THE LEPIDOPTERISTS' SOCIETY
EST. 1947

NEWS OF THE LEPIDOPTERISTS' SOCIETY

Volume 41, Number 1 Spring 1999

Inside:

Membership

The Lepidopterists' Society is open to membership from anyone interested in any aspect of lepidopterology. The only criteria for membership is that you appreciate butterflies or moths! To become a member, please send full dues for the current year, together with your current mailing address and a note about your particular areas of interest in Lepidoptera, to:

Kelly Richers,
Assistant Treasurer,
The Lepidopterists' Society
9417 Carvalho Court
Bakersfield, CA 93311

Dues Rate

Active (regular)	$ 35.00
Affiliate	5.00
Student	15.00
Sustaining	50.00
Contributor	100.00
Institutional Subscription	50.00
Air Mail Postage for News	15.00

Students must send proof of enrollment. Please add $ 5.00 to your Student or Active dues if you live outside of the U.S. to cover additional mailing costs. Remittances must be in U.S. dollars, payable to "The Lepidopterists' Society". All members receive the **Journal** and the **News** (each published quarterly). Supplements included in the **News** are the Membership Directory, published in even-numbered years, and the Season Summary, published annually. Additional information on membership and other aspects of the Society can be obtained from the Secretary (see address inside back cover).

Change of Address?

Please send permanent changes of address, telephone numbers, areas of interest, or e-mail addresses to:

Julian P. Donahue, Assistant Secretary,
The Lepidopterists' Society,
Natural History Museum of Los Angeles County, 900 Exposition Blvd.,
Los Angeles, CA 90007-4057.
donahue@caroli.usc.edu

Our Mailing List?

Contact Dr. Donahue for information on mailing list rental.

Missed or Defective Issue?

Requests for missed issues should be directed to: Ron Leuschner (1900 John Street, Manhattan Beach, CA 90266-2608, (310) 545-9415, ***ronleusch@aol.com***). Defective issues will also be replaced. Please be certain that you've really missed an issue by waiting for a subsequent issue to arrive.

Journal of the Lepidopterists' Society

Inquiries regarding **Journal** policy and manuscripts submitted for publication in the **Journal** are to be sent to:

Dr. M. Deane Bowers, Editor
Journal of the Lepidopterists' Society
Entomology Section, University of Colorado Museum, Campus Box 218, University of Colorado, Boulder, CO 80309-0334
Phone (303)492-5530,
FAX: (303)492-8699
bowers@spot.colorado.edu

Editorial policy is outlined on the inside back cover of any issue of the **Journal**.

Book Reviews

Send book reviews or new book releases for review, for either the **Journal** or the **News**, to:

M. Alma Solis
Systematic Entomology Lab., USDA,
c/o National Museum of Natural History,
MRC 127, Washington, D.C. 20560.
(202) 382-1785 (office)
(202) 786-9422 (fax)
asolis@sel.barc.usda.gov

Submission Guidelines for the News

Submissions are always welcome! When space becomes limiting, preference is given to articles written for a non-technical but knowledgable 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).

Submission Deadlines

Material for Volume 41 must reach the Editor by the following dates:

Issue	Date Due
1 Spring	too late...
2 Summer	April 30
3 Autumn	July 31
4 Winter	October 31

Reports for Supplement S1, the Season Summary, must reach the respective Zone Coordinator (see most recent Season Summary for your Zone) by Dec. 15. See inside back cover for Zone Coordinator information.

NEWS OF THE LEPIDOPTERISTS' SOCIETY

Volume 41, No. 1 Spring 1999

Contents

Issue Date: March 15, 1999 ISSN 0091-1348

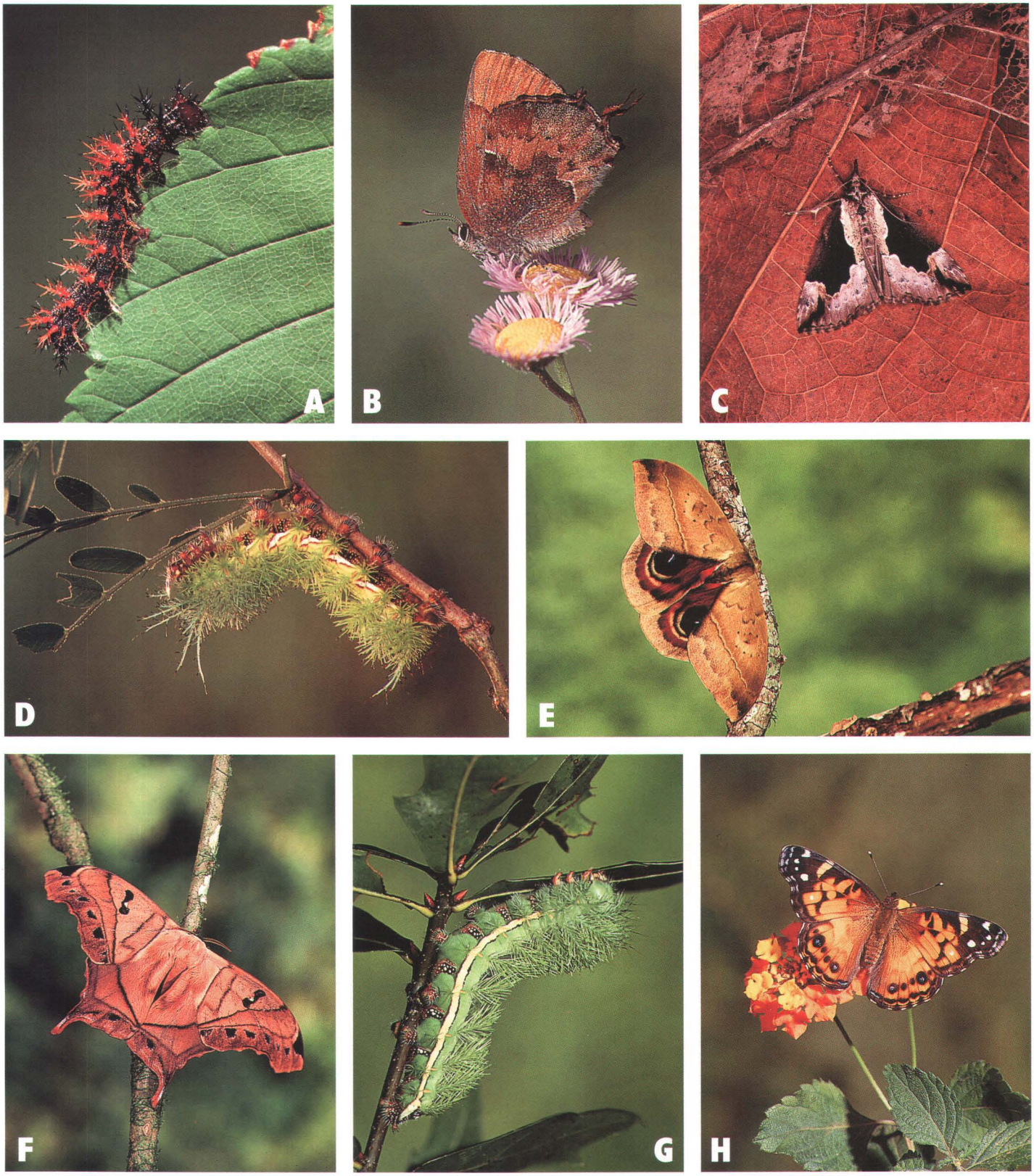
Cover: Heliconius charithonia, *Best in Show and 1st Place, Butterflies, in the 1998 Lepidopterists' Society Photo Contest. Photo by Leroy Simon.* *See pp. 4 for other winning photos.*

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.)

The **News of the Lepidopterists' Society** (ISSN 0091-1348) is published quarterly by The Lepidopterists' Society, c/o Los Angeles County Museum of Natural History, 900 Exposition Blvd., Los Angeles, CA 90007-4057, USA., and includes one or two supplements each year. The **Season Summary** is published every year as Supplement S1 and is mailed with issue 1 of the News. In even numbered years a complete **Membership Directory** is published as Supplement S2 and is mailed with issue 4 of that volume of the News. Please see the inside front cover for instructions regarding subscriptions, submissions to, and deadline dates for, the News.

Periodicals Postage Pending at address above (Los Angeles, CA) and at additional mailing office (Lawrence, KS).

POSTMASTER: Please send address changes to **News of the Lepidopterists' Society**, c/o Los Angeles County Museum of Natural History, 900 Exposition Blvd., Los Angeles, CA 90007-4057.



1998 Photo Contest Winner...Leroy Simon! Leroy won in *all* categories...see note on pp.6. Life History: 1st, *Polygonia interrogationis* **(A)**, 2nd, *Automeris annulata* **(D)**, 3rd, *Automeris candalara* **(G)**, Hon. Mention, *Caligo eurilochus* (not shown); Moths: 1st, *Titaea lemoulti* **(F)**, 2nd, *Bomolocha baltimarchis* **(C)**, 3rd, *Automeris janus* **(E)**, Hon. Mention, *Catocala micronympha* (not shown); Butterflies: 1st and Best in Show, *Heliconius charitonius* **(front cover)**, 2nd, *Vanessa virginiensis* **(H)**, 3rd, *Incisalia henricii* **(B)**, Hon. Mention, *Siderone marthesia* (not shown).

Tirista praxila

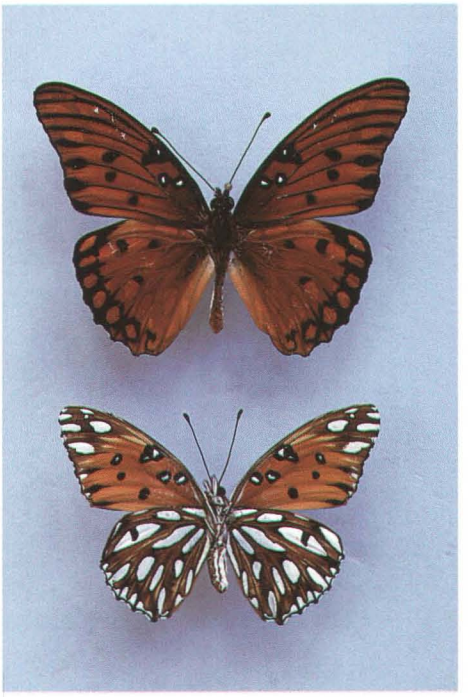
Synanthedon kathyae

Carmenta odda (dark form)

Carmenta odda (typical form)

Carmenta odda (intermediate form)

Observations on Texas Sesiidae. Refer to text on pp. 6. Photos by Ed Knudson.



***Agraulis vanillae nigrior*, from Indiana.** Upper (top) and lower (bottom) of two specimens. See text by Ernest M. Shull on pp. 9. Specimens generously provided by Ed Howard and Larry Rice. Photo by David Eilan.

Feature Photo:

Startling, isn't it?

Two male *Automeris io* at lights. Side by side views of startle and cryptic behavior. The one on the left flew in first. The second (on right) flew in not long after, stimulating the first into a startle display. Photographed in Mexico at El Salto Falls, San Luis Potosi, May 27, 1987. Photo by James K. Adams.

A single adult *Urania fulgens* resting near a fluorescent light at 2130 hrs on the night of 20 September, 1998 in Placencia, located in the southern coastal Stann Creek District of Belize. See text on pp. 10. Photo by John V. Calhoun.

1999 Annual Photo Contest

Jacqueline Y. Miller

Allyn Museum of Entomology, Florida Museum of Natural History, 3621 Bay Shore Road, Sarasota, FL 34234

The Education Committee of the Lepidopterists' Society invites you to enter the Annual Photo Contest. Prizes will be awarded in three categories: (A) Butterflies, (B) Moths, and (C) Life history sequence or individual photos of larvae and/or pupae. Cash award of $50 for first place in each category and photographic supplies as prizes in other categories will be awarded. The Best in Show will receive a special trophy award. Award winners will also be published on the covers of future issue of the **News of the Lepidopterists' Society**: First place winners will appear on color front covers, while second and third place winners will appear on the color back covers, of issues 2 to 4 of the **News.** Entries will be judged by a three to five member jury and the awards will be selected based on composition, balance, clarity and compliance with the following rules:

1) All subjects must be live specimens and photographs must be taken in natural settings.

2) Only 8" x 10" color prints on 11" x 14" posterboard mounts (which must be matted (white)) will be accepted.

3) Each entry must have a separate entry form.

4) Entry fee of $5.00 U. S. currency for each *category* with submission of up to four entries per category.

5) Submissions must be received at the address given below not later than 15 June 1999 to be considered.

6) Selected entries will be on display during the 1999 Annual Meeting of the Lepidopterists' Society in Sierra Vista, Arizona.

7) Additional entry conditions can be obtained by contacting the Education Committee at the address in the entry form (opposite) or by contacting J.Y. Miller at ***jmiller@virtu.sar.usf.edu***

Plan on entering the photo contest this year!

Observations on Texas Sesiidae

Charles Bordelon Jr. and Ed Knudson

8440 Washington, Beaumont, TX 77707 and 8517 Burkhart, Houston, TX 77055

Carmenta odda Duckworth & Eichlin

In 1997, we collected and identified several specimens of this taxon in Texas, at Village Creek State Park, in Hardin Co. Adult males were collected in pheromone traps containing a 2: 1 combination of ZZ,ODDA and EZ-2-13-ODDA, in May and again in September. Previously, Bordelon had collected many specimens in traps in Beaumont, which we both had mistakenly determined as *Paranthrene tabaniformis* (Rott.). In 1998, we collected a series of about 15 specimens in similarly baited pheromone traps at Tony Houseman Wildlife Management Area (Texas Parks & Wildlife Dept.), in Orange Co. These included some intermediates between the "typical" form and the forms which superficially resembles *P. tabaniformis.* Several specimens from each locality were dissected by Knudson, confirming their identity as *C. odda,* which has notably distinctive male genitalia.

Later in 1998, additional specimens were collected in pheromone traps, with similar lures, in Harrison Co., Caddo Lake State Park; Newton Co., Wild Azalea Canyons, and Chambers Co., Trinity River, near Wallisville.

The dark form shown (see color plate on pp. 5 of this issue), differs from the description on Duckworth & Eichlin, 1977, in that the forewing tends to be more opaque. The *tabaniformis*-like form is blue black with fewer whitish yellow bands on the abdomen, usually lacking on segment 6 and nearly completely opaque forewing. The more typical form, from Caddo Lake, is brown black with orange-yellow abdominal bands and partially hyaline forewing. Intermediates have also been found.

The life history of this species remains a mystery, but from the localities where we have found them, we would suggest that it feeds on a host growing in swampy areas, or along canals. It is also possible that the two forms arise from different hosts.

The presence of this species in Texas represents a significant western range extension.

Vitacea admiranda (Henry Edwards)

This species, reported by us in 1997 in this publication (see **News** 40(1): 31-32), continued to be abundant in Texas in 1998, especially in Harris Co. Specimens were also collected in Galveston

continued on next page...

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Co., Galveston, and Chambers Co., Trinity River, nr. Wallisville, in June-Aug. 1998, in or near pheromone traps baited with ZZ,ODDA.

Synanthedon kathyae Duckworth & Eichlin

This taxon, which we had mistakenly reported as *Carmenta laurelae* in the 1996 Season Summary, differs wildly in appearance from the form illustrated by Duckworth & Eichlin (1977), and Eichlin & Duckworth, 1988. As can be seen from the illustrated example (see pp. 5), the forewings have very wide dark margins, tending, in ALL examples we have seen from Texas, to a nearly completely opaque FW, as is the case in *C. laurelae* or *S. alien*. However, the male genitalia were examined by Knudson, confirming the determination and specimens were also sent to Eichlin, who also confirmed their identity as *S. kathyae*.

We have collected S. *kathyae* in Tyler, Newton, and Orange counties of eastern TX, mainly using a 2:1 combination of ZZ,ODDA and EZ,2-13-ODDA. The adults fly May to early June. One known larval host is *Ilex americana* (American Holly) and it is a potential pest of ornamental plantings of this species, as well as nursery stock. We hope this illustrated melanic form will serve to prevent future misidentifications.

Tirista praxila (Druce)

This taxon, which was described from Mexico, was first discovered in Texas and the USA by Hermann Flaschka, of Decatur, GA, who received a single male, collected in a pheromone trap in Uvalde Co., TX, by T. Mise. It has been subsequently collected in Cameron Co., TX, at the Audubon Sabal Palm Grove Sanctuary by the authors, in Oct. 1997. It was taken in a pheromone trap baited with a 2:1 combination of ZZ,ODDA and EZ,2,13-ODDA, which had been previously checked in June of the same year. The specimen was determined by Dr. Eichlin.

Our specimen (see pp. 5) is a rather nondescript insect, mainly brown in color, with lighter bands on each abdominal segment. The forewings are translucent brown.

This represents the first illustration of this species in a modern publication, and the first report of its occurrence in Texas and the USA. According to Eichlin (pers. comm.) a third old record exists from the Brownsville area.

Literature Cited

Duckworth & Eichlin, 1977, J. Lepid. Soc. 31: 191-196.

Eichlin & Duckworth, 1988, Sesioidea: Sesiidae in Dominick, *et.al.*, The Moths of America, North of Mexico, fasc. 5.1, Washington DC.

Journal Notes

M. Deane Bowers,Editor,

Journal of the Lepidopterists' Society

Sorry they're late...

Please accept my sincere apologies for the delays in publication of the Journal. It took more time than I anticipated to learn the ropes of editorship and so I have fallen behind. However, I anticipate that the last two issues for Vol. 52 will be issued in March and that publication of Vol. 53 will proceed on schedule after that. Note that all 1998 members will receive the outstanding issues of Vol. 52.

Calling all artists...

Members with artistic inclinations are being sought to provide cover illustrations for upcoming issues of the Journal. If you have any drawings (black and white, preferably pen and ink) that you think might be suitable, please send them to me at Dr. M. Deane Bowers, Editor, Journal of the Lepidopterists' Society, Museum and E.P.O. Biology, Campus Box 334, University of Colorado, Boulder CO 80309. Please be sure to indicate that they are to be considered for Journal cover illustrations.

1999 Annual Photo Contest Entry Form

Name_____

Address_____

_____

City, State, Zip Code_____

Phone no._____

Print or Sequence

Title_____

Caption

Information_____

Camera, photographic

Comments_____

_____

Film_____

Fee received? _____

Member of Lepidopterists' Society?: ___ Yes ___ No

Membership fee included ($40) _____

Entry no._____ (please leave blank)

Mail Entries to:

Education Committee
c/o Dr. J. Y. Miller
Allyn Museum of Entomology/FLMNH
3621 Bay Shore Road
Sarasota, FL 34234 USA

Hemiargus ammon Photographed in Florida

George O. Krizek

2111 Bancroft Place, N.W., Washington, D.C. 20008

A very interesting habitat can be found in the center of the island of Big Pine Key, Monroe Co., Florida. In **Butterflies of the Florida Keys** (M.C. Minno and T.C. Emmel, 1993, Scientific Pub., Gainesville), the authors describe the community as consisting of "open stands of *Pinus elliottii* with a rich variety of grasses and herbs. Characteristic shrubs include locust berry (*Brysonima lucida*), sweet acacia (*Acacia farnesiana*), *Croton linearis* (Euphorbiaceae) and small palms (*Serenoa repens*, *Coccothrinax argentata*, and *Thrinax* sp."

This habitat becomes quickly overgrown and changes into hardwood hammock unless burned every few years. Typical butterflies found here include *Anaea troglodyta floridalis* Johnson & Comstock (Nymphalidae), *Phoebis agarithe maxima* (Neumoegen) (Pieriedae), the Hesperids *Ephiriades brunnea floridensis* Bell & Comstock and *Hesperia meskei* (W.H. Edwards) and the Lycaenids *Strymon acis bartrami* (Comstock & Huntington) and *Hemiargus thomasi* Clench. Now, we can add the newly discovered or confirmed *Hemiargus (Cyclargus) ammon* Lucas. I saw and photographed *Hesperia meskei* here on 22 May, 1981 (see Fig. 265 in **Butterflies East of the Great Plains**, P.A. Opler and G.O. Krizek, 1984, Johns Hopkins University Press, Baltimore). To my knowledge it has not been seen here since. *Hemiargus ammon* has not yet been documented in the U.S. but I was able to observe and photograph two different individuals, alive in nature, on 31 May, 1998, in two different areas of Big Pine Key.

The month of May 1998 was hot and dry, however, there was some rain beginning on the 30th. The male (see photo below) was photographed in the central part of the island some 300 or 400 yards north of the famous "Blue Hole", an artifical pond. The butterfly was flying quickly and nervously, low to the ground, around bushes of *Croton linearis* (hostplant for *Anaea troglodyta floridalis* and *Strymon acis bartrami*). From time to time it rested on blossoms or buds or took nectar from the blossoms. At first I thought that it was *Hemiargus thomasi* but after my return home I was able to make the correct determination, subsequently confirmed by T.C. Emmel and P.A. Opler. At about 1400h, 31 May, I photographed a second individual in the eastern part of Big Pine Key, in similar habitat.

During recent years several specimens have been erroneously considered to be *H. ammon* (see pp. 133, Minno and Emmel, 1993), but were actually *H. thomasi*. Therefore, it may be useful to describe some characteristics of the underside wing pattern of *H. ammon*, all of which are easily visible in the photograph. In **The Butterflies of the West Indies and South Florida** (D.S. Smith, L.D. Miller and J.Y. Miller, 1994, Oxford University Press), the following diagnostic description is given for *H. ammon*:

> "white postdiscal area of HW always much broader in M_1-M_2 and M_2-M_3 than in M_3-Cu_1, two submarginal black spots in HW, that in Cu_1-Cu_2 with a red cap, in Cu_2-2A without, and three basal black spots, the one at base of Cu_2-2A (present in thomasi) being absent."

Thomas C. Emmel (pers. comm.) considers this specimen to "resemble more the subspecies known from Grand Cayman, Little Cayman and Cayman Brac (*H. a. erembis* Nabakov) rather than *H. a. ammon* which is found on many Bahamian islands, Cuba and Jamaica, in that it is larger and more boldly marked."

Hemiargus ammon, *photographed on Big Pine Key, Florida, in May 1998. Photo by George O. Krizek.*

S. Lepid. Soc. Celebrates 20 Years

Leroy C. Koehn

6085 Wedgewood Village Circle, Lake Worth, FL 33463-7371

On Saturday, October 3, 1998, The Southern Lepidopterists' Society celebrated its twenty-year anniversary at their annual meeting in Gainesville, Florida. The occasion was marked with a special butterfly cake and a toast to twenty years (see photo at right). This year's guest speaker was Paul Opler.

Southern Lepidopterists' Society members toast 20 years!

Founded in Gainesville, Florida, in 1978, The Southern Lepidopterists' Society was organized to promote scientific interest and knowledge related to understanding the Lepidoptera fauna of the southern region of the Untied States. The Society was founded by Dave Baggett and a group of enthusiastic amateur collectors from the eleven southern states that comprise the Society. These states are: Alabama, Arkansas, Florida, Georgia, Louisiana, Mississippi, North Carolina, South Carolina, Tennessee, Texas, and Virginia. Each of these states has a field coordinator that gathers field information and reports records and field activities of the members in the newsletter.

The newsletter, The News of the Southern Lepidopterists' Society, is published four times annually. In addition to field reports, the newsletter has informative articles and keeps the members up to date with the activities of the Society. The Society conducts field meetings at various locations. The field meetings for 1999 are planned for northwestern Georgia and the Texas Panhandle. These meetings provide an opportunity for members to share field techniques and to socialize with those of similar interests. They also provide members with the opportunity to visit other's states and collect and study the Lepidoptera of those areas. In addition to field meetings, an annual meeting is held each year.

James K. Adams is the current Chairman. Membership is $15.00 annually. For additional information or to become a member, contact: Jeffrey Slotten, Treasurer, 5421 NW 69th Lane, Gainesville, Florida 32653.

Agraulis vanillae Rediscovered in Vanderburgh County, Indiana

Ernest M. Shull

402 N. Wayne St., N. Manchester, IN 46962-1652

On October 8, 1998, two butterfly enthusiasts, Ed Howard and Larry Rice, captured a butterfly by the Ohio River that had not been seen in Vanderburgh Co., Indiana, for over 100 years.

The first record for the Gulf Fritillary, *Agraulis vanillae* L., found near Evansville, Vanderburgh Co., Indiana was that of W.S. Blatchley, Indiana State geologist, in 1891. It was feeding on its larval hostplant, the Passionflower. On September 9, 1998, Rice and Howard sighted a female *A. vanillae nigrior* laying eggs on Passionflower *(presumably Maypops,* Passiflora incarnata – *Ed.)*. Between September 9 and October 5 they caught 5 specimens of this species.

These beautiful creatures are bright orange-brown with brown and black markings above and marked with metallic spots of silver below (see photo on pp. 5). It is resident throughout the southern United States and southwards but sometimes migrates northward into the Great Basin, the Rockies, the Midwest and the Great Lakes and mid-Atlantic States. I have collected this mostly tropical butterfly in Mexico, Florida and Brazil, but never in Indiana! What a thrill to hear of the rediscovery of this species in Evansville, Vanderburgh Co., after a 107 year absence.

Another record for *A. vanillae*, this time in Clay Co., is found in the book **The Butterflies of Indiana** although where and when this record was made has been lost. If you have any information about this record, or about this butterfly in Indiana, I would appreciate hearing from you.

More on *Urania fulgens* in Belize

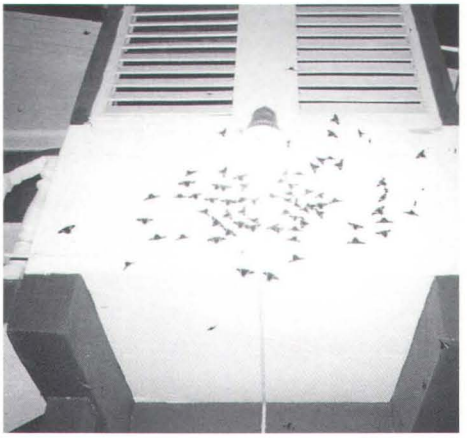
John V. Calhoun

977 Wicks Dr., Palm Harbor, FL 34684-4656

Jan Meerman (**News of the Lepidopterists' Society** 39(1): 8-9) discussed his experiences with the day-flying moth, *Urania fulgens* (Uraniidae), in Belize, Central America. This dazzling moth can be widespread and locally common in Belize, particularly when adults are migrating from breeding areas. Adults fly rapidly near the ground through open areas and closely resemble swallowtail butterflies in both appearance and behavior. Jan noted that due to the diurnal nature of the species, it is uncommon for adults to be attracted to light. However, my recent experiences in Belize suggest that, under certain circumstances, this species is drawn to lights in large numbers.

During 11-21 September 1998, I participated in a survey of the butterfly fauna of Belize. John Shuey led the expedition, his wife, Judy, and Jeffrey Maddox (an avid birder) joined us. My experience with *U. fulgens* began when I sighted my first adult from the airplane upon arrival at Belize City. We continued to observe solitary individuals in many areas of Belize (our truck radiator bore the evidence). On 20 September, we traveled to Placencia, located in the southern coastal Stann Creek District.

The night of 20 September was hot and very humid under clear skies. As we strolled to a local restaurant at 2130 hrs, we found a single adult *U. fulgens* resting near a fluorescent light. As we continued, we noted other individuals around fluorescent, incandescent and mercury vapor lights throughout the town (see color photo on pp. 5). Light sources ranged in height from 1.5m to over 4.5m. We witnessed the most impressive gathering of *U. fulgens* around a mercury vapor lamp attached to a smooth white wall at a height of about 3.5m. The number of adults gradually increased until we returned to our cabanas at about 2330 hrs. At least 100 individuals were ultimately attracted to this light (see photo at left). Dozens clung to the wall and many others were scattered on the ground, on vehicles and other illuminated objects in the vicinity. The next morning, many remained on the wall, even after others were seen coursing through local fields. Although it is unknown if this species is established in Belize or merely a migrant (Meerman, op. cit.), this large congregation of mostly fresh adults may suggest a simultaneous local emergence.



On that sultry evening in Placencia, as we beheld the striking assemblage of shimmering green and black moths, a young Rastafarian approached. He looked up, paused a moment, and voiced what we all were thinking; "Beautiful Belize, mon."

Former Member, Peter J. Herlan, Honored

Ann Pinzl

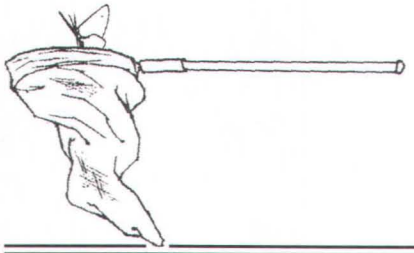
Curator of Natural History, Nevada State Museum, Captiol Complex, 600 N. Carson St., Carson City, NV 89710

Peter J. Herlan may be well known to some of you, as he had been an active member, particularly in the Pacific Slope Section. He was also the first Curator of Natural History at the Nevada State Museum that now recognizes his significant contributions by naming the Peter J. Herlan Lepidoptera Collection after him.

Peter worked at the museum from 1955 until his death in 1977. In his earlier years at the museum, he drove its mobile unit around the state. It might be said that Peter "founded" the museum's Natural History Department and he chose to work on Nevada's butterflies. While curator and travelling the state, he searched for butterflies and went on to describe a subspecies of the Viceroy, *Limenitis archipus lahontani*. A colleague honored him by naming a subspecies of the Long-Wing Crescent, *Phyciodes orseis herlani*, after him.

Part of his efforts was to develop the collection, which now stands at some 50,000 specimens. True, not all of that number were collected by Peter (Gloria Harjes also contributed) and later, George T. Austin (now a curator of the Nevada State Museum and Historical Society in Las Vegas) studied Nevada's butterflies at this museum and expanded the collection in the process.

The museum is proud to formally name the collection after Peter J. Herlan; the Lepidoptera Collection would not be one of the finer assets of the museum were it not for him.



Mailbag...

Dear Editor,

I'm flattered that Phil Schappert, in an editorial in Vol. 40(4) of the **News**, took the time to disagree with me about the preferred words to use for some butterfly-related structures and activities. Had he simply disagreed with me, I would not have written this letter. However, he went on to say that "...Mr. Glassberg appears to feel that, ultimately, people are not very smart. His argument, that the language of lepidopterology is too difficult for the lay-person to understand, fails to account for the intelligence of amateurs..."

Nowhere did I "argue" that the lay-person could not understand words such as proboscis or ovipositing. Rather, I opined that most people *would not* (not *could not*) learn these words, and that there was no reason to use these words since there exists commonly understood English words that mean the same thing.

Mr. Schappert's decision to never use the word "tongue" to describe the structure emanating from a butterfly's mouth is his prerogative, however, I believe that he may want to rethink his statement that the use of the word tongue is "wrong...simply wrong." A tongue is "any long structure emanating from a "mouth"" (such as the tongue of a shoe.) Many prominent lepidopterists, including Paul Ehrlich (**How to Know the Butterflies**, 1961, Brown Co., Dubuque, Iowa), and Malcolm Scoble (**The Lepidoptera**, 1992, Oxford University Press) have used the word "tongue" in this way. And although human tongues don't function like butterfly tongues, hummingbirds draw nectar to their mouths by sucking it through the rolled or tubular structure of the outer part of their extensile tongues. If you want to raise the issue of homology in a consistent way, you'll need to coin new words for butterfly feet and wings. More to the point, you'll need a new word for butterfly "tongue" since the use of "proboscis," to mean a fleshy, snout-like mammalian appendage, has precedence over the non-homologous, and functionally dissimilar, butterfly proboscis.

Jeff Glassberg

4 Deleware Rd.,
Morristown, NJ 07960

It seems that we'll have to agree to disagree on this one, Jeff! I suppose that "activities" is your choice of a word to replace "behavior?" To paraphrase, there are already perfectly good, useable, and exacting words for everything that you propose an alternate for. The problem, of course, is twofold: the fact that we are engaged in this debate suggests that they do NOT mean the same thing and not everyone speaks English so these words, like scientific names, serve a very useful purpose. Why not just learn them? (By the way, I'll bet there are some British members who are firmly convinced that we do not speak English on this side of the big pond...)

Dear Editor,

You asked "do we want longer articles run serially," like the Kulja piece which appeared in News 40(3) and (4)? The answer is YES! Interesting, and it would have never appeared in the Journal.

Color is nice but it could be put to better use if the color pages helped us to identify the bugs. I'm thinking of the Summer '97 issues as opposed to the Spring '98 issue. The photos of all of those moths, presumably not to be found elsewhere (or at least not in color or in one place), was useful, as were the photos of the *Urbanus* skippers – when taken with the text, the photos clear up some confusing points of identification.

Perhaps you could solicit more stuff like this to illustrate groups where the refs are hard to come by or which had previously been illustrated only in black and white? Pictures of caterpillars with identifications would help those folks who go out with tweezers as opposed to nets. These would be a "good" use of color. Photo winners are ok but the more useful color would be anything else!

Rudy de Mordaigle

K76471 B3-111, HDSP, Box 3030,
Susanville, CA 96127

I think you'll just love this issue, Rudy!

1998 Annual Photo Contest

Jacqueline Y. Miller

Allyn Museum of Entomology, Florida Museum of Natural History, 3621 Bay Shore Road, Sarasota, FL 34234

Leroy Simon won in all categories for butterflies, moths, and life history in the Annual Photo Contest. All entries were evaluated for composition, balance, clarity, and the compliance with the rules. Mr. Simon won best in show for his photograph of *Heliconius charithonia*. The Education Committee would like to thank the judges, Elaine Hodges and Dr. David Ahrenholtz for evaluating the entries. Special thanks also to those members who submitted photographs. The photos on display were appreciated by all members at the meeting, especially during the breaks.

Lepidopterology...and the return of natural history

Paul Manton

10 Flower Street, Hicksville, NY 11801

Nature study, that imprecise hodgepodge of folklore and dilettante science dismissed by modern biology professors—good "ologists" that they are—is enjoying a revival in popular culture such as it has not known since World War Two.

Gone with the curious clergyman, idle aristocrat, or dabbling gentry were the days when the amateur could hope to make a significant contribution. Complexity and a high degree of specialization transformed such fields as entomology from the realm of hobbyists to requiring the expertise of serious academicians. Since this evolution occurred in the mid-20th century, it is perhaps no coincidence that an institution such as The Lepidopterists' Society, established in 1947, would reflect these two realms, respectively, in the **News** and **Journal**.

In a rather tongue-in-cheek fashion, Wigglesworth, himself a professional entomologist, called this move away from Victorian eclecticism "the dry rot of academic biology." He lamented not merely the extinction of popular enthusiasm that made naturalist authors, like Edwin Way Teale (I grew up on his **The Strange Lives of Familiar Insects** and **Near Horizons**), Pulitzer Prize winners, but the source of inspiration whence the next generation of biologists would arise. Without the profound sense of wonderment, awe, and beauty that comes with rearing our first Monarch caterpillar, capturing our first Cecropia Moth, or sighting the first Cabbage Butterfly of spring tumbling across some overgrown wayside, where will the E. O. Wilsons, Richard Dawkins, or Stephen Jay Goulds of tomorrow come from?

I maintain wholeheartedly that reductionism and disciplinary specialization has not caused enthusiasm to whither. We may never relive the heyday when salons of fashionable ladies and witty dandies amused themselves with ornate microscopes in the parlor or when almost every Victorian middle class home had a butterfly collection. But there is a revival of interest in our beloved avocation. Maybe it will not herald some kind of entomological *Great Awakening* when the likes of polymaths such as Winston Churchill, Theodore Roosevelt, and Oliver Wendel Holmes were butterfly collectors or when the study of insects was such a commonplace leisure among parsons that the whole Anglican clergy in Victoria's day was a veritable entomological society. So what? At least a new generation that is enamoured of the natural world will have germinated.

Why the revival? What is the source of the freshness that comes with Sir David Attenborough's departure from the arid BBC style of "nature films"? Perhaps it's the reapproachment to Victorian and Edwardian themes in general that has rendered **Titanic** a phenomenal movie and made the "goth" genre a kind of Generation X answer to the sullen and fatalistic romanticism of Byron, Shelley, and Poe. I don't mean to suggest that the biological sciences are being deconstructed back into natural history. It's more a reconciliation. It's **Jurassic Park** as a romantic adventure yarn about the possibilities of DNA sequencing. It's the marriage of Sir Arthur Conan Doyle and an undergrad. course in Organic Chemistry 101.

Who in the field of biology—or of retail merchandizing—could have imagined the recent appearance of "nature stores" in local shopping malls over the last decade? It seems that savvy marketers and the general public are discovering what we lepidopterists are incapable of forgetting: natural wonders like butterflies address a fundamental spiritual yearning for beauty and inspiration. And what better conduit to the wellspring of the inspirational could there be than lepidoptera?

The art student will find, in Miriam Rothschild's **Butterfly Cooing Like a Dove**, a wonderful reminder that prescientific man's spiritual and artistic expressions are as worthy as our empirical examinations. What lepidopterist is not, at heart, both a poet and an artist? Ms. Rothschild's scientific contributions to entomology are well known to members of The Lepidopterists' Society but her artistic contributions to entomology are not to be underestimated either. It is they that are the source of popular enthusiasm and the Lorelei song that draws students of nature to undertake more serious scientific studies. Thus, her tome is called "Butterfly Cooing Like a Dove" and not "An Abstract on the Production of Galliformes-related Vocalizations Attributed to Rhopalocera".

A Thank You

David Iftner, Treasurer

A hearty *thank you* to the following members who contributed donations to our membership brochure fund. Without their help the treasury would have sustained a much greater hit.

Robert A. Belmont/Belmont Pest Control, $500.00; Ronald Boender/Butterfly World, $250.00; Michael J. Smith, $50.00; William D. Winter, Jr. (Deceased), $50.00.

A Bilateral Gynandromorph of *Arsenura sylla sylla*

Eurides Furtado

Caixa Postal 97, 784000-000 Diamantino, Mato Grosso, Brazil

In 25 years of entomological studies in the area of the Rio Arinos, Diamantino, Mato Grosso, Brazil, the author has collected few *Arsenura sylla sylla* (Cramer, 1779)(Saturniidae, Arsenurinae) specimens. The species is rare in this area despite having a relatively wide range (from Venezuela to southeastern Brazil), the typical species and two more subspecies (Lemaire, C., 1980. **Le Attacidae Americains**. (The Attacidae (=Saturniidae) of America, Arsenurinae), Nevilly, France, 199 pp.).

Of the relatively few specimens collected by the author one of them is a bilateral gynandromorph (see photo below). The specimen is male in coloration, wing format, antenna and other important details to the left (dorsally) and is female to the right. The genitalia are also bilateral. The sexual characteristics are clearly demarcated and evident.

The specimen is in the author's collection.

Specimen Shipment Seized

Ron Leuschner

1900 John St., Manhattan Beach, CA 90266-2608

One of our members who was buying specimens from a Canadian dealer had the shipment seized by F.W.S. at Port of Entry in Chicago. They demanded that the buyer obtain a commercial import license ($55) and pay a $50 inspection fee for each shipment. The interpretation was that 8 or more similar "unused items" must be for commercial sale. It is interesting to note that all Lepidoptera, regardless of species, are considered similar to F.W.S!

This is bound to put a dent in the business of Canadian dealers. Maybe we could claim that all specimens are "used" once they have flown?

'99 Invertebrates in Captivity Conference

Steve Prchal, Director

Sonoran Arthropod Studies Institute, PO Box 5624, Tucson, AZ 85703-0624

The 1999 Invertebrates in Captivity Conference will be held at the Rio Rico Resort July 29–August 1. The Conference brings together zoo, aquarium, museum, and education professionals and other interested persons to share their programs and accomplishments in invertebrate husbandry, conservation, exhibition, and interpretation. Hosted by Tucson's Sonoran Arthropod Studies Institute, the Conference has grown from 73 participants in 1993 to 172 last year. International attendance varies but in 1997, nine countries were represented.

This year's Keynote Address, "Insects as Environments: Symbiosis and Spores" will be presented by Lynn Margulis of the University of Massachusetts. Previous Keynote Speakers have included Bob Pyle, Terry Erwin, Tom Turpin and John Acorn.

Rio Rico, located about 10 miles north of Nogales, is a new venue for the Conference. With the growing numbers and participants' desire to be in natural surroundings, the new location offers natural areas just minutes away. Peña Blanca Lake and Sycamore Canyon are just a few miles further. Besides 28-30 paper presentations, the Conference offers optional field trips and workshops. The Conference is sponsored by a number of national companies to help keep registration fees within reach of students.

For more information on the Conference, visit the SASI website at ***www.SASIonline.org***. Here you will get up to the date developments for this year's event as well as a review of previous Conferences. You can also order the Proceedings, published after each Conference.

Metamorphosis...

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

Dr. J. Alan Brown

of Oakville, Ontario, Canada, in October 1998. Dr. Brown had been a member of the Society since 1965.

Kenneth Brugger

Kenneth Brugger, the Austin bee man, who loved homing pigeons, and the discoverer of the winter home of the eastern Monarch butterfly population, died in his home on November 25, 1998 at age 80. He grew up in Kenosha, Wisconsin. His mechanical aptitude and mathematical abilities allowed him to pursue a living as a textile engineer with the Jockey Corporation. And his association with this company eventually took him to Mexico City where in 1973, he noticed an advertisement in a local paper placed by Dr. Fred Urquhart of Scarborough College, Toronto asking for help in locating the overwintering sites of the Monarch butterfly. Clearly stamped on his psyche was a profound interest in nature, if not problem solving. He loved bees, kept homing pigeons and when the opportunity presented itself, he and Kathy, his wife to be, took up the search for the monarch colonies with relish. The folklore has it that they combed the mountains of Michoacan on motorcycle, recreational vehicle and foot. At first, they found lots of flying butterflies, but none of them in clusters. But they did notice that the monarchs no longer pursued a highly directional migratory path. After months of searching and with the help of local guides, they located major sites on Cerro El Pelon and in the Sierra Chincua.

Kenneth Brugger's achievement is even more significant in light of the apparent isolation of the butterfly area. Local people, mestizos and Indian groups, knew about the enormous aggregations of butterflies located on adjacent mountains or above their towns, but did not know the significance of their presence. They did not know that these butterflies had been born two thousand miles away and had flown there. They must have known about them for a long time. The Mezahua, a group closely related to the Aztecs who live to the northeast of the monarch areas, have a word in their language meaning "butterfly that passes in October and November". Local American Smelting Company mining engineers, some of whom were educated in US universities, apparently also did not realize the significance of the phenomenon and never made the monarch sites known to the scientific world. Kenneth Brugger not only solved the mystery of the monarch's overwintering destination, but also made local people aware of their migration across practically the whole of North America to the small areas in the forested mountains of Michoacan and Mexico.

Since Ken's discovery, many changes have occurred that benefit overwintering monarchs and contribute to the persistence of this endangered migratory phenomenon. A cottage tourist industry has grown into a viable source of income for many local farmers who share their lands with the overwintering monarch butterfly. The public of all three countries that share monarchs has been made aware of the conservation needs of monarchs and strong efforts are being made to establish reserves to protect them indefinitely. Ken Brugger's initial efforts sparked this interest. We have much for which to thank him!

Bill Calvert

Dr. Dario Cappelli

of Vergato, Italy, in 1998. Dr. Cappelli, a veterinarian, naturalist, and entomologist, had been a member of the Society since 1978.

Mrs. Joan M. DeWind

of Sherman, Connecticut, a member of the Society since 1971.

David Edward Gaskin

of Guelph, Ontario, Canada, in September 1998. Professor Gaskin passed away after a brief illness. David was 60 years of age and Professor of Marine Biology at the University of Guelph. Despite his professional affiliation, he had a lifelong interest in the lepidoptera. He had lived in New Zealand and in 1966 authored a publication titled **Butterflies and Common Moths of New Zealand**, a very popular and accessible book for both professional and amateur entomologists. David had travelled widely and was interested in the butterflies of Albania, Greece and Texas. A very sad loss—he will be missed.

Alan J. Hanks

Selected Papers

In the moth world (ie. Pyraloidea) David E. Gaskin published extensively in the Crambinae (Crambidae). He published papers mainly on the Old World Crambinae, primarily of the tribe Diptychophorini and the genus *Pareromene* and primarily in New Zealand, but also in other geographic re-

gions such as Southeast Asia, Australia, and the Pacific, but more recently in China (in collaboration with others) and the Neotropical Region. For many years he visited London, England to see his father and to work with Mr. Michael Shaffer at The Natural History Museum in London on crambine type specimens. His extensive and diverse work included genera in the tribes of Diptychophorini, Crambini, and Chilonini. For example, he erected the tribes Diptychophorini and Crambini, he published a diagram of the evolutionary relationships of the major genera of the Crambini, and published on the life cycles of the Crambini.

1971. A revision of New Zealand Diptychophorini (Lepidoptera: Pyralidae: Crambinae). New Zealand. Journal of Science 14: 759-809.

1973. Revision of New Zealand Chilonini (Lepidoptera: Pyralidae) and redescription of some Australian species. New Zealand Journal of Science 16:435-463.

1974a. The species of *Pareromene* Osthelder (Pyralidae: Crambinae: Diptychophorini) from the western South Pacific, with further notes on the New Zealand species. Journal of Entomology, London 43:159-184

1974b. The species of *Pareromene* Osthelder (Pyralidae: Crambinae: Diptychophorini) from Malaysia, Indonesia, and New Guinea. Journal of Entomology, London 43:185-208

1975a. Revision of the New Zealand Crambini (Lepidopera: Pyralidae: Crambinae). New Zealand Journal of Zoology, 2:265-363

1975b. A revision of Australian species of *Pareromene* Osthelder (Pyralidae: Crambinae: Diptychophorini). Australian Journal of Zoology 23:123-147

1975c. Information on the life cycle of some New Zealand Crambini (Lepidoptera: Pyralidae: Crambinae). New Zealand Journal of Zoology 2:365-376.

1985.Morphology and reclassification of the Australian, Melanesian and Polynesian *Glauchocharis* Meyrick (Lepidoptera: Crambinae: Diptychophorini). Australian Journal of Zoology, Supplement, 115:1-75.

1986a. Genus *Diptychophora* Zeller and a related new genus *Steneromene* from the Neotropical region (Pyralidae: Crambinae). Journal of the Lepidopterists' Society 40:107-123

1986b. New genera for the Neotropical *"Pareromene"* species (Pyralidae: Crambinae). Journal of the Lepidopterists' Society 40:271-288

Maria Alma Solis

Remembering David Edward Gaskin

I first met David at the Yale meetings in 1997. We were staying in nearby dorms, and since it was early in the proceedings, few lepidopterists were around. When I first saw him, my "soul-brother radar" started to go off, and so we struck up a conversation. We both wanted company for breakfast, so off we went to a local diner. I quickly learned that David had served in Commonwealth forces during the Malayasian uprising, and had wound up in Vietnam on his way back to the Australia region. That partially explained my "radar alert", and we began swapping stories from our days in Southeast Asia, thus sealing a friendship begun almost by chance.

Over the next few days, I saw David often—we took most meals together—and I discovered another reason that my "radar" had gone off. We had similar approaches to the study of Lepidoptera; he running around after individual *Nathalis iole* all day to see what they did, and I running after individual *Euchloe olympia* doing the same thing. He presented a paper on his work at the conference—who can forget the slide of an air mattress being carried past at 60 miles an hour on the crest of a flash flood?—and I was impressed with the obvious feel he had developed for his subject. By feel, I mean more than just a scientific understanding; he really got to know individual butterflies. This is perhaps not the *in* thing in ecology circles, but to my way of thinking it is essential if we are to truly understand the animals we work with.

At one point in the conference, several of us were standing around waiting to go to dinner, and a street person came up and asked for any spare change. Most of us looked at the ground, shuffling our feet, embarrassed and angry to be put in this situation by a stranger. David reached in his pocket and pulled out, not just spare change, but some real folding money and handed it over. After the beggar had left, one of the group commented that he'd probably just spend it on booze. David just shrugged his shoulders and said "It looked like he could use a bite." It didn't matter what that man decided to do with the money, what mattered was that David had seen a fair portion of the world, and had seen enough to respond to a fellow human in need.

We parted, with promises to meet next year in Eureka, where I was hosting the meetings. Early in June, 1998, I received a call from David asking if he could submit a poster instead of giving a paper—his health had been bad and he had been diagnosed with kidney stones and was having a lot of pain. I said "sure," but that I would miss seeing him. I duly received a poster, very professionally organized, on his work with *Nathalis iole.*

Shortly before the meeting, I received another call from David. He informed me that he had been diagnosed with cancer, that it may have spread to his liver and other organs, and that he was facing a tough go. We cried a little, shared a couple more stories, and then I told him we were all pulling for him. At the time, I felt that that wasn't much to offer, so later I e-mailed him and told him the good wishes of his friends were sort of like fire support (artillery, air...military stuff) when one got in a jam—it might not be of direct benefit, but it sure could make you feel better. I called him one more time, after the meeting, to see how he was doing. He sounded pretty up-beat; and I was hopeful he could beat this thing. Sadly, that was not to be. The next communication I had was from his son, informing us that he had died.

This Society has lost a valued member, and I have lost a friend, known all too briefly. He will be missed.

Mike Toliver

Prof. Zdravko Lorkovic

(3 Jan. 1900-11 Nov. 1998) of Zagreb, Croatia. Dr. Lorkovic first joined the Society in 1955, and was elected an Honorary Life Member in 1980.

William D. ("Dave") Winter, Jr., M.D.

of Westwood, Massachusetts, on 15 Dec. 1998. Dave was a member of the Society since 1968, and served six years as our Secretary, from 1989 through 1994. He was also Editor of the News from 1980 to 1982, and a Member-at-Large of the Executive Council from 1979 to 1982. At the time of his death he was working on the final draft of the long-awaited **Lepidoptera Techniques Manual** to be published by the Society.

He also served as Vice-President of the Xerces Society and President of the Cambridge Entomological Club. Dave began his interest in Lepidoptera at the age of 10 when he began collecting in New Hampshire and New Jersey, the latter area under the guidance of Charles Rummel. Dave completed his medical education and established a pediatric practice in Boston. Devoting time to his practice and growing family, he later resumed his interest in Lepidoptera in 1964. His interests included collecting, life history, and photography of all Lepidoptera with a special focus on moths. Author of several papers, Dave co-authored the book **Butterflies and Moths** with his wife and former News editor, Jo Brewer, in 1986.

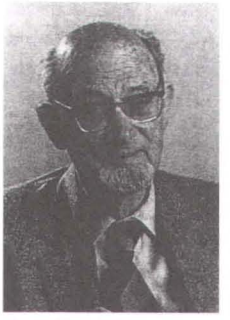
Always the observer, Dave was a fun loving guy, who caused quite a stir in the emergency room of the Boston Children's Hospital one September following a hurricane when he collected a specimen of *Erebus odora*. Most of all, Dave was a punster and will be missed for his dry wit and the proverbial twinkle in his eye. He is survived by his wife, naturalist writer Jo Brewer, and son Scott Winter.

Julian Donahue & Jackie Miller

Zdravko Lorkovic (1900-1998): a personal appreciation

Arthur M. Shapiro

Center for Population Biology, University of California, Davis, CA 95616



Prof. Dr. Zdravko Lorkovic at his 95th birthday celebration, November 1995.

Prof. Zdravko Lorkovic, the dean of European butterfly geneticists and evolutionary biologists, died November 11, 1998 in Zagreb, Croatia. His last two papers appeared in his 97th year. In a letter accompanying the reprints, dated 9 January 1998, he wrote me: "I send to you a couple of my short articles, cause I am not able to write a longer article any more. In spite of my 98 years I am still by my senses, only the memory has becam very weak...I have difficulties with my movability, for two years I have caught none butterfly!" This situation must have been very frustrating to "Lorki."

In 1978, the late Sydney Bowden sent one of my papers (on the hierarchical determination of phenotype in seasonally-polyphenic *Pieris napi*) to Lorkovic. I, of course, knew Lorkovic's work but had not had occasion to correspond with him. I was surprised to get a letter from him expressing polite incredulity that I had not cited his thesis; he had done similar work on *Pontia daplidice* in the 1920's! I had never heard of the paper. It was published in the scientific series of the Yearbook of the Royal University of Zagreb, in Croatian with a German summary. While I tried to track down a copy here—it wasn't easy—he found his last remaining copy and mailed it to me. It arrived just before Christmas 1978, accompanied by a charming letter that said, in part: "I feel content to live so long to see that I was discovered after 49 years, indeed!"

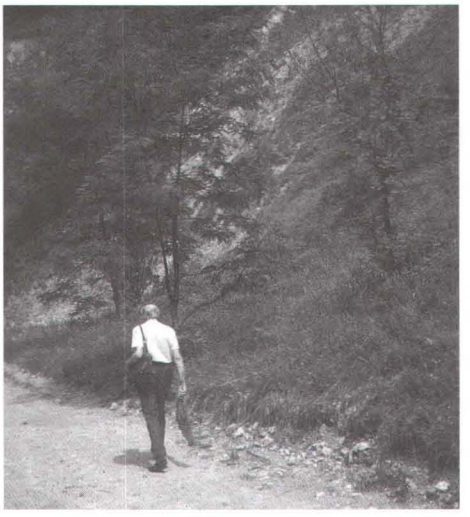
Thus began a fruitful and always enjoyable correspondence, conducted in English (though we could both handle German). Lorkovic wrote: "Excuse me, please, my bad English, this is a great handicap for me, because we old 'Austro-Hungarians' have begun to learn English just before or after the second war, to late to master a language if one is not a talent for languages. Nowadays I am lose many time while writing any thing in English, but if it is not in English it is as it was not written..." Lorkovic had indeed exactly duplicated my results on a different species 50 years earlier, and it turned out we had a lot to talk about. My wife ("Madame Adrienne," as "Lorki" called her in a courtly Austro-Hungarian manner) wanted to visit family in France in 1979 and we decided to make a side trip to Yugoslavia and visit Lorkovic who, after all, was not getting any younger.

We spent a delightful week in Croatia. "Lorki" and I talked genetics, evolution, ecology, and international scientific affairs. It was a fascinating time in Yugoslavia; the end of the Tito era was rapidly approaching. In Croatia in particular signs were everywhere that the federation, held together by Tito's personality, would outlast him but little. I don't think anyone grasped the potential horrors that awaited. In Zagreb, the movie houses had *Smokey and the Bandit* and *Breaker, Breaker*; on the funny little tramvej (trolley cars) even the standees were all reading Orwell's **Animal Farm**, which had just been published in Croatian for the first time. Even "Lorki," his friends and family were reading it. Despite the swirl of change outside, his apartment at III cvjetno naselje 25 seemed frozen in time before World War I; all was politeness,

genteel elegance, heirlooms and butterflies, the accoutrements of a long life well-lived.

The highlight of the visit was a hike up Mount Medvednica, accompanied by Eric von Mentzer. We stopped at an inn and dined on the terrace (my first exposure to cevapcice, pepper steak Croatian-style) with strolling musicians in attendance. It was a sultry Balkan afternoon. We counted 25 species, I believe, before black clouds and rolling thunder turned us back toward town. There were thousands of chestnut trees in bloom. It was a moment unstuck in time. Hitler, Stalin, Ante Pavelic, Tito all had never happened; it was just three guys with butterfly nets on a mountain on a thundery afernoon that could have been in 1879 or 1913.

We remained in touch. Lorkovic was one of the first Central Europeans to hop on the bandwagon of the neo-Darwinian synthesis, and he remained loyal to it. He was intensely interested in speciation. A superb technician, he particularly cared about karyology and the role of chromosomes in butterfly speciation. He lived to see tremendous changes in genetics. He was always "up" for a scientific squabble and was intensely proud of his own work—and of his distinguished ancestor Blaz Lorkavic, one of Croatia's leading 19th Century intellectuals, who was honored on a stamp by the newly-independent Croatia state in 1992. "Lorki" sent us a first-day cover.



Zdravko Lorkovic collecting above Pustidol, Coratia en route to Mt. Medvednica, July 1979. Age 79 years! Photo by Art Shapiro.

For his 95th birthday I sent him a color photo of the Hrvatski Dom (Croatian Club), one of the best old buildings in Punta Arenas in far southern Chile, with the Croatian and Chilean flags flapping side-by-side in the subantarctic breeze. Patriot that he was, we knew that he would enjoy that. There was a symposium in his honor in Zagreb, November 6-8, 1995. I was supposed to give a paper but, with the confusing and difficult conditions in the former Yugoslavia most of the foreigners who were scheduled to participate stayed away, myself included. He never mentioned it in his letters.

He was one of those rare people who could communicate the twinkle in his eye on paper. We will miss his annual New Year greeting, and after so many years it seem inconceivable that there will be no more reprints from him.

He is buried in Mirogoju Cemetery in Zagreb.

Announcement:

1999 Lepidoptera Workshop: Biology of Butterflies and Moths

Boyce Drummond

The Nature Place, P. 0. Box 167, Florissant, CO 80816

The annual Lepidoptera Workshop, at The Nature Place in Florissant, Colorado, will be held from June 27 to July 3, 1999. The Lepidoptera Workshop offers an exciting week of studying, observing, and photographing butterflies and moths in a fabulous mountain setting in central Colorado. Your instructors will be Drs. Boyce A. Drummond (Pikes Peak Research Station), Thomas C. Emmel (University of Florida), and Frederick W. Stehr (Michigan State University).

Montane and alpine meadows—carpeted with a rich array of wildflowers, alive with butterflies and moths, and surrounded by majestic mountain peaks in all directions—form the setting for this unique workshop. Almost 100 species of butterflies and over a thousand species of moths occur on The Nature Place property. Field trips to nearby alpine passes, subalpine meadows, foothill canyons, and desert shrublands provide spectacular opportunities for butterfly watching, diurnal collecting, and photographing, while nighttime hookups for ultraviolet and mercury vapor lights will bring in a rich diversity of Colorado's outstanding moth fauna.

Hands-on instruction will be offered on a variety of field and laboratory techniques, including: observation and interpretation of behaviors, butterfly gardening, breeding and rearing, monitoring and conservation, close-up field and specimen photography, and drawing and painting butterflies and moths and their habitats. With daily offerings of a selection of field trips and three full-time instructors, small groups and individualized instruction will be the norm for fieldwork and learning opportunities. The broad range of topics covered should interest both the advanced and beginning lepidopterist.

For a complete description of activities and facilities, and an application form, please write The Nature Place at the address above, call (719) 748-3475, or e-mail Boyce Drummond at ***bdrummond3@aol.com***.

The Lepidopterists' Bookshelf

M. Alma Solis, Editor

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 re-view copies directly to the Book Review Editor for consid-eration for review in the News or Journal. Members interested in re-viewing books for the News or the Journal should send their requests or interests to:

Dr. M. Alma Solis
Systematic Entomology Lab., USDA, c/o National Museum of Natural History, MRC 127, Washington, D.C. 20560, (202) 382-1785 (office), (202) 786-9422 (fax)

E-mail: ***asolis@sel.barc.usda.gov***

The Butterflies of Canada

by Ross A. Layberry, Peter W. Hall, and J. Donald Lafontaine. 1998.University of Toronto Press, vii + 280 pages, 32 color plates, 21.5 X 27.5 cm. Available from The University of Toronto Press, 5201 Dufferin Street, North York, ON, M3H 5T8, U.S. orders to Toronto Press, 250 Sonwil Drive, Buffalo, NY, 14225-5516. (Phone) 1-800-565-9523, (FAX) 716-685-6985. Price: Softcover, $30 CDN, ISBN 0-8020-7881-8; Hard cover, $100 CDN, ISBN 0-8020-0898-4.

The Butterflies of Canada is a wonderful and innovative book for several reasons. I was especially pleased with the excellent distribution maps, the color plates of specimens in the wild with habitat pictures, and the taxonomic treatment with clear explanations describing why some generic names were chosen over others.

The 293 species treated are all illustrated with good to great photographs of set specimens on 20 plates. Eighty of the species are also shown in the wild on ten separate plates with accompanying pictures of the habitats; these ten plates each represent an ecological zone of Canada. There are also two plates with 40 photos of immatures, mostly caterpillars.

Following the table of contents and acknowledgments, there are a map of Canada showing the country's life zones, a one-page introduction, and a three-page section on the history of butterfly study in Canada with some interesting iconography and anecdotes. For example, it reproduces the first document on which a Canadian butterfly, the White Admirable [sic], is illustrated.

The subsequent chapter is a concise yet comprehensive five-page account of Canadian geography and butterfly distribution, especially in relation to the last Great Ice Age. This is followed by useful one-page sections on butterfly observation and gardening.

Two pages discuss butterfly conservation. The authors state that habitat destruction is the major reason why some species are endangered. They also point out rightly that general butterfly collecting is not the cause for species loss. They mention which habitats are most threatened in Canada with examples of butterfly species associated with each. One Canadian endemic, an undescribed subspecies of the pierid *Euchloe ausonides*, restricted to Garry oak woodlands on southern Vancouver Island, is now considered extinct. In the second page of this section the latin name of the Tulip-tree, *Liriodendron*, is misspelled.

In one half-page the authors then explain what a butterfly is by mentioning their key diagnostic features and what makes them part of order Lepidoptera, class Insecta and phylum Arthropoda. The subsequent section covers Lepidoptera classification in one page. It outlines the hierarchy of the higher categories and puts the butterflies in their evolutionary context. In the first paragraph, the reader will note that Aglossata is misspelled.

Butterfly life-history is the subject of the following chapter. The authors provide the over-wintering stage as well as brief descriptions of the caterpillars and pupae for the main butterfly groups; unfortunately this is not complemented by references to the relevant color illustrations.

In my view, the Butterfly systematics section is one of the best features of this book; it explains in five pages what the concepts of genus, species and subspecies represent, and discusses why some generic names are preferable to others (for example, *Pieris* over *Artogeia* for *P. rapae* (L.)). The 12 generic names discussed are also shown in a table with the names Scott, Ferris, and Opler and Malikul used for them. These explanations in my opinion will help to diffuse the frustration that name changes sometimes generate. Finally, this section presents three new synonymies for species occurring across Beringia, described in

Russia in 1960, and redescribed in North America in the 1980s.

The main part of the book, the Species accounts, follows on 207 pages. This includes introductions for families and subfamilies, as well as for larger genera, with an emphasis on species-groups which are difficult to separate. Each species account comprises a Diagnosis, and sections with the following titles: Subspecies, Range, Similar species, Early stages, Abundance, Flight season, and Habits. In some cases additional information (on unique or doubtful records, for example) is given in a section titled Remarks. Each species account is accompanied by a detailed dot map showing the species' distribution in Canada. These were electronically generated with a database built from the data on the specimens of the Canadian National Collection (Ottawa) and those of a few private collections. Each map is cut in order to show only the region where the butterfly occurs. Hopefully, maps like these will become the norm in similar faunistic treatments. Such documents can be updated easily and made accessible on the WWW. This becomes more and more important as powerful tools are being developed to use distribution records of animals in plants in conjunction with other maps (of soil types, land ownership, etc.) in planning land use. If each collector wrote the latitude and longitude information on their locality labels, it would make their records more rapidly available, and thus, more valuable.

The species accounts are well written and concise. I have found only two misspellings of Latin names (*oxycoccus* [for *oxycoccos*] on p. 125, and *Oensie* [for *Oeneis*] on p. 232), and a few problems with the use of French names (such as the misspelled Matagami, on p. 59, Val-d'Or, on p. 214, and Jacques-Cartier, on p. 43, with the hyphen missing, or "lac Guillaume-Delisle", p. 46, "lac Albanel", p. 205, and "Parc des Laurentides", p. 224, with unnecessary hyphens; the latter in my opinion should have been translated into English as Guillaume-Delisle Lake, etc.). Chaleur Bay is mentioned correctly on page 217, but as Bay of Chaleur on p. 126. Also, Montréal and Québec should have come with accents, as in many English Canadian publications nowadays. Finally, I found three references not mentioned in the bibliography: Johnson (1976) on p. 140, Ferris (1977) on p. 127, and Ferris (1987) on p. 142. The species accounts are followed by a complete checklist, seven dubious species records with explanations, and the collecting guidelines of the Lepidopterists' Society.

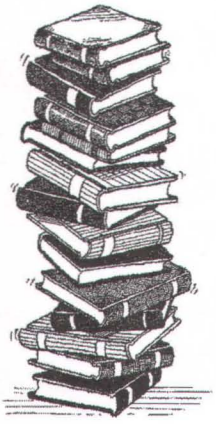
The book ends with an Appendix listing the Canadian locations mentioned in the text, with the addition of the latitude and longitude, a Glossary of 91 terms of butterfly morphology and habitat mostly, a Bibliography of 128 references mentioned in the text, and, to wrap it all up, an index of larval foodplants, and an index of butterfly names where the common, specific, generic, as well as family and subfamily names are listed. In the bibliography I have noted that the Crosson du Cormier title is incomplete.

As an excellent descriptive account of all the butterfly species in Canada, this book is certainly worth buying, especially considering its very low price. Moreover, **The Butterflies of Canada** offers an updated list of the species' latin names, and useful information on the proper generic names in several difficult groups. I strongly recommend it to anybody interested in butterflies of the Northern Hemisphere.

Bernard Landry

18, rue Washington, Aylmer, Quebec, J9H 4B9, Canada

Butterflies of New Jersey: A Guide to Their Status, Distribution, Conservation, and Appreciation



by Michael Gochfeld and Joanna Burger. 1997. Rutgers University Press. 330 pp., 17 black & white and 16 color illustrations, 13 figures, 18 tables. Available from Rutgers University Press, Livingston Campus, P.O.Box 5062, New Brunswick, N.J. 08903-5062, (Phone) 1-800-446-9323. Price: Paper, US $20.00. ISBN 0-8135-2355; Hardcover, US $55.00, ISBN 0-8135-2354-0.

As a child growing up in Doylestown, PA, I viewed New Jersey as the place we had to drive through to get to the beach. By the time I was a teenager, however, I joined the local chapter of the National Audubon Society and participated in their field trips to the Pine Barrens and other natural areas of New Jersey and discovered that what lay between Doylestown and the beach was actually a fascinating place. Today, because of Gochfeld's and

Burger's book, I want to return to explore and discover the rich butterfly fauna of an area that, as a child, I considered just a place to drive through.

A model for anyone wanting to publish a guide to observing and studying the butterflies of any given region (county, state, biome), the **Butterflies of New Jersey**, written by Michael Gochfeld and Joanna Burger, presents a plethora of facts and figures tailored to the common and not so common diurnal lepidopterans of the Garden State. Not reinventing just another field guide to butterflies, the authors put a great deal of effort into presenting important information on the geography, phenology, history (including human), and natural history as it pertains to New Jersey butterflies.

Extensive tables list everything from the dates and authors of original species descriptions to human population growth in New Jersey. Maps show climate patterns, glacial history, geologic bedrock, geographic and vegetation regions and subregions to augment the descriptive text throughout the book. A list of references posted at the end of the book, as well as an appendix devoted to references, gives readers other sources of information. Since this is not an identification guide there are few photographs illustrating species of butterflies, but those that are included have interesting life history or occurrence information in the captions. All of these features that one would not find in a standard butterfly identification guide make **Butterflies of New Jersey** a must for anyone wanting to observe and study the butterflies of New Jersey.

I have taught an adult education course on the local butterfly fauna of the Washington, D.C. area for the past nine summers and would have loved to have had a book comparable to **Butterflies of New Jersey** for the Washington, D.C. area for my students to use. A chapter devoted to butterfly distribution and censusing along with and appendix presenting sample data forms to make butterfly observation easier and more systematic are very helpful for students new to butterfly censusing and study.

For those heading to the Pine Barrens in search of interesting "herps", to Cape May or Brigantine for bird observation, or to the beach, I recommend obtaining a copy of **Butterflies of New Jersey** to help introduce one to a diverse butterfly fauna.

Nate Erwin

Insect Zoo, NMNH, Smithsonian Institution, Washington, D.C. 20560

Recently Published Books...

Systematics of Western North American Butterflies

edited by Thomas C. Emmel. 1998. Mariposa Press, Inc., 878 pp., 207 plates (51 in color). Available from Mariposa Press, Inc., 1717 N. W. 45th Avenue, Gainesville, FL, 32605, U.S.A. ISBN 0-9655370-2-1, $75.00 plus $4.95 shipping per copy.

This book consists of 73 chapters by 22 specialists in butterflies of the western U. S., Canada, and northern Mexico. It includes 2 species new to science, 11 new species from new name combinations, 210 subspecies new to science plus 15 new subspecies raised from synonymy. In addition to the 207 plates there are thousands of figures illustrating specimens, plus special habitats and life histories. All Boisduval, Lucas, Felder and other historic type specimens from California are illustrated and discussed in detail. This is a reference for lepidopterists, naturalists, conservationists, and institutional libraries.

Butterflies Through Binoculars, The East

by Jeffrey Glassberg. 1999. Oxford University Press, 242 pp., 630 color photographs. Available from Oxford University Press (after April), 198 Madison Avenue, New York, N.Y., (Phone) 212-726-6000, (FAX) 212-726-6447, **sah@oup-usa.org**, *website:* **www.oup-usa.org**. *ISBN: 0-19-510668-7, $18.95 (paper).*

This guide contains photographs of 300 species native to the eastern half of the United States and Canada. It illustrates butterflies in their natural settings with 630 color photographs arranged on 71 color plates. It provides adjacent color maps that show where and how long each species occurs in a given locality. It demonstrates how to identify subjects by the way of the key characteristics are likely to display in their own habitats, and supplies entirely new field marks for butterfly identification. It explains how to differentiate between males and females and shows how species can be recognized both from above and below. In addition, it provides readers with a complete account of flight times, ranges, and seasonal patterns. It gives advice on selecting binoculars, how to locate and

identify butterflies, and butterfly photography.

Hedylidae

by Malcolm J. Scoble in Heppner, J.B. (ed), Lepidopterorum Catalogus (New Series), fasc. 93. 1998. Assoc. for Tropical Lepidoptera & Scientific Publishers, 9 pp.1 plate of 12 black & white photographs of adults, 1 map. Available from Association for Tropical Lepidoptera, Inc., P.O. Box 141210, Gainesville, FL, 32614-1210, (Phone) 352-392-0479, (FAX) 352-392-0479, **jbhatl@aol.com**, *website:* **www.troplep.org**. *ISBN: 0-945417-66-7, free to members (paper), $2.50 (additional copies), $7.50 (non-members).*

The Hedylidae consists of 35 neotropical species now recognized in a single genus, *Macrosoma* Hübner. This work includes a world distribution map, a generic synopsis, an illustrated synopsis of species, a catalog of the species, references, a hostplant index, and indices to the species and genera. The close affinity of the Hedylidae to the butterflies (Papilionoidea and Hesperioidea) is discussed in the Preface.

Tineodidae

by John B. Heppner in Heppner, J.B.(ed.), Lepidopterorum Catalogus (New Series), fasc. 61. 1998. Assoc. for Tropical Lepidoptera & Scientific Publishers, 8 pp., 1 plate of 5 black & white photographs of adults, 1 map. Available from Association for Tropical Lepidoptera, Inc., P.O. Box 141210, Gainesville, FL, 32614-1210, (Phone) 352-392-0479, (FAX) 352-392-0479, **jbhatl@aol.com**, *website:* **www.troplep.org**. *ISBN: 0-945417-58-6, free to members (paper), $1.50 (additional copies), $4.50 (non-members).*

The Tineodidae consists of 10 Australian species now recognized in 7 genera. This work includes a world distribution map, a generic synopsis, an illustrated synopsis of species, a catalog of the species, references, a hostplant index, and indices to the species and genera. The close affinity of the Tineodidae to the Oxychirotidae is discussed in the Preface.

Ochsenheimeriidae

by Donald R. Davis in Heppner, J.B.(ed.), Lepidopterorum Catalogus (New Series), fasc 48. 1998. Assoc. for Tropical Lepidoptera & Scientific Publishers, 12 pp., 1 plate of 6 black & white photographs of adults, 1 map. Available from Association for Tropical Lepidoptera, Inc., P.O. Box 141210, Gainesville, FL, 32614-1210, (Phone) 352-392-0479, (FAX) 352-392-0479, **jbhatl@aol.com**, *website:* **www.troplep.org**. *ISBN: 0-945417-55-1, free to members (paper), $1.50 (additional copies), $4.50 (non-members).*

The Ochsenheimeriidae consists of 17 Palearctic species now recognized in 2 genera (recently accidently introduced into North America). This work includes a world distribution map, a generic synopsis, an illustrated synopsis of species, a catalog of the species, notes, references, a hostplant index, and indices to the species and genera.

NOTE: The numbering system for the families has been renumbered. Corrected pages noting the new number for fasc. 47, Epermeniidae by Reinhard Gaedike is now available (Epermeniidae was originally printed as fasc. 48 in 1996).

A Contribution to Riodinid Systematics (Lepidoptera: Riodinidae)

by Jason P. W. Hall (with other contributors Keith R. Willmott & Donald J. Harvey). Tropical Lepidoptera, November 1998, Volume 9, Supplement 1. Assoc. for Tropical Lepidoptera & Scientific Publishers, 42 pp., color plates of adults, black & white illustrations of morphological structures. Available from Association for Tropical Lepidoptera, Inc., P.O. Box 141210, Gainesville, FL, 32614-1210, (Phone) 352-392- 0479, (FAX) 352-392-0479, ***jbhatl@aol.com***, *website:* ***www.troplep.org***. *ISSN: 1048-8138 (journal), free to members (paper), $10.00 (additional copies), $18.00 (non-members).*

A collection of 4 articles on the Riodinidae: A review of the genus *Sarota* by J. P. W. Hall; Three new species of Riodinini from the cloud forests of Ecuador by J.P.W. Hall & K.R. Willmott; Nine new species and one new subspecies of *Euselasia* from Ecuador (Riodinidae); A new genus of riodinid, with a new species from Panama by J.P.W. Hall & D. J. Harvey.

Notes on Neotropical Skippers, Part 2

by various authors (see below). Tropical Lepidoptera, November 1998, Volume 9, Supplement 2. Assoc. for Tropical Lepidoptera & Scientific Publishers, 42 pp., color plates of adults, black & white illustrations of morphological structures. Available from Association for Tropical Lepidoptera, Inc., P.O. Box 141210, Gainesville, FL, 32614-1210, (Phone) 352-392- 0479, (FAX) 352-392-0479, ***jbhatl@aol.com***, *website:* ***www.troplep.org***. *ISSN: 1048-8138 (journal), free to members (paper), $10.00 (additional copies), $18.00 (non-members).*

A collection of 5 articles on Hesperiidae: Notes on *Piruna* in Western Mexico, with a descrip-

continued on pp. 24...

Membership Update...

Julian Donahue

This update includes all changes received by 11 February 1999.

"Lost" Members

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

Robin Bruhn (Vittsjo, Sweden); **Adam Miles Cotton** (Life Member: Chiang Mai, Thailand); **Terhune Dickel** (Anthony, Florida); **Jo Dickinson** (Bethesda, Maryland); **David L. Eiler** (North Manchester, Indiana); **Ronald J. Flaspohler** (Parchment, Michigan); **Helen Kruppenbacher** (East Durham, New York)

Corrections and Minor Changes to the 1998 Membership Directory

(make appropriate changes in Alphabetical List of Members):

Bagdonas, Karolis C. (Dr.): ADD "Box 2116" to address
Beck, John R., Jr.: change street number from "4032" to "4030"
Cock, Matthew J.W.: replace "Int. Institute of Biological Control" with "CABI Bioscience (Ascot)"
Crowe, Mary (Dr.): ADD "P.O. Box 261954" and change ZIP to "29528-6054"
Filiatrault, John G.: change street number from "4608" to "4600"
Fisher-Dahn, Deborah: change street address to "107 Howard Street"
Gochfeld, Michael: change street number to "170 Freilinghuysen Road" and ZIP to "08854-8020"
Hall, Terry E.: new postal code is "BS15 9UD"
Hatano, Renpei: new postal code is "421-0302"
Itoh, Takao (Prof. Dr.): new postal code is "374-8555"
Young, Michael E.: new ZIP Code is "09464-1325"

New/Reinstated Members, Part 1

Members who have joined, renewed, or rescinded their request to be omitted since publication of the 1996 Membership Directory. All were included in the 1998 Membership Directory, so they are listed here by name only.

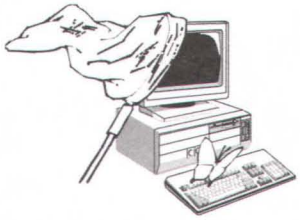
Bridgehouse, Derek W.
Brodkin, Henry M.
Bucheli, Sibyl
Cheyovich, Michele
Estadt, Lauren
Glassman, Janet
Pangemanan, Arthur A.
Petroske, Elizabeth
Priestaf, Richard Carl
Settele, Josef
Vaughan, Douglas
Wahlberg, Niklas
Wiley, Bruce E.
Yi, Tan (Dr.)
Ziaeian, Manoocher

New/Reinstated Members, Part 2

***NOT** included in the 1998 Membership Directory:*

Abbate, Renae (Miss): W18699 Lund Road, Strum, WI 54770-9330.
Armstead, Steve: 743 Gay Street, Longmont, CO 80501.
Beard, Brian M.: 108 Grand View Ave. #B, San Francisco, CA 94114-2732.
Berezhnoi, Yuri: The Butterfly Kingdom, Box 33, P.O. 071, 354 071 Sochi, **Russia.**
Brady, William (D.C.): 11888 Blue February Way, Columbia, MD 21044-4407.
Cassidy, Susan E.: 16321 Spangler Peak Road, Ramona, CA 92065-4242.
Chaves, Hugo Armando: 3370 Puerto Iguazu, Misiones, **Argentina.**
Churchill, Mark: 841 Burton Street SE, Grand Rapids, MI 49507-3319.
Clark, Dale: 10142 Estacado Drive, Dallas, TX 75228.
Curtis, Matt: 1091 Geneva Drive, Prescott, AZ 86305-4073.
Davidson, David: 7633 Loucks Street, York, PA 17403-9405.
Dion, Yves-Pascal: 271 Leo-T.-Julien, Charlesbourg, Quebec G1H 7B1, **Canada.**
Fields, Helen L.: 2441 Maretee Drive, Naples, FL 34114-3122.
Geiger, Hansjurg (Dr.): Zoologisches Institut, Universitat Bern, Baltzerstrasse 3, CH-3012 Bern, **Switzerland.**
Gleusteen, J.F.: Noorderpad 14, 1674-NR Opperdoes, **Netherlands.**
Haywood, Paulette: 4407 Briar Glen Circle, Birmingham, AL 35243-1721.
Heath, Alan: 209 Ringwood Drive, Pinelands, Cape Town, Western Prov. 7405, **South Africa.**
Hepperle, Amada V.: P.O. Box 1926, Waterloo, IA 50704-1926.
Hepperle, Donald E.: P.O. Box 1926, Waterloo, IA 50704-1926.
Herwitt, Richard E.: 401-B Chestnut Street, San Francisco, CA 94133-2301.
Hiller, Katie: Mt. Glorious Biological Centre, Mt. Glorious, Queensland 4520, **Australia.**
Holden, Larry: 509 North 12th Avenue, Marshalltown, IA 50158-2161.
Holmes, Philip: 18 Blaisdon Close, Menbury, Bristol BS10 7BW, **England.**
Holt, Margo: 68 Huron Woods Drive, RR4, Coldwater, Ontario L0K 1E0, **Canada.**
Hrabovsky, Sonia Pessoa: [address omitted by request]
Ikerd, Harold W., II: 611 North Locust Street, Denton, TX 76201-2901.

continued on pp. 30...



Out of the Net...

by Jim Taylor, ***1_iron@msn.com***

At the time of this writing (December 6) August 1999 seems a long way off. The forecast for South Georgia is for a temperature of near 80°F, and I plan on cutting grass tomorrow. LAST summer is not yet over here. Still, the just-received Winter 1998 edition of the NEWS reminds me the next annual meeting of our Society will be just a few months away when you read this.

Moths and Butterflies of Southeast Arizona

This morning I received an e-mail from Bruce Walsh, who is Associate Professor, Department of Ecology and Evolutionary Biology at the University of Arizona in Tucson, with the news that he is putting together webpages for both moths and butterflies of southeast Arizona. Since the annual meeting is to be held at Sierra Vista, Arizona, an area squarely in the middle of Bruce's area, you really should visit ***nitro.biosci.arizona.edu/zeeb/butterflies/mothlist.html*** for the moths, and ***nitro.biosci.arizona.edu/zeeb/butterflies/seazlist.html*** for the butterflies.

Bruce says "most" Sphingidae, Saturniidae, Mimallonidae, Apatelodidae, Lasiocampidae, and Arctiidae are covered, and he is working on the Geometrids. The moth URL includes a map of the area, written description of the habitats, and listings of the moths by Family. The pictures are large and clear. The butterfly site is constructed the same way, and it includes (per Bruce) 98% of all butterflies—including strays—found in the area.

The moth site has been open since August, 1998; the butterfly page opened October, 1995. I was visitor 134 to the moths and 3,454 to the butterflies. Even considering the longer time the butterflies have been available, it is clear we moth lovers are being out-peeked about three to one. C'mon, folks. Run Bruce's moth numbers up.

Lepidoptera and Some Other Life Forms: *www.funet.fi/pub/sci/bio/life/intro.html*

This home page begins with an explanation that the owner began the project as a means of displaying Finnish Lepidoptera on the web—and it obviously got out of hand. It has expanded into other life forms, including not only mammals, birds, and the like, but also plants.

Captain Kirk and Mr. Spock would be pleased to know there is included a "warp" page—a sort of index which ties together the bewildering array of check lists and alphabetical indices. If you visit this site, I strongly urge you to use the warp page.

For you skipper lovers, "Lepidoptera 5" on the warp page takes you to, among others, the Hesperioidea. A click on "Coeliades" produces a list of species within this genus and a map (world) of their occurence. A click on "C. forestan" and then, on the page which pops up, "Solanum auriculatum" takes you to the food plant, Nightshade. There is a map of its distribution and a listing of a gaggle of critters which feed on it.

To see what photographs are available, click "life-English-Photolist" on the home page. In addition to squirrels and geese there are 750 images of Lepidoptera. All this has been put together by a young man (there is a picture of him on his home page) named Markku Savela who lives in Finland. Impressive.

Go look.

UK Moths: *www.geocities.com/RainForest/Canopy/6658/*

This site was created and is maintained by Ian Kimber who lives in northwest England. His purpose is to encourage an interest in moths, and from the quality of his photographs, he should succeed. At present, his lists and photos cover his immediate area (Rochdale, Greater Manchester), but he intends to enlarge his collecting area.

His page includes a list of new additions to the photographs, a systematic moth list, a discussion of his photographic techniques and much, much more. The pictures are just about the best I have seen—and there are over 200 of them. I was visitor 1,449 since he started counting in June.

The Urban Gardener's Journal: *www.butterflies.com/journal.html*

As a concession to butterfliers and gardeners I include this site. While I'm not much on butterflies or gardening, I confess it makes fascinating reading, and the pictures are superb. This site is the saga of a butterfly gardener from the summer of 1995 to the present. His first garden was established in Orlando, Florida, and a move to Virginia in November, 1996, offered new challenges—in a new garden.

The Life of the Caterpillar: *eldred.ne.mediaone.net/jhf/cater.html*

The internet isn't just pictures; text—old text—can be found as well. How many of you read any and everything written by Fabre when you were a kid? Here at this site is one of his best books—all fifteen chapters and 373 pages of "The Life of the Caterpillar."

continued on pp. 31...

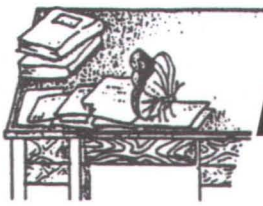
New Books...*cont'd. from pp. 21*

tion of a new species by A.D. Warren & L. González-Cota; A preliminary checklist of Guatemala butterflies Hesperiidae (Hesperioidea) by G.T. Austin, C. Mendez, & A. E. Launer; Hesperiidae of Rondônia, Brazil: *Anastrus* and *Tosta*, with descriptions of two new species (Hesperiidae: Pyrginae) by G.T. Austin; Hesperiidae of Rondônia, Brazil: Noes on *Talides* Hübner (Hesperiidae:Hesperiinae); Parasitization biology of a new species of Braconidae (Hymenoptera) feeding on larvae of Costa Rican dry forest skippers (Hesperiidae: Pyrginae) by D. H. Janzen, M.J. Sharkey, & J.M. Burns.

Classification of Lepidoptera, Part I, Introduction

by John B. Heppner. Holarctic Lepidoptera, November 1998, Volume 5, Supplement 1. Assoc. for Tropical Lepidoptera & Scientific Publishers, 148 pp. (+ index 6 pp), black & white illustrations of morphological structures. Available from Association for Tropical Lepidoptera, Inc., P.O. Box 141210, Gainesville, FL, 32614-1210, (Phone) 352-392- 0479, (FAX) 352-392-0479, **jbhatl@aol.com**, *website:* **www.troplep.org**. *ISSN: 1070-4140 (journal), free to members (paper), $18.00 + shipping ($2.00) (additional copies), $36.00 + shipping ($2.00), $36.00 (non-members).*

The classification of the Lepidoptera is summarized worldwide for the 124 extant families and their subfamilies, with keys to all families and illustrations of some of the basic morphological features. Common names are given for all recognized families. The evolution and phylogeny of Lepidoptera is summarized. Major literature references for the order and for faunal regions are given.



From the Editor's Desk

Phil Schappert

Finally. Another issue (beginning of a new volume), color even, is in the can. There's a certain sense of satisfaction connected with doing a good job but there's an overwhelming feeling of sheer relief just to be done!

As you can see from the below, the News will begin accepting commercial advertising—on topical subjects only. Have no fear, you won't be seeing ads for the newest sport utility vehicles or for the latest fad perfume. This is not to say that you won't ever find a scented ad in the News (given the outside chance that someone may want to advertise the newest moth pheromone!)

Our application for Periodical Nonprofit Postal Rates will be pending by the time you read this so you should start seeing, at least for domestic members here in the US, the News in your mailbox a little sooner after it's mailed. Unfortunately, I have not had enough submissions (or time!) to prepare for color covers on all four issues of the News and the Season Summary supplement for this year. Start planning now for the color issue in Volume 42!

Please take special note of the request for artwork for the cover of the **Journal** (see pp. 7) and remember, for those of you that are artistically inclined, that the **Journal** goes to letter size (same size as the **News**) with the coming volume so the artwork will be reproduced at a larger, more prominent, size.

Keep the stories, letters and photos coming...I enjoy them all and look forward to my trip to the mailbox. It's like everyday is Christmas...

Commercial Advertising Rates Set

The News will begin accepting paid advertising, for topical products only, with this volume. Submit all copy and payments to the editor. Receipts will be issued, if requested, by the Treasurer.

Rates are set based on 1/12 of a page (e.g. a 3 column layout with full, 3/4, 1/2 and 1/4 columns) or per column inch for commercial want-ads. Camera ready ads. must be 2.375" (6 cm), 4.875" (12.4 cm) or 7.375" (18.7 cm) in width for 1, 2, or 3 column widths respectively. Quarter height ads are 2.22" (5.6 cm), half height ads are 4.56" (11.6 cm), three-quarter height ads are 6.91" (17.5 cm) and full height ads are 9.25" (23.5 cm). These heights allow for a 1/8" (0.3 cm) gutter between advertisements.

Rates (all in US $) are $16 per 1/12 of a page for a single issue, $14 per 1/12 of a page for the same ad running in two consecutive issues, and $10 per 1/12 of a page for the same ad runnning in four consecutive issues. All advertisements will be printed in one color (black and white/greyscale). For example, a 1/2 page, 2 column ad will cover 4/12 of a page, be 4.875" x 4.56" (12.4 x 11.6 cm) in size and cost 4 x $16 ($64) for a single issue, 4 x $14 ($56) for two consecutive issues or 4 x $10 ($40) for four consecutive issues.

Commercial want-ads are also available for $7 per column inch (approx. 32 words, 6 lines). These are defined as any advertisement offering goods for sale under a company name. For example, John Q. Public, Inc. must buy want-ads but member J. Q. Public may advertise in the Members Marketplace for free. Note that Company names will no longer be allowed to appear in member's ads after the current ads expire.

The Marketplace

***IMPORTANT NOTICE TO ADVERTISERS:* If the number following your advertisement is "404" then *you must renew your advertisement* before the next issue! Remember that all revisions are required in writing.**

Books For Sale

Systematics of Western North American Butterflies, ed. by Thomas C. Emmel. This new book, published in December 1998, contains over 900 pages and covers much of the western fauna, reviewing many genera, describing many new species and subspecies (new to science and new name combinations). This book will be an indispensable reference for lepidopterists and libraries. Contains 73 papers and chapters authored by 22 specialists, 207 plates, 51 in color, habitat and life history details of many taxa, and important detailed discussions of all Boisduval, Lucas, Behr, Felder & Felder and other historic type specimens from California. Available directly from the publisher (check or money order, prepaid, $80 in the US, $85 international): Mariposa Press, Inc, 1717 NW 45th Ave., Gainesville, FL 32605. 411

Apollo Books is the leading European mail order bookseller specializing in insect books. We supply customers worldwide, amateurs as well as professional entomologists and institutional libraries, many of these in North America. Once or twice a year we produce a catalog with new and forthcoming entomological books, especially Lepidoptera, which also lists second hand and antiquarian books and journals. We are also well known publishers of high quality books on Lepidoptera including **The Lepidoptera of Europe**, **Noctuidae Europaeae** and **Microlepidoptera of Europe**. Ask for a free copy of the most recent catalog. Peder Skou, Apollo Books, Kirkeby Sand 19, DK-5771 Stenstrup, Denmark. Fax: +45 62 26 37 80. 411

Tired of playing with butterflies? Study the beautiful flower moths. Both diurnal and nocturnal species can usually be found resting in the blossoms of their food plants. All moths and those larvae know are illustrated in a **Monograph to the North American Heliothentinae** by David F. Hardwick, with 279 pages and 25 full-page color plates. Prices: Canadian: perfect binding, $70 + $10 S & H, hard cover, cloth bound, $95 + $10 S & H; U.S.: perfect binding, $50 + $10 S & H, hard cover, cloth bound, $70 + $10 S & H. Available from Ms. Julia Hardwick, 533 Highland Ave., Ottawa, Ontario, K2A 2J5, Canada. Please make checks payable to D.F. Hardwick. 411

E. W. Classey Ltd has been supplying Lepidoptera books to the worldwide entomological community for 50 YEARS. Our FREE catalogues, which are available on request, contain books-in-print, notifications of forthcoming publications, and Antiquarian and used books. We have a Lepidoptera Book

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 because 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 resolved 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 resticting 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.

Search service and are always interested in buying books, from single volumes to complete libraries. Peter Classey, E.W.Classey Ltd. Oxford House, Marlborough Street, Faringdon, Oxfordshire SN7 7JP, England. ***Bugbooks@classey.demon.co.uk*** Tel: (+44) 1367 244700 Fax: (+44) 1367 244800. 411

Seitz Mix and Match? I have partial and duplicate material for several volumes of Adalbert Seitz' **Macrolepidoptera of the World** (some English, some German, and some French edition material) and would like to exchange for or purchase portions I lack in order to complete my volumes, or sell duplicates to complete yours. Will also consider purchase of complete volumes, to complete my set. Please send collation and condition of what you can offer and/or what you need, and price if selling, to: Dr. Jack Levy, P.O. Box 83489, Los Angeles, California 90083, or call (310) 670-8434. 411

Lepidoptera Books published in China for sale: **Monograph of Chinese Butterflies** by Zhou Io, 854 pl., 5000 color photos, two vols. for $380. **Classification and Identification of Chinese Butterflies** by Zhou Io, 350 pp., 90 pl., $260. **Butterflies in Hainan Island, China** by Gu M-B, 355 pl., 700 color photos, $280. **Yunnan Butterfles** by Lee C-L *et al*, 152 pl., $180. **Insect Fauna of Henan, China-Butterflies** by Wang Z-G, 222 pp.,88 pl., $150. **The Butterflies of Beijing in Colour** (1994) by Yang *et al*, 128 pp., 44 pl., $60. **Butterfly Fauna of Zhejiang, China** by Tong X-S, 87 pp, 62 pl.,756 color photos, $48. All prices include mailing, send check payable to: Peng Z-L, 361# ERQI North Rd. Nanchang, Jiangxi, China. Tel & Fax +021-58743235, ***pengzl@public.nc.jx.cn***. 411

New: **Saturniidae Mundi - Saturniid Moths of the World** by B. D'Abrera, Vol. 3 now available, containing many spectacular Asian and Australian genera (£158 / c.$260). **Butterflies of Ceylon** by B. D'Abrera (£85 /c.$140). **Butterflies of Papua New Guinea** by M. Parsons (£185 /c.$305). **Living Butterflies of Southern Africa** by S. Henning et al. Vol.1: Hesperiidae, Papilionidae, Pieridae (£69 / c.$115). Due March 1999: **The Butterflies of Hong Kong** by M. Bascombe (£95 / c.$155). All prices + shipping. Free Catalog available (1,500 new, used and rare books on entomology). Ian Johnson (Pemberley Books), P.O. Box 334, Hayes, Middlesex, UB4 0AZ, England. Tel/Fax: +44 181 561 5494; ***ij@pembooks.demon.co.uk***; Website: ***www.pembooks.demon.co.uk***. 411

For Sale: **Monograph of the Geometrid Moths** by A.S. Packard, 1876; **Checklist of the Lepidoptera of Boreal America** by J. B. Smith, 1903; **On the Diurnal Lepidoptera of the Athabaska and Mackenzie Region, British Colombia** by M. Cary, 1906; **An Annotated List of the Butterflies of San Diego, CA** by W.S. Wright, 1930. M.C. Nielsen, 3415 Overlea Dr., Lansing, MI 48917, 517-321-2192. 405

One, like new, copy of the two volume set **Monographia Rhopalocerorum Sinensium** (Monograph of the Chinese Butterflies) in attractive slip case. This is the only comprehensive work available on Chinese butterflies. All species are illustrated life size in high quality color. A collector's item, will take highest offer (minimum $200). Wayne H. Whaley, 391 East, 1040 North, Orem, UT 84057, 801-222-8607 (work, leave message), 801-225-6684 (evenings). 405

Comstock, John A., **Butterflies of California**. Original issue. Rebound; in prime condition. Autographed by the author. With enclosure: 63 color plates updated to MONA. Make offer. Frank Sala, 3493 Greenfield Place, Carmel, CA 93923, 408-624-5677. 404

For Sale. Send for list of publications on Lepidoptera for sale. Enclose SASE. Dr. Eugene J. Gerberg, 5819 NW 57th Way, Gainesville, FL 32653-3257. 404

Color plates of **Butterflies of California** by J. A. Comstock, updated to MONA for identification. Color plates digitally reproduced, full size, better than original. 63 plates with ident. Loose-bound $120, on heavy stock $170. Firm-bound $160, on heavy stock $200. Field book size (5½" x 8½") $160, on heavy stock $200. Contact: Frank Sala, 3493 Greenfield Place, Carmel, CA 93923, 408-624-5677. 404

Discovering the Butterflies of Lassen Volcanic National Park (1998) by Laurence Crabree. Paper, 107 pp., 23 color plates, 9 text figures, 6 illustrations. Treats 106 species and includes full-color, life size photographs of 229 butterflies and 14 day-flying moths. Obtain from Hilltopping Publications, Box 79, Chester, CA 96020 for $11.95 + $0.86 tax and $2.00 shipping (total: $14.81 USD). 404

Livestock

Wanted: Pupae of Sphingidae. Stefan Mikus, F.-Otto-Schott-Weg 20, 31319 Sehnde, Germany. ***stefan.mikus@nordlb.de***. 411

Wanted: Livestock of *Phyllodesma americana* for research on larval parasitoids. Ova for spring 1999 preferred, but overwintering pupae also suitable. Will buy or trade for western North America papered specimens. Chris Schmidt, Dept. of Biol. Sciences, University of Alberta, Edmonton, Alberta, Canada. T6G 2E9. ***schmidt@odum.biology.ualberta.ca***. 411

For sale or trade: Late spring/early summer ova of *Hyalophora cecropia*, *Antheraea polyphemus* and *Actias luna*. Will trade for ova of *Actias selene*, *Attacus atlas*, *Antheraea harti*, *A. pernyi*, *A. mylitta*, and *Argema mittrei*. Will also considera ova of *Hyalophora gloveri* and *H. euryalus*. Send SASE or $1.50 USD for prices, or offers for trade, to Russell Granata, 114 Commonwealth Ave., Buffalo, NY 14216-2308. 411

Cocoons and pupa for Spring 1999: *Actias luna*, *Antheraea polyphemus*, *Samia cynthia*, *Hyalophora cecropia*, *Automeris io*, *Callosamia promethea*, *Papilio glaucus*, *P. troilus*, *P. polyxenes asterius*. Send SASE to: Don Oehlke, c/o P.O. Pottersville, NJ 07979, 908-439-2462. 405

For Sale or Trade: ova of *Catocala palaeogama*, *C. cerogama*, *C. neogama*, *C. ultronia*, *C. meskei*, *C. grynea*, *C.*

mira, *C. minuta*, *C. aholibah*, *C. ilia*, *C. ilia* "zoe", *C. obscura*, *C. residua*, *C. amatrix*, *C. cara*, *C. innubens*, *C. piatrix*, *C. robinsoni*. SASE please to: Jim Mouw, 245 Sarah Avenue, Iowa Falls, IA 50126. 405

Livestock available: Cocoons of *Actias luna*, *Automeris io*, *Callosamia promethea*, *Hyalophora cecropia*, *H. columbia*, and *Samia cynthia* available fall and winter 1998. Also pupae of *Papilio p. asterias*, *P. glaucus*, and *P. troilus*. Send for free price list to Bill Oehlke, Box 476, Montague, P.E.I., Canada, C0A 1R0, Email: ***oehlkew@montagueint.edu.pe.ca***, website: ***www3.pei.sympatico.ca/oehlkew***, fax: 902-838-0866; phone: 902-838-3455. 405

For sale or exchange: Large selection of Iranian butterflies, perfect quality, with data. All *Louristana* sp., *Hypbushirica*, *A. apollinaria*, *Colias sagartia*, *C. cholorocoma*, *C. aurorina*, *C. thisoa* ssp. *shahkuhensis*, *Euchloe*, Papilionidae, *Agrodiaetus* and more. Many species from other families at fair prices; local or rare species that are allowed for exchange. Exchange or buy other kinds or pupae for breeding. I need any breeding information you can provide. Also, local beetles and dragonflies, books. Please send me your collection list or write for extensive price list to A. Karbalaye, P.O. Box 11495-175, Tehran, Iran. Fax: 0098-21-7531604 404

Wanted: overwintering pupae of *P. zelicaon*, *P. polyxenes*, *P. oregonius*, *P. bairdii*, *P. kahli*, *B. philenor*, *P. xuthus*, *P. bianor*, *P. maackii* and others. Robert Keiser, Adh Borinstraat 36, 2070 Zwinjndrecht Belgium 404

For Exchange Only: Larva or pupa of *Empyreuma affinis*, *Syntomeida epilias jucundissima*, *Composia fidelissima*, and *Eumaeus atala florida* in exchange for other species of Arctiids and Sphingids. Leroy C. Koehn, 6085 Wedgewood Village Circle, Lake Worth, FL 33463-7371; Tele: 561-966-1655; ***Leptrap@aol.com*** 404

Wanted: to exchange butterflies and macro moths with interested people from other countries. I'm also interested in live material. Manuel Carrasco Gonzlez Bda Andaluca, Bque 5-5 C 11540-Sanlcar de Bda, ***jcuberog11@ocefss. ucm.es*** 404

Will buy ova or pupae of Calleta Silkmoth, *Eupackardia calleta*; Black Witch, *Ascalapha odorata*; Giant Leopard Moth, *Ecpantheria scribonia*. Steve Greenfield, 1810 Marbury Lane, Albany, GA 31707, ***clayspot@aol.com*** 404

For Sale: Overwintering coccoons of *Actias luna*, *Automeris io* and *Callosamia promethea*. SASE for prices. Larry J. Kopp, RD 1, Box 30, Klingerstown, PA 17941-9718. 404

Pupae of *Saturnia walterorum*, *Hyalophora euryalus*, *Annaphila decia* for sale. SASE to Frank Sala, 3493 Greenfield Place, Carmel, CA 93923, 408-624-5677. 404

Specimens

For sale/exchange: Butterflies from Tibet, esp. species and subsp. of Parnassiinae (*P. hide*, *P. imerator*, *P. acco*, *P. acdestis*, *P. szechenyii*, *P. schultei*, *P. cephalus*, etc.), Pieridae, and Satyridae of finest quality. Discounts as much as 25%. Posted by registered airmail and packaged free of charge. For price list and information contact: Stanislav Kocman, Horymirova 4, Ostrava 3, 700 30, Czech Republic, Europe. Tel./Fax: +420 69 345538. 411

For sale: Lepidoptera: Rhopalocera from France, Spain, Japan, Italy, and Turkey. Coleoptera from France, Spain, China and Russia. For lists contact Pierre Robert, 1 Ave., Georges Guyemer, 64110 Jurançon, France. 411

Offered: Papilionidae, *Charaxes*, *Euphaedra*, *Cymothoe*, etc. from the Republic of Central Africa and Burundi. Giancarlo Veronese, Viale Venezia n. 138, I-33100 Udine (Italy). Tel: 0432-232754, Fax: 0432-232654. 411

Wanted: *Charaxes* from East Africa and the South African Republic, as well as *Charaxes* and *Polyura* from the Philippines and Indonesia (exchange or purchase). Giancarlo Veronese, Viale Venezia n. 138, I-33100 Udine (Italy). Tel: 0432-232754, Fax: 0432-232654.411

For Sale: Lepidoptera from many countries: Australia, Papua-New Guinea, Solomon Islands, Indonesia, South America, etc. Specimens include Papilionidae, *Delias*, *Charaxes*, etc. Australian government CITES permits supplied where necessary. Free price list. Specials: *Ornithoptera allottei*—one specimen only (make offer); *Graphium orsaki*—a totally new species of *Graphium* similar to *G. stressemani*. Recently discovered in New Ireland. A very few paratypes available. David Hall, 6 Rule St., Cambridge Park, N.S.W. 2747 Australia. Tel/Fax: +61 247 312 410. 411

For sale: Butterflies, moths and other insects from the tropical regions of the world. Many bred pairs of unusual butterflies from El Salvador as well as collectors' items with data for private collections, museums and schools. Request a catalog with color illustrations for $5 refundable with first order. Please mention the Lepidopterists News when replying. Miguel Serrano 6823 Rosemary Drive,, Tampa FL 33625 411

Serving Lepidopterists since 1976. Many unusual specimens from Neotropics, Africa and Indo-Australia regions. Many bred or ranched specimens! Just mail US$1 (cash or stamps) for our new 12-page catalog to: Simon Ellis, Apartado 6951, 1000L San Jose, Costa Rica 411

Wanted: Collector or wholesale seller from Mexico, Guatemala, Honduras, Nicaragua, Panama, Colombia, Ecuador and Caribbean Islands. I am interested in buying or exchanging for butterflies and moths from these countries or areas. Manuel del Pino Gamiz, C/. Padre Santonja 15-7, 46920 Mislata, Valencia, Spain, phone/fax: +34+96 +3501009. 405

Fine, quality butterflies, live pupae, dried and papered butterflies, moths, beetles, mantids, stick insects large and small, etc. A-1 quality. Leodegario Layron, c/o Mogpog Post Office, 4901 Mogpog, Marinduque, Philippines, phone: 042-332-1558, fax: 042-332-2092. 405

For sale: Saturniidae, Sphingidae, all other familes of Lepidoptera, Coleoptera

and other insects from Paraguay. Papered with full data. Live ova of Saturniidae, possibly pupae/cocoons. For lists, contact: Ulf Drechsel, Gral. Aquino 694, Asuncion, Paraguay. 405

For exchange: Wisconsin leps. and Mexican (via E. C. Welling, ca. 1920) for other US or Caribbean. SASE for list. George F. Holbach, 1549 N. Lynn Rd., Adell, WI 53001. 404

For exchange: Detroit area collector wishes to exchange for US or Canadian species. Quantities are strictly limited but requests will be noted. All specimens with complete data. For more information and availability, contact Donald Starkey, 41226 Marjoran, Sterling Heights, MI 48314. 404

Equipment

For sale: Entomological pins of the highest quality. Price is approx. $1.80 for 100 pieces. Send for list, pin sample and information to: Stanislav Kocman, Horymirova 4, Ostrava 3, 700 30, Czech Republic, Europe. Tel./Fax: +420 69 345538. 411

For Sale: Light traps, 12 volt DC or 110 AC with 15 watt or 20 watt black lights. The traps are portable and easy to use. Rain drains & sorting screens protect specimens from damage. Free brochure and price list available. Also, custom built light traps and light fixtures: Mercury vapor, black light & black light dark in 15, 20 & 40 watt, and sun lamps. Together or in combination. Electrical controls, photoelectric switches, rain drains and sorting screen. Will design enclosures and include enclosure plans with purchase of fixture. To obtain a quote, your specifications are required. For information, contact: Leroy C. Koehn, 6085 Wedgewood Village Circle, Lake Worth, FL 33464-7371; Tele: 561-966-1655; ***Leptrap@aol.com*** 404

Help Needed

Reward for information leading to the purchase of the Annals of the Entomology Society of Philadelphia, Vol. 1-6, 1861-1866. Contact: Richard O. Bray, Project Director, Rocky Mountain Butterfly Project, 5613 McLean Dr., Bethesda, MD 20814. Tel: 301-652-0387, ***mtlep@earthlink.net***. 411

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. 404

Help Offered

Wish to collect legally in Costa Rica? Whether you decide to visit Costa Rica for pleasure 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 from the north (Mexico) or the south (South America). Contact: Miguel E. Chumpitasi, P.O.Box 1106-2150, Moravia, San Jose, Costa Rica or phone/fax (506) 236-1447, ***echump@sol.racsa.co.cr***. 411

Extraordinary stamps issue of 10 stamps with the following butterflies: *Caligo memnon*, *Morpho peleides*, *Papilio thoas*, *Siproeta stelenes*, *Ascia monuste*, *Parides iphidamas*, *Callicore pitheas*, *Danaus plexippus*, *Historis odius* and *Smyrna blomfildia*. The mail office estimates that the issue will last up to November. The price for the 10-stamp set placed in deluxe cardboard is $6 USD plus $2.50 USD for air delivery (USA or Canada) or plus $4 USD for Europe. Contact: Miguel E. Chumpitasi, P.O.Box 1106-2150, Moravia, San Jose, Costa Rica or phone/fax (506) 235-5160. 404

Miscellaneous

For Sale: Small amount of dormant rootstock of *Aristolochia clematitis* (very hardy winter plant) and seeds of *Coronilla varia* (crown vetch), *Medicago sativa* (alfalfa, Lucerne), *Rumex hydrolapathum* (great water dock), a few others and annual flower and grass mix. SASE to Randy Robinette, 7302 Midland Trail Rd., Ashland, KY 41102-9294. 404

Texas Butterfly Checklist Project

Joseph F. Doyle

13310 Bar C Drive, San Antonio, TX 78253

I am requesting records for an Annotated Checklist of the Butterflies of Texas by county and botanical region. These will be compiled with data on known larval hostplants in Texas, diapause, abundance and special habitat information. State maps with county outlines will be used for range and occurrence illustrations. Please submit authentic records by scientific name (genus, species, subspecies) following the Checklist of Butterflies of North America North of Mexico by Clifford D. Ferris (Lepidopterists' Society Memoir No. 3, 1989) or latest revision. Include sex, number of examples, location, county, date of capture, collector (if other than submitter), location of specimen, and specimen identifier if other than submitter. Please feel free to add any notes applicable to any of the categories above, including life history observations. Contributors will be credited for any notes provided.

This work is planned for publication, in both printed and a computer-based medium, in five years. Please do not send records that have already been published – records that are not publicly available would be the most valuable and needed. Please help us to update an endeavor initiated by Roy Kendall and H. A. Freeman. With your help we will have a valuable tool for the future pursuit of knowledge and understanding of the butterflies of Texas.

Deciduous Scales on Satyrine Legs

Andrei Sourakov

Dept. of Zoology, University of Florida, Gainesville, FL 32611

The presence of deciduous scales in some myrmecophilous lycaenids is a well known phenomenon. Ants, attacking a freshly emerged butterfly, are left with these deciduous scales in their mandibles, while a butterfly escapes from ant's nest.

In other families of Lepidoptera, deciduous scales could also be observed, although their function there is less obvious. For instance, in clearwing sphingids of the genus *Hemaris*, the freshly emerged adults at first have wings, coated with dark scales (pers. observ.). These scales come off with the first flight, exposing the clear membrane.

My project on phylogeny of the genus *Calisto* Hubner (the sole satyrine genus found in the Caribbean) involves rearing of every species in the genus in order to compare their immature stages. When I recently raised *Calisto nubila* Lathy, the only satyrine of Puerto Rico, I noticed that legs of a freshly hatched adult are colored white. I had not previously observed such feature in any species of the genus, *C. nubila* included.

Under the dissecting microscope the coating proved to be composed of white, slightly translucent scales. These scales came off with every movement of the butterfly, and were gone within a few hours of the butterfly's life.

Thus, I pose a question: what is the function of the above scales? Are they a mere atavism, originally functional in some myrmecophilous ancestor, or they have a purpose (e. g., facilitating the eclosion of a butterfly from its pupa)?

Fig. 1. Calisto nubilla, *freshly emerged and still bearing a coating of white scales on its front legs. Photo by Andrei Sourakov.*

Fig. 2: *Close-up photograph of the scaled legs of* Calisto nubilla. *Photo by Andrei Sourakov.*

Anti-predator Behavior of a *Battus philenor* (Papilionidae) Caterpillar

A photo sequence of a Pipevine Swallowtail, *Battus philenor*, caterpillar showing the intriguing anti-predator response of some Papilionid larvae. The sequence (left to right) shows the larva feeding on a flower of the local central Texas hostplant, *Aristolochia erecta*. Upon being "tickled," the larva everted its osmeteria. With repeated touchs it "reared" up, then angled its head to point at the predator (the photographer in this case!) presumably to ensure that the predator gets a good strong sniff of the foul osmeterial secretion. I did. Photos by Phil Schappert.

Members...*continued from pp.22*

Janzen, Daniel (Dr.): Department of Biology, University of Pennsylvania, Philadelphia, PA 19104.
Johnson, Wanda A.: 1875 Fontanelle Road, Fontanelle, IA 50846-8060.
Kemp, Darrell: Dept. of Zoology, James Cook University, P.O. Box 6811, Cairns, Queensland 4870, **Australia.**
Kleintjes, Paula (Ph.D.): Dept. of Biology, University of Wisconsin, Eau Claire, WI 54702.
Kreusel, Boris: Anemonenstrasse 11, D-70771 Leinfelden, **Germany.**
Lambillotte, Dave: 3466 Corte Sonrisa, Carlsbad, CA 92009-9341.
Layron, Grelando L., Jr.: A-1 Insect Trading, P.O. Box 6, Boac, Marinduque 4900, **Philippines.**
Layron, Lany L.: A-1 Insect Trading, P.O. Box 6, Boac, Marinduque 4900, **Philippines.**
Leen, Rosemary: USDA – Forest Service, Quarantine Facility, P.O. Box 236, Volcano, HI 96785-0236.
Monroe, Gene: 13780 North Saint Vrain Drive, Lyons, CO 80540-9034.
Mudge, Donald P.: P.O. Box 395, Rye, NH 03870-0395.
Nickles, Elizabeth P.: 9333 NY Highway 66, Wynantskill, NY 12198-3018.
Nielsen, Gregory James: Apartado Aereo 2514, Villavicencio, **Colombia.**
Oliver, Jeff: 800 Adams Street, Apt. 15, Davis, CA 95616-3241.
Pagels R., Olaf: Apartado 14, 4059 San Pedro de Poas, **Costa Rica.**
Prudic, Katy: 800 Adams Street, Apt. 15, Davis, CA 95616-3241.
Quinn, Michael A.: 1708 Hunt Avenue, Donna, TX 78537-2924.
Rumpsa, Paul: 214 Ulmer Drive, Circle Pines, MN 55014-1228.
Sato, E.: Kaminoge 3-3-11, Setagaya-ku, Tokyo 158-0093, **Japan.**
Sauer, Leslie: Andropogon Associates, Ltd., 374 Shurs Lane, Philadelphia, PA 19128.
Schleyer, Axel (Ph.D.): 34 Vernon Street, San Francisco, CA 94132-3039.
Schumacher, Jeff: 1030 1st Street, Brookings, SD 57006-2219.
Soe, Tetsutaro: 1115 Roscoe Street, Green Bay, WI 54304-3338.
Sutherland, Donald A.: Natural Heritage Information Centre, 300 Water Street, 2nd Floor N., P.O. Box 7000, Peterborough, Ontario K9J 8M5, **Canada.**
Sylvestre, Jonathan: 335 St-Albert, C.P. 137, Manseau, Quebec G0X 1V0, **Canada.**
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Karl Jordan Medal Award

Dr. Jacqueline Y. Miller

Allyn Museum of Entomology, Florida Museum of Natural History, 3621 Bay Shore Road, Sarasota, FL 34234

The Karl Jordan Medal Award is given by the Lepidopterists' Society in recognition of outstanding original research in lepidopterology with emphasis on the fields of morphology, taxonomy, zoogeography, and "natural history." The Award consists of the Karl Jordan Medal, $1,000 cash prize, and limited meeting expenses. The recipient also delivers a noteworthy address at the Annual Meeting.

This award was established in 1973 in honor of Dr. Heinrich Ernst Karl Jordan, one of the original Honorary Life Members of the Society and a Honorary Fellow of the Royal Entomological Society of London. Although he was primarily a taxonomist, Jordan actually was the consummate zoologist. During his lifetime, he published more than 450 papers, and it is impossible to detail here the impressive scope of his work. Most noteworthy are his extensive revisionary studies on Coleoptera (especially the Anthribidae) and Lepidoptera (particularly the monographs on the Papilionidae and Sphingidae). He also revised the Siphonoptera and completed much of work on the economic and medical significance of the order. Jordan was also an internationalist and took a leadership role in the development and foundation of the international congresses. Last but not in the least, Jordan played a significant part in the establishment of the International Commission of Zoological Nomenclature of which he was an Honorary Life President. Despite the above extraordinary accomplishments, Dr. Jordan was always approachable by young entomologists and willing to discuss new ideas.

The procedures and criteria for awarding the Jordan Medal are published elsewhere (J. Lep. Soc., 26: 207-209), but briefly published work(s) are nominated and submitted to the Karl Jordan Committee for evaluation. The Committee will review publications from the list of nominated candidates. The award is only given by unanimous vote and is presented for original research on Lepidoptera, not for a compilation of previously published information. The award may be based on a single research publication or on a series of interrelated works.

Nominations for the Jordan Medal would be appreciated and can be forwarded to Karl Jordan Medal Award Committee at ***jmiller@virtu.sar.usf.edu***, or at the address above.

The Society is in the process of establishing endowments for Karl Jordan Medal and the Harry K. Clench Student Award. Forward your tax deductible donation for either of above award endowment funds (please specify) to the Treasurer, Dr. David Iftner, 8 Alpine Trail, Sparta, New Jersey 07871.

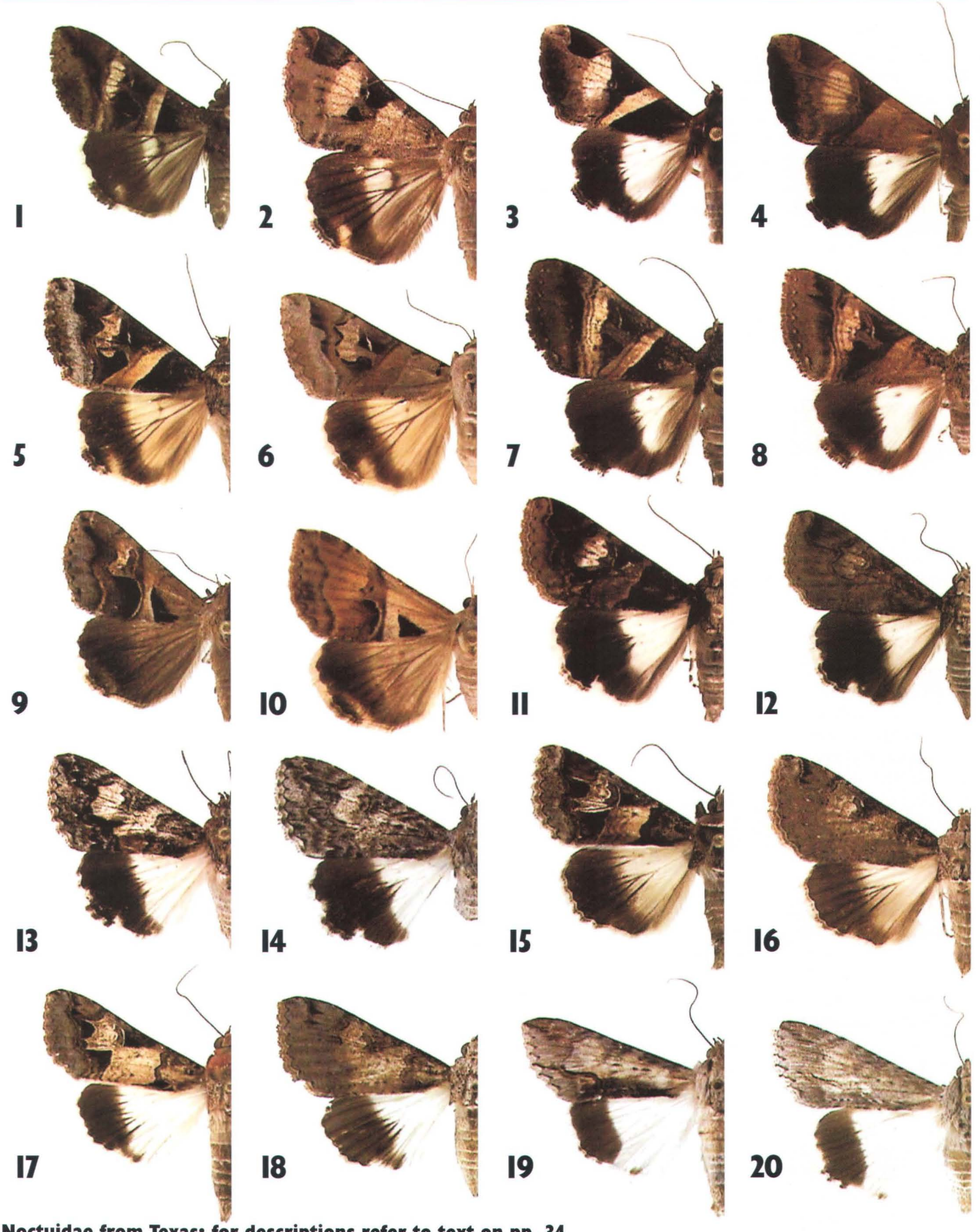
Net...*continued from pp. 23*

It helps you remember what started you in what others view as a strange obsession.

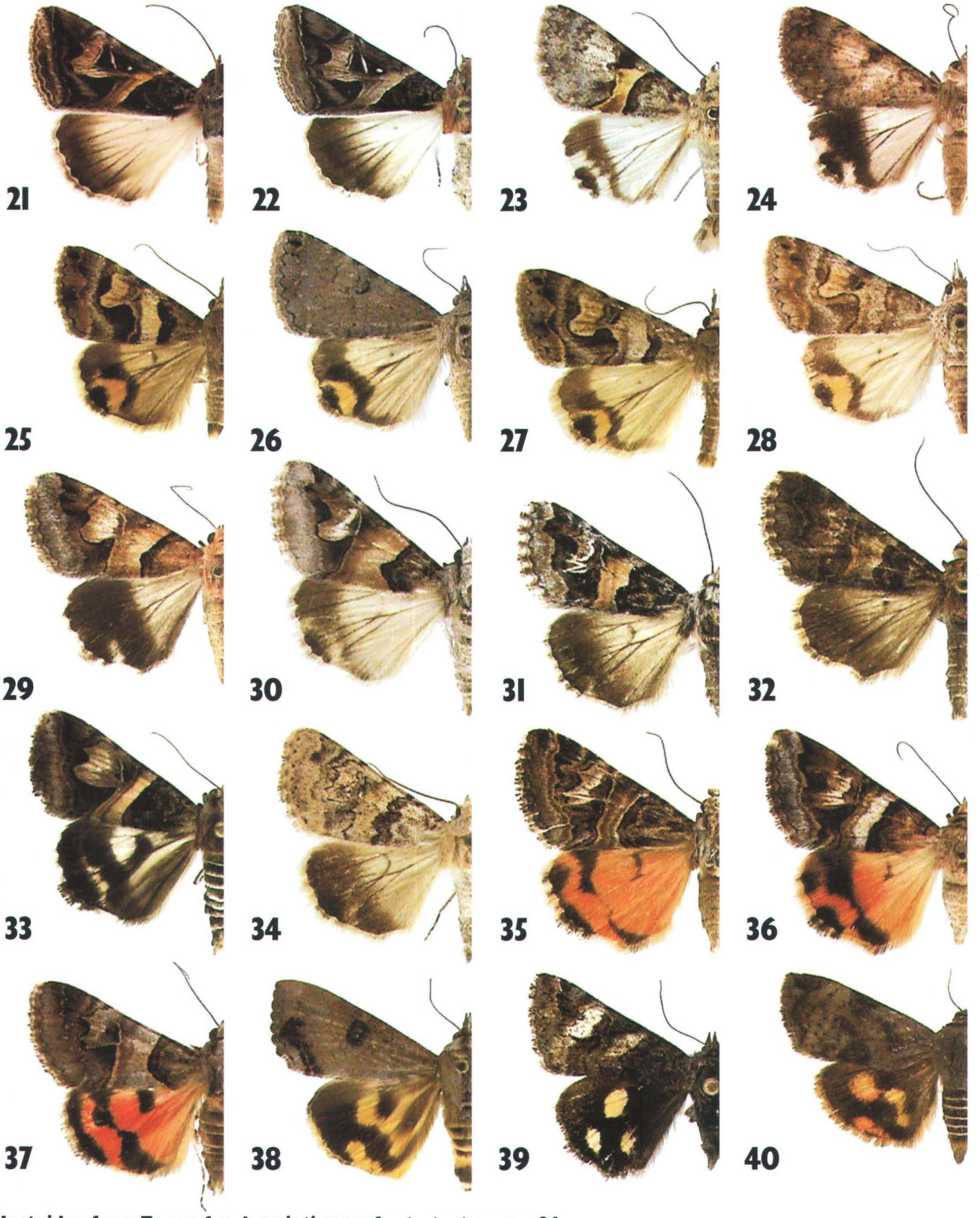
A Truly Awesome Picture: *bvsd.k12.co.us/schools/coalc/Pages/Chris_pussmoth.html*

Finally, since I have mentioned great pictures several times, go here for a truly awesome picture of a puss moth. Pay particular attention to the tarsal detail.

'Til next time.



Noctuidae from Texas: for descriptions refer to text on pp. 34



Noctuidae from Texas: for descriptions refer to text on pp. 34

Noctuideae from Texas: The genus *Melipotis* and related or similar genera

Charles Bordelon Jr. and Ed Knudson

8440 Washington, Beaumont, TX 77707 and 8517 Burkhart, Houston, TX 77055

All figure numbers refer to color plates on pp. 32-33 of this issue.

Melipotis perpendicularis (Gn.) fig 1: male; fig. 2: female. Similar to *M. januaris* from FL, larger, with PM line extending above cubital vein. Range: Southern TX into Mexico, occasionally north to Houston.

Melipotis fasciolaris (Hbn.) fig.3: male: fig. 4: female. Range: Southern TX, occasionally migrates northward to NE TX, also FL and Gulf coast.

Melipotis indomita (Wik.) fig.5: male; fig.6: female Most common species in TX, occurs throughout state, west to CA, east to FL.

Melipotis mgrobasis (Gn.) fig.7: male: fig.8: female. Range: Extreme S. TX into Mexico. *Melipotis cellaris* (Gn.) fig.9: male: fig. 10: female. Range: Southern half of state, occasionally northward, and Gulf coast to FL.

Melipotis famelica (Gn.) fig. 11: male; fig. 12: female. Resembles *M. contorta* (FL). Range: Mainly extreme S. TX, occasionally northward.

Melipotis jucunda Hbn. fig 13: male; fig. 14: female. Range: Eastern USA. W. TX forms more contrasting in pattern.

Melipotis novanda (Gn.) fig. 15: male: fig 16: female. Range: SW USA, to extreme S. TX.

Melipotis agrotioides (Wlk.) fig 17: male: fig 18: female. Similar to preceding, larger pale patch on mid inner margin on FW. Usually reddish thorax; fringe entirely white. Range: Extreme S. TX.

Melipotis acontioides (Gn.) fig. 19: male: fig 20: female. Range: Throughout most of TX, except extreme east, along gulf coast to FL.

Note: 10 species of Melipotis *are found in Texas. The mainly Floridian species* M. prolata, M. contorta, *and* M. januaris *have not been found in Texas as yet. There are several other related genera in Texas that closely resemble* Melipotis *in outward appearance. These are illustrated below.*

Ianius mosca (Dyar) fig. 21 :male; fig. 22: female. Range: Western TX into AZ. *Forsebia perlaeta* (Hy.Edw.) fig. 23: male; fig. 24: female. Range: SW TX into Mexico.

Bulia deducta (Morr.) fig. 25: male; fig. 26: female. Range: Throughout TX. One of the most abundant moths in SW and Central TX.

Bulia similaris Rich. fig. 27: male; fig. 28: female. Range: Western TX to CA. Not as sexually dimorphic as preceding.

Drasteria pallescens (G&R) fig. 29: male (This and remaining sp. not sexually dimorphic) Range: Most of TX, except extreme east and coast.

Drasteria fumosa (Stkr.) fig. 30: male. Range: West TX into AZ.

Drasteria sabulosa abrupta (B&McD). fig. 31: male. Range: SW TX into AZ.

Drasteria sabulosa sabulosa Hy. Edw. fig 32: male. Range: Davis Mts. of TX into CO.

Drasteria grandirena (Haw.) fig. 33: male. Range: Eastern US including E. TX.

Drasteria inepta Hy. Edw. fig. 34: male. Range: West and North TX. into CA, quite variable, form shown is one of the better marked examples seen.

Drastena mirifica klotsi Rich. fig. 35: female. Range: Texas Panhandle northward.

Drasteria howlandi (Grt.) fig. 36: female. Range: SW TX into AZ.

Drasteria ingeniculata (Morr.) fig. 37: male. Range: NE and Central TX into OK.

Hypocala andremona (Cram.) fig. 38: male. Range: South TX. Regularly migrates northward in Autumn. Often found at flowers during the daytime.

Litocala sexsignata (Harv.) fig. 39: female. Range: West TX (rare) to CO and CA. Strictly diurnal, it resembles a skipper in flight.

Hyblaea puera (Cram.) fig 40: male. Family Hyblaeidae (*not* a noctuid). A pan-tropical species recently discovered in Cameron Co., TX. Also occurs in FL.

T-Shirt Models Wanted!

Julian Donahue

735 Rome Drive, Los Angeles, CA 90065-4040

We need color photos of Society T-shirts in action, for posting on our website to promote sales. Photos should clearly show one or both of the colors of T-shirts available, preferably being worn by photogenic people doing lepidopterological things. Include signed model release from any recognizable person in the photo (i.e., permission for the Society to use the photograph for advertising purposes on the internet), and indicate whether you want photos returned. For those of you who don't have one, T-shirts are available in *Papilio* yellow or navy blue, in sizes S, M, L, and XL; $10 USD each, plus $3.50 postage ($5 to Canada) for 1-3 shirts. Inquire for foreign postage and quantity orders. Scanned JPEG images may be e-mailed to ***bugbooks@aol.com***, or prints may be mailed to the address above.

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The Incredible Lightness of Being, Oil on canvas, 18" x 24", by Linda Hobley. Used by Permission. Ms. Hobley says "The Monarch Butterfly, incredibly beautiful, and just as incredibly fragile. How could such a creature, light as air, that could be crushed with ease, survive a rigorous migration of thousands of kilometers is truly a miracle. This small and fragile butterfly has become a worldwid symbol of natural history conservation. For me it is a symbol of what I hold most precious—being." Contact the artist at 3319 Bullard Rd., Dunham, Quebec J0E 1M0, Canada, or ***linda@acbm.qc.ca***.