 1) *Speyeria egleis egleis* (Behr) has expanded its range southward into the Greenhorn Mountains and now occurs even in southern California south of the Tulare/Kern County line; 2) the range of *S. hydaspe viridicornis* (J. A. Comstock) is much larger than was once thought; and 3) a "blend zone" between mostly unsilvered *S. callippe laurina* (Wright) and the totally unsilvered subspecies *inornata* (W. H. Edwards) probably does not exist in the Kern River drainage. A "blend zone" may occur northwest of the Greenhorn Mountains.

The Great Basin or Egleis Fritillary (*Speyeria e. egleis*)

When Emmel and Emmel published their 1973 book "The Butterflies of Southern California", it was not known that the range of this nominotypical Sierran subspecies reached southward into Kern County. Subsequent collecting has found it at the south end of the Kern Plateau east of Kernville (2 VIII 1985, pers. coll.) and on the summit of Owens Peak (collected there by Derham Giuliani on 16 VII 1986 fide John F. Emmel, pers. comm.). Heavy collecting at high elevations in the northern Greenhorns after 1973 and through the 1980's turned up only a single possible sight record from Baker Peak in 1981. The butterfly occurs commonly east of the range on Sherman Pass and on Bald Mountain in the Sierra/northern Kern Plateau. Emmel & Emmel (1973) had suggested that subspecies *tehachapina* (J. A. Comstock) might occur on the higher peaks in the southern Sierra including Owens Peak and the Greenhorns.

Heavily accumulated brush and dead trees made this poor butterfly and animal habitat since there was little plant growth in the understory of the forest, however, in 1990, a huge forest fire burned the heavily forested land east of the Greenhorn Crest from Baker Ridge south to Black Mountain. After the fire had consumed the brush and dead growth, good rainfall turned the region into meadows and open forest with plant growth not seen prior to the fire...including the violets utilized by fritillaries as larval hosts. After several years of absence from collecting the region I returned to check out Ray Stanford's "wild tale" of seeing a parnassian in the Greenhorns (which proved true by the way). This was in the summer of 1995, five years after the fire.

The first *egleis* collected in the Greenhorns, to my knowledge, were collected on Baker Lookout on 4 VII 1995. Later trips in July and August have since commonly turned up this butterfly at several localities including Tobias Peak, Poison Meadow, Frog Meadow and Sugarloaf Road from Portuguese Pass north. At times, it has been very abundant on roadside flowers. It crosses the Tulare/Kern County line in the Sunday Peak area where it was first collected along the trail to Sunday Peak and on the summit "hilltopping" (31 VII 1995). The southernmost sight record was from Black Mountain in 1996.

It would appear that *egleis* was either very rare or absent in the Greenhorns prior to the fire in 1990, but that it was able to colonize the region very successfully sometime before 1995. The forest fire appears to have created a changed habitat in which this butterfly thrives. It

will be interesting to monitor this *egleis* population in the years ahead as the forest grows back to see if *egleis* (see A on page 32) populations decline or disappear again...and to see if this fritillary will expand further south into the Shirley Meadows region.

The Greenhorn Fritillary (*Speyeria hydaspe viridicornis*)

At the time the Emmel's wrote (Emmel and Emmel 1973, pp. 30) it was believed that "the roads around Greenhorn Mountain Park and Shirley Meadows are the sole places (this species) has been taken." No one at that time knew of my records from Balch Park (26 VI 1972) since I did not know the Emmel's or of the Lepidopterists' Society prior to 1975. William H. Howe made some interesting comments in his 1975 book (pp. 239) on butterflies of North America: "individuals closely resembling *viridicornis* turn up in both Yosemite and Kings Canyon national parks where *viridicornis* blends with *hydaspe*. I have taken *viridicornis* in certain sections of Yosemite while in other areas within the park I have encountered typical *hydaspe*."

Since then my collections, in these regions and in Sequoia National Park (under permit from NPS), parallel Howe's observations. This butterfly is found in many places in the southern Sierra: Eshom Camp, Quaking Aspen, Camp Nelson and Camp Wishon are good Tulare County locations. It is also found in the northern Greenhorns with records from Black Mountain meadow and saddle, the lower slopes and meadows around Sunday Peak, Poison Meadow/Tobias Peak and Sugarloaf Road 2 miles

north of Portuguese Pass. Records extend from late May to early September. As Howe observed, some *hydaspe* populations in the region (i.e. Freeman Creek Grove) are not *viridicornis*!

The Macaria and Unsilvered Macaria Fritillary and a possible blend zone with Plain Fritillary (*Speyeria callippe* complex)

The Greenhorn Mountains population of this species has been variously treated as *macaria* with unsilvered individuals treated as a form or as a full subspecies *laurina*. Whichever view is best, several authors (e.g. Howe 1975) have stated the belief that *laurina* is a blend zone population between *macaria* to the south and *inornata* to the north. This is based on the assumption that mostly silvered *macaria* gradually blends into totally unsilvered *inornata* with *laurina* as intermediate. That view seems logical, reasonable, and believable but is not true in the Kern River drainage.

Contrary to what we would expect in a cline, the next *callippe* population to the north (common in the region around Johnsondale and Sherman Pass Road

with strays taken as far north as Freeman Creek) is 100% silvered (see B on page 32)! This population is similar to *macaria* but has a brighter orange-red coloration above than *macaria* found further south.

If there is a *laurina/inornata* blend zone then it must occur to the northwest. James R. Mori (pers. comm.) reports collecting males of *S. callippe* near *inornata* from Tulare County near Camp Nelson, east of Porterville. L. P. Grey (pers. comm.) reports "*macaria/inornata*" intergrades resembling "dark *laurina*, below" from Sequoia National Park. John. H. Masters (1979) listed *S. callippe inornata* as "not uncommon in June" from the Mineral King region. Specimens from these regions are reportedly silvered or partly silvered, once again raising questions about the validity of *laurina* as a "form" or a subspecies. Grey may have viewed "*laurina*" as a form of *macaria*. Finding silvered *callippe* in the Sequoia region does not fit in well with an *inornata/laurina* blend zone but might fit better with a *macaria/inornata* one. A true *laurina/inornata* blend zone may not exist.

Populations of *callippe* from west of Kings Canyon National Park in the Badger/Eshom region are clearly *inornata*. I have not seen Masters' specimens from the Mineral King region, they may be very close to *inornata*. Legal restrictions to collecting in the Mineral King region (it was not a National Park when Masters collected there but is now part of Sequoia National Park) and the scarcity of *callippe* north of the Greenhorns leave our further questions unanswered. But, as this article indicates, much remains to be learned about butterflies, even the common fritillaries of the southern Sierra!

Literature Cited:

- Emmel, T. C. and J. F. Emmel, 1973. The Butterflies of Southern California. Nat. Hist. Mus. of Los Angeles County, Sci. Ser. 26:1-148.
- Howe, W. H., Ed., 1975. The Butterflies of North America. Doubleday & Co., Inc. Garden City, New York. 633 pp.
- Masters, J. H., 1979. Mineral King Butterflies. Bio-publication Services, pp. 8. (presentation given to Pacific Slope Section, Lep. Soc., Davis CA, Aug. 1979)

Calendar & Upcoming Events

The **Third Biennial Members' Meeting of the North American Butterfly Association (NABA)** will be held in Golden, Colorado from the 11th - 14th of June 1998. For more info. write to Jan Chu, Chairperson, 964 Ravenwood Rd., Boulder, CO 80303, CHUFLY@JUNO.COM or call Josie Quick-Carleno, 303-316-8965.

The **Humboldt Field Research Institute** has announced their "Eagle Hill Field Seminar" series of advanced, professional and specialty natural history seminars and workshops on the coast of Maine for 1998. For more info. contact: Humboldt Field Research Institute, Dyer Bay Rd., P. O. Box 9, Steuben, ME 04680-0009, 207-546-2821, web site MAINE.MAINE.EDU/~EAGLHILL, or email HUMBOLDT@NEMAINE.COM

Paul Opler will be teaching 3 **Field Courses in Butterfly Biology and Behavior** this spring and summer. In Rocky Mountain National Park near Estes Park, Colorado, he will teach a one-day course on spring butterflies on May 16th (May 17th rain day). A 2-day course on butterflies and moths will be held July 18 - 19. Butterflies will be studied by netting, observation in small holding containers, and release. Contact the Rocky Mountain Nature Association, Estes Park, CO 80517 or call 970/586-0108 for registration information. On August 7th Paul will teach Natural History of Butterflies for the Teton Science School. Contact Claudia Eberspacher at P.O. Box 68, Kelly, Wyo. 83011 [307/733-4765] for registration information.

The **1999 Meeting of the Lepidopterists' Society** has been confirmed for August 4-8 at the Windermere Hotel and Convention Center in Sierra Vista, Arizona. Meeting organizers are Paul Opler and Michael Smith. We are seeking volunteers as field trip leaders and symposium organizers. Details about the meeting will be published in future issues of the News.

Our meetings from 2000 to 2004 have been tentatively set for South Carolina; Oregon State University, Corvallis; Mississippi State University; Albuquerque, New Mexico or Colorado State University; and U.S. Museum of Natural history, Washington, DC

Don't forget this year's meeting, July 30 - August 2, 1998 in Eureka, IL!

“Social” Egg-Laying in *Aglais cashmirensis*, the Indian Tortoiseshell

Andrei Sourakov

Department of Entomology & Nematology, University of Florida, Gainesville, FL 32611

The phenomenon of cluster oviposition has evolved independently in many different groups of butterflies. For a detailed account of this feature of butterfly biology interested persons are referred to Chew and Robbins (1984) in the symposium volume, *The Biology of Butterflies*, edited by Vane-Wright and Ackery.

Only in two groups of butterflies has “social” oviposition been noted, where more than one female contributes to an egg batch. In the neotropical genus *Heliconius*, such behavior has been recorded in *H. sara*, *H. doris*, and *H. xanthocles* Bates (Mallet and Jackson, 1980). In the Holarctic genus *Aglais*, congregations of several females on nettle leaves, laying heaps of up to a

thousand eggs, has been observed in English populations of the Small Tortoiseshell, *A. urticae* L. (Thomas and Lewington, 1991).

Recent observations on an Asian relative of *A. urticae*, *A. cashmirensis*, add this species to the list of “socially” ovipositing butterflies. During my 1997 expedition to western Nepal, I observed a female settling to lay eggs on the underside of a nettle leaf. As oviposition began, a second female came to the site and soon landed on the same leaf, meeting no hostility from the first female (see C on page 29). Both females then continued to lay eggs for at least 20 minutes, forming a single heap of green eggs (see D on page 29).

Acknowledgements

I thank George Beccaloni, Dick Vane-Wright and Allen Young for bringing important references to my attention and for comments on an earlier version of this note.

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Tagging as a Method of Monitoring the Fall Migration of the Monarch Butterfly

Gayle Steffy

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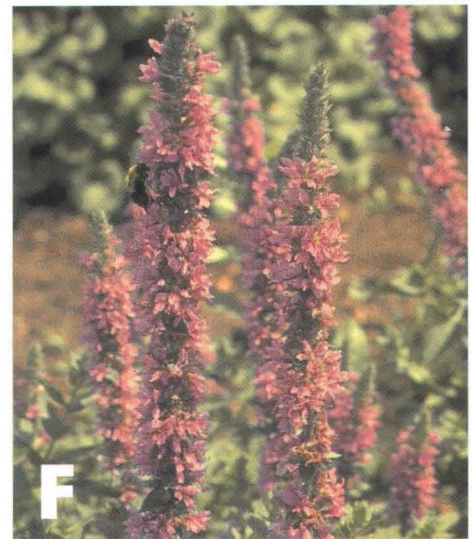
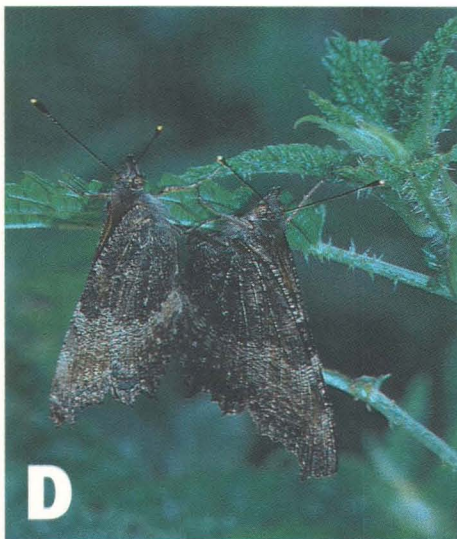
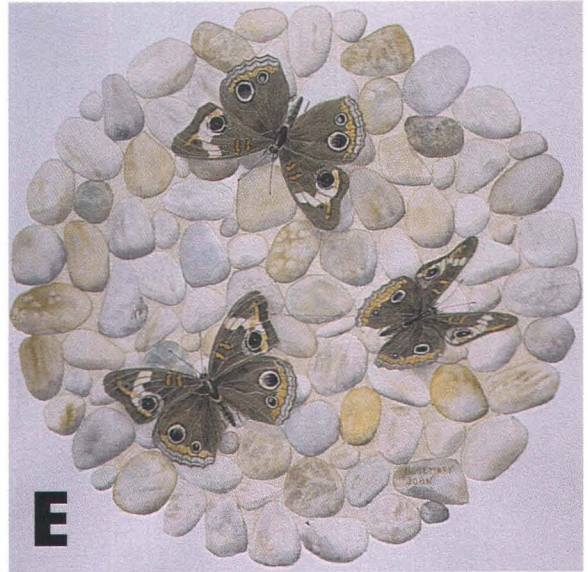
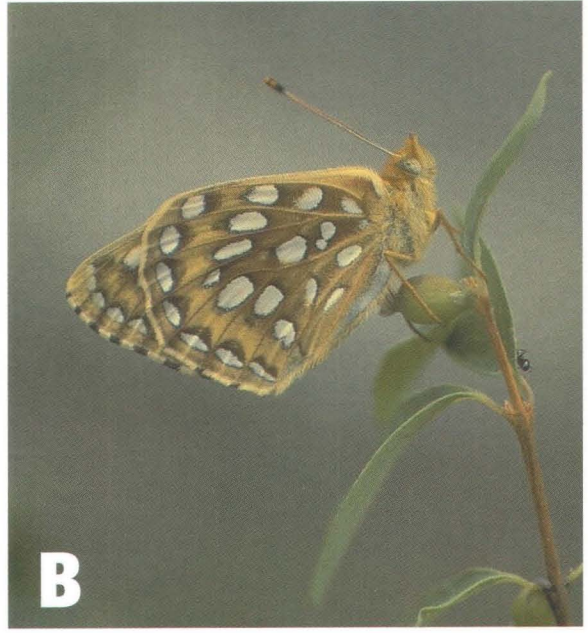
First used by Dr. Fred Urquhart in 1937, the alar tag (see D on page 32) has contributed much to our knowledge of the migration patterns of the monarch butterfly, including the discovery of the wintering grounds of the eastern population in the transverse neo-volcanic belt of central Mexico (Urquhart 1976; Brower 1995). In this study, tagging is used for a different purpose.

Until recently, little comparative data has been available on the size of the eastern migration of monarch butterflies (*Danaus plexippus*) from year to year. For 4 years, monarchs have been

tagged at Wissler Run Park, which is located in southern PA along the Susquehanna River. The main attractant of the area to monarchs is an abundance of *Buddleia davidii* growing along some railroad tracks (see C on page 32). Most monarchs stop here for nectaring before crossing the Susquehanna River. All tagging was done by a single individual and the time at the beginning and end of tagging sessions was recorded. Tagging was done as often as possible, weather permitting. An advantage of tagging over the other census methods is that no butterfly is

counted twice, and it is possible to determine the sex ratio and wing condition of the butterflies. A disadvantage is that monarchs that do not choose to stop and nectar are not counted.

Table 1 shows the Wissler Run data in comparison with two other methods of censusing monarchs. The Monarch Migration Project (MMP) performed the counts in Cape May, NJ two or three times daily during September and October. A single observer drove an 8 km transect at approximately 32-40 km per hour. No stops were allowed to count specific concentrations of butterflies.



A: a mating pair of *Speyeria egleis* (see article on page 26); **B:** *Speyeria callippe* (see article on page 26); **C:** "Social" oviposition in *Aglais cashmirensis*: A second female (left) settling to oviposit in the same spot as the first female (see article on page 28); **D:** "Social" oviposition in *Aglais cashmirensis*: Two females laid a single batch of eggs, ovipositing continuously for at least 20 minutes (see article on page 28); **E:** "Buckeye Trio", a new watercolor by artist Rosemary John (15" diameter). Contact the artist at: P. O. Box 83933, Baton Rouge, LA 70884-3993, ZOROSE@LSUVM.SNCC.LSU.EDU; **F:** Purple Loosestrife, *Lythrum salicaria* (see article on page 13). Photos A, B and F from Corel Photo CD-ROMs, C & D © 1997 by Andrei Sourakov, E provided by Rosemary John.

Table 1. A comparison of three methods of counting Monarch butterflies.

Year	Wissler Run			Cape May ¹			4JBC ²		
	Count	Hrs.	Count /Hr.	Count	Hrs.	Count /Hr.	Count	Hrs.	Count /Hr.
1992	202	50.0	4.04	565	47.2	10.4	169	648.7	0.26
1993	1204	88.6	13.60	2857	40.9	62.9	689	620.6	1.11
1994	687	47.8	14.29	4103	42.1	86.3	1258	806.2	1.56
1995	417	52.5	7.94	1266	48.6	25.6	1232	1009.8	1.22

¹ Walton and Brower, 1996; Walton, 1997

² Swengel and Opler 1993, 1995, 1996; Opler and Swengel 1994

(Walton and Brower 1996) The NABA-Xerces Fourth of July Butterfly Counts (4JBC's) are held each year on or around July 4. Participants conduct a one-day census of all butterflies observed at sites within their count area, a fifteen mile diameter circle (Swengel and Opler 1996). For the purpose of this paper, only those counts north of 40°N latitude and east of 80°W longitude were used, since this is the probable breeding area of monarchs migrating through Wissler Run. Walton and Brower (1996) suggested that the 4JBCs could be used to predict the size of the fall migration, and this hypothesis worked well for 1991-1994, but in 1995 the fall migration in both Cape May and Wissler Run was lower than the 4JBC's predicted. This was probably because extreme heat and drought in the northeast during July and August adversely affected the monarch population (Taylor 1996).

Statistical analysis performed on the data in Table 1 suggest that tagging can be a valid method of censusing monarchs, with linear regression analysis comparing Wissler Run to Cape May producing an r^2 value of 0.933. Accu-

racy, as compared with the prediction of the 4JBC's, is slightly lower than that of the Cape May road census, probably because the Wissler Run counts were not able to be done every day for the same amount of time and because butterflies not stopping to nectar may have been missed. The sex ratio of monarchs tagged at Wissler Run was highly skewed in favor of males, possibly because many of the females chose not to stop and nectar before crossing the river.

Perhaps the biggest difference between the Cape May and Wissler Run counts is that the Cape May road census counts mainly monarchs in flight, while the Wissler Run census counts nectaring monarchs. As an intern for the MMP in Cape May, I attempted to compare the results of tagging vs. the road census. This proved to be difficult because some days there were simply many more monarchs than it was possible to tag, causing the results to be too low. There were also days when most of the monarchs were nectaring rather than flying, causing the tagging num-

bers to be much higher than the road census. Since the tagging method only works when most of the monarchs in the area can be tagged, it works best in areas not totally inundated with monarchs. In conclusion, tagging appears to be a valid method of censusing monarchs (as compared to the 4JBC's and the Cape May road census) and may work best in low volume areas where road censusing is not feasible.

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Ray E. Stanford Collection to Gillette Museum of Arthropod Diversity, Colorado State University, Fort Collins, Colorado

The paperwork necessary to transfer the Ray E. Stanford collection of Lepidoptera to the C. P. Gillette Museum of Arthropod Diversity at CSU has been completed and the first 4 installments (Papilionidae, Pieridae, Libytheidae, Heliconiinae, Ithomiinae) were received in late 1996 and early 1997. The re-

maining groups will be transferred in stages over the next several years, with small aliquots to a few other museum and university collections in the western United States. Dr. Stanford will retain some material pending completion of research studies in progress at this time, but these specimens and li-

brary materials will be incorporated eventually.

The Stanford collection consists of approximately 90,000 specimens of Lepidoptera, mainly butterflies from western North America, including about 20 secondary type specimens (paratypes)

Abundant Occurrence of the "Rare" *Vitacea admiranda* (Hy. Edw.) (Sesiidae) in the Coastal Bend of Texas

Charles W. Bordelon, Jr. & Edward C. Knudson

8440 Washinton, Beaumont, TX 77707 & 8517 Burkhart, Houston, TX 77055

Vitacea admiranda had been collected very infrequently prior to 1996. Although this Sesiid moth has been well described and illustrated by several authors (Beutenmueller 1901, Englehardt 1946, Eichlin & Duckworth 1988), it was known from only three museum specimens and a few others in private collections (Dallas, Bexar, Travis and Harris counties, Texas). In 1996, using pheromone lures, we collected four additional males, two from Briscoe Co., and one each from Starr and Hidalgo counties. From 6 – 10 June, 1997, we obtained an impressive series of male *V. admiranda* from six south Texas counties. Approximately 50 males were observed in Refugio, Refugio Co., between 1700 – 1814 on 6 June. They were attracted to a 1:1 combination of the pheromones Z,Z,ODDA and E,Z,2,13,ODDA, but some males flew directly to the Z,Z,ODDA lure. In Sinton, San Patricio Co., on 10 June, we observed over 100 males between 1730 – 1800. They were so abundant, that they began swarming our vehicle before it could be parked. During the same dates, small numbers of *V. admiranda* were collected in Cameron, Hidalgo, Nueces, and Bee counties.

From 14 – 20 June, and again 10 – 16 August, Knudson found additional males of *V. admiranda* in Ft. Bend and Harris counties, usually in small numbers. However, on 20 June, in downtown Houston, at 1730, many males were seen flying about and into his vehicle (which contained active lures), after it had been parked for 10 minutes. No specimens were found east of Houston, although we had 18 active pheromone traps, which were checked at biweekly intervals or less, in Jefferson, Tyler, Hardin, Liberty, and Polk counties. A few additional males were collected late in the season (Uvalde Co., 1 Nov.; Hidalgo Co., 7 Nov.)

Having access to a sizeable series, we note pattern and size variation in this species. In a series of 20 males from Refugio Co., 6 June, forewing length varied from 9.5 to 15 mm, with an average of 12.8 mm. The smaller specimens tended to be darker with segments 5 to 7 entirely blackish in some examples (see A on page 32). In other specimens, the coloration of these terminal segments varied from rust red to orange yellow (see B on page 32). Other pattern elements and colors were more constant, matching the description given by Eichlin & Duckworth, 1988.

Vitaceae admiranda is one of several sessids in Texas that mimics *Polistes* sp. wasps. The males are capable of rapid flight and can produce an audible buzz. Although they are strongly attracted to pheromones, we have found only three males in traps. These, and perhaps many other species of Sesiidae, are best collected by observing lures during the appropriate season and flight times. In Texas, *V. admiranda* is now known from 15 counties and has been collected from June through November. It is otherwise known only from Mexico, where it is not uncommon (Eichlin, pers. comm.). The life history is unknown, but the foodplant is likely a member of the Vitaceae. In areas where we found this species to be especially abundant, we noted extensive stands of *Vitis candicans* (Mustang Grape).

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and over 1000 county/state vouchers. There are also several hundred moths and 5 drawers of miscellaneous pinned insects from other orders and a few terrestrial arthropod specimens. Butterflies from eastern North America, Mexico, South America, the Caribbean Islands, Europe, Africa, and Asia are also represented. Nearly a third of the specimens are skippers (Hesperioidea), including many from the prairies of the

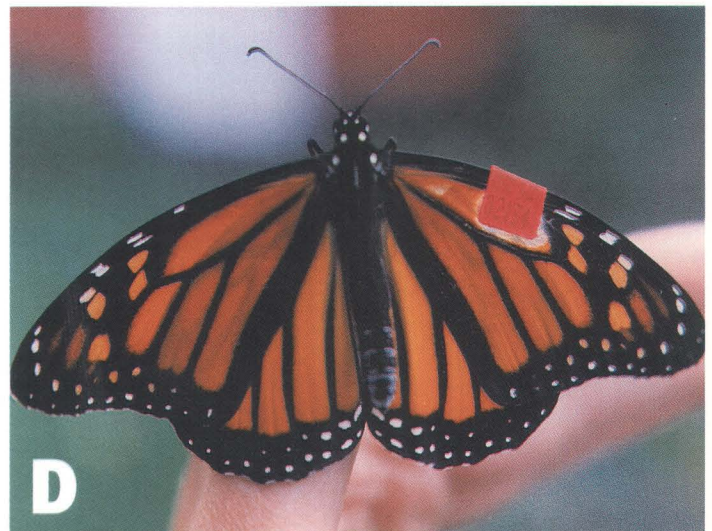
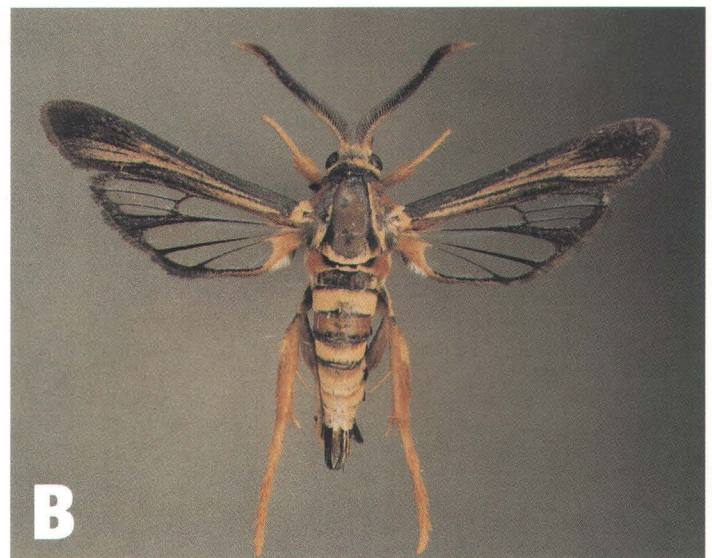
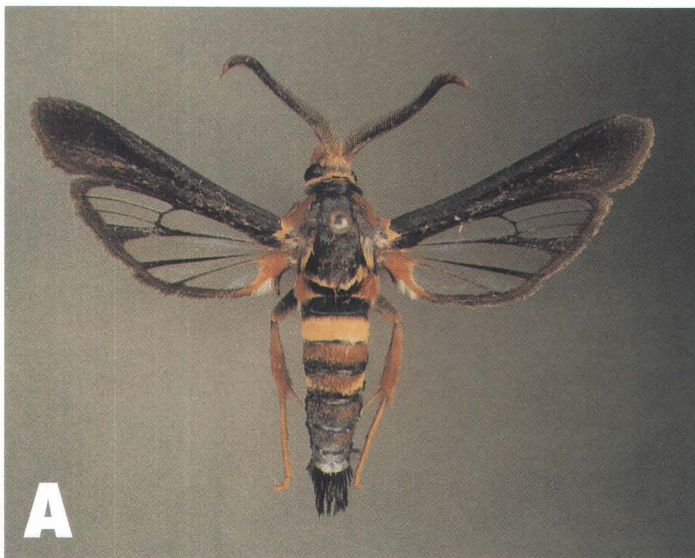
Rocky Mountain states and adjacent prairie states, a very important acquisition, representing Dr. Stanford's interests in these butterflies. In addition to the specimens and library, there are also files of letters, statistical information, state and county checklists, and many reprints.

We welcome this important, major addition to the Museum and what is now the premier institutional collection of

insects and other arthropods in the Rocky Mountain region. We welcome any inquiries regarding these data and resources, and express our immense gratitude to Ray Stanford for selecting CSU for the permanent disposition of the majority of his collection and papers.

Paul A. Opler

Gillette Museum of Arthropod Diversity, Colorado State University, Fort Collins, CO 80523



A: *Vitacea admiranda*, Refugio, TX, 6 June 1997. Note the dark coloration with abdominal segments 5 to 7 being entirely blackish in some examples (see article on page 31); **B:** *Vitacea admiranda*, Refugio, TX, 6 June 1997. Note the overall lighter coloration and the bright red to orange yellow coloration of the terminal segments (see article on page 31). Note that photographer, Ed. Knudson, has deliberately used a non-uniform background and lighting in A & B to accent the fringes on the wings.; **C:** An alar tagged Monarch nectars on *Buddleia davidii* flowers at Wissler Run, PA (see article on page 28); **D:** The "Urquhart method" of alar tagging is illustrated in this photo (see article on page 28). A & B © 1997 Ed. Knudson; C & D © 1997 Gayle Steffy.

Frass from the Giant Northumberland Caterpillar

Although these creatures absolutely devastate the fields where they forage, the frass is highly valued as fertilizer! Photo. by Tom & Judith Brewer, Northern England, June 1997.

Enodia anthedon (Nymphalidae, Satyrinae): a new record for Texas.

Nick V. Grishin

University of Texas Southwestern Medical Center, 5323 Harry Hines Blvd., Dallas, TX, 75235-9041

During one of my butterfly trips I netted a male of Northern pearly eye (*Enodia anthedon*) 9 mi. north of Decatur, Wise Co., TX on 31-Aug-1997 (Figure 1). This is the first report of this species having been taken in Texas. Two species of *Enodia* were known from Texas previously: Southern pearly eye (*E. portlandia*) and Creole pearly eye (*E. creola*). The three *Enodia* species can be distinguished as follows:

E. creola – ventral forewing with a straight row of 5 eyespots, postmedian dark line on the ventral forewing is offset at vein M1. Only *E. creola* males have patches of dark, raised sex scales between the veins on the forewing above;

E. portlandia – ventral forewing with curved row of usually 4 eyespots, postmedian dark line on the ventral forewing is straight or slightly zigzag. Texas ssp. *missarkae* has a tiny or absent spot in forewing cell M3. Antennal clubs are orange;

E. anthedon – ventral forewing with nearly straight row of 4 eyespots, postmedian dark line on the ventral forewing is sinuous, Spot in forewing cell M3 is usually large. Antennal club is ringed with black. (see Scott 1986, Opler 1992, and Pyle 1981).

E. anthedon was once considered a subspecies of *E. portlandia*, but they fly together without inter-

breeding, and have different host plants. *E. anthedon* larvae feed on forest grasses (*Chasmanthium latifolium* is one of the favorites) and *E. portlandia* larvae feed exclusively on cane (*Arundinaria gigantea*, *A. tecta*). *Enodia* species are confined to shady woody areas near streams and swamps. They are usually local and unlike most of other butterflies are active at dusk and maybe at night. Males perch on tree trunks or foliage. The adults do not visit flowers and feed on mud, sap, carrion, rotting fruit, dung.

E. anthedon is the most widely spread and common *Enodia* species in North America. The most southern records of it has been known from Oklahoma and Louisiana (Opler et al, 1995). The Texas specimen of *E. anthedon* was taken at the shady wood edge with *Chasmanthium latifolium* (its larval host plant) nearby. The plant community at the site is reminiscent of that in Carter Co., OK, where a large colony of *E. anthedon* exists. This specimen undoubtedly represents the last brood

of the year. However additional work is needed to clarify existence of a colony of this butterfly in Texas. Although the butterfly is usually local, the possibility exists, that it strayed from Oklahoma (the closest colony, known to the author is about 50 mi to the north).

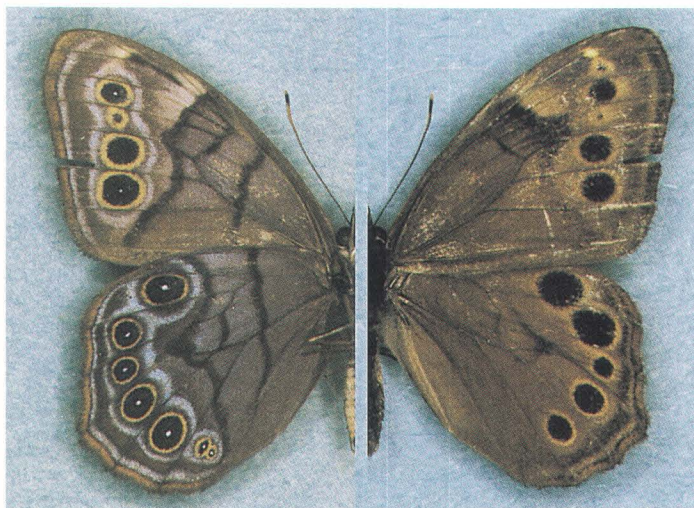
In any case, Wise Co. is probably the most southwestern site of the *E. anthedon* range and this species should be added to the Texas state butterfly list. The Texas specimen will be deposited in the Texas A&M University collection.

Acknowledgements

The author thanks Paul A. Opler and Roy O. Kendall for personal communications.

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Enodia anthedon, male, Texas record, 9 mi. north of Decatur, Wise Co. TX, 31-Aug-97. The photo shows ventral on left and dorsal on right.

Mitoura...continued from page 17

ably not worldly enough to appreciate the full import of my response, which was, "A man with a Sicilian wife."

Anyway, that's about the extent of the untold story of the demise of the name *millerorum* as applied to U.S. *Mitoura*, except that I spent the return trip scratching chiggers, and wondering what the girl would have thought I had that caused red lumps all over my body.

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Submissions are always welcome! When space becomes limiting, preference is given to articles written for a non-technical but knowledgeable audience, illustrated, written succinctly, and under 1,000 words. Please submit your article or item in one of the following formats (in order of preference):

1. Article on high-density, DOS- or MAC-formatted, floppy diskette in any of the popular formats. You may include graphics on disk, too. Indicate what format(s) your article is in, and call if in doubt. Include a printed hardcopy and a backup in ASCII or RTF (just in case).

2. Electronically transmitted file in ASCII or other acceptable form *via* e-mail.

3. Typewritten copy, double-spaced suitable for scanning and optical character recognition. Articles may also be faxed directly to my computer for OCR but you must call first so that I can set up for reception of your fax. Artwork should be line drawings in pen and ink or good, clean photocopies suitable for scanning.

4. Handwritten or printed (very legible, short pieces only please, <500 words).

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Mail disks and illustrations to the *News* Editor (see right). Material for Volume 40 must reach the Editor by the following dates:

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1 Spring	too late...
2 Season Summary	December 15
3 Summer	April 30
4 Autumn	July 31
5 Winter	October 31

Reports for the Season Summary must reach the Zone Coordinator by Dec. 15. See next page for more information.

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Migration of Snout Butterflies: *Libythea bachmannii* larvata (*Libytheidae*), Potrero Redondo, Nuevo Leon, Mexico, 1994 by William H. Howe. Acrylic, 30" × 40", Live Model: Luis Magaña Vega. "Butterflies of North America" (Howe), pp. 257: "...on August 9, 1966 these migrants were so numerous that they obscured the sun over Tucson, Arizona, and it was necessary to turn on the street lights." Bill adds that "Floyd and June Preston saw thousands of tightly packed bachmannii in a truck radiator on September 1, 1995 at Nogales, Arizona. The truck had obviously passed through a huge flight of these butterflies on its northward journey across Sonora, Mexico."