

NEWS

OF THE

LEPIDOPTERISTS' SOCIETY

Volume 41, Number 3 Autumn 1999

Centenary Reflections on Edwin Way Teale...

Inside:

Put *That* in your Funk and Wagnall's!

More on Purple Loosestrife and the White-Lined Sphinx...

Preservation Techniques for Larvae and Pupae...

An Index to Smith & Dyar's Acronyctids & Allied Noctuids

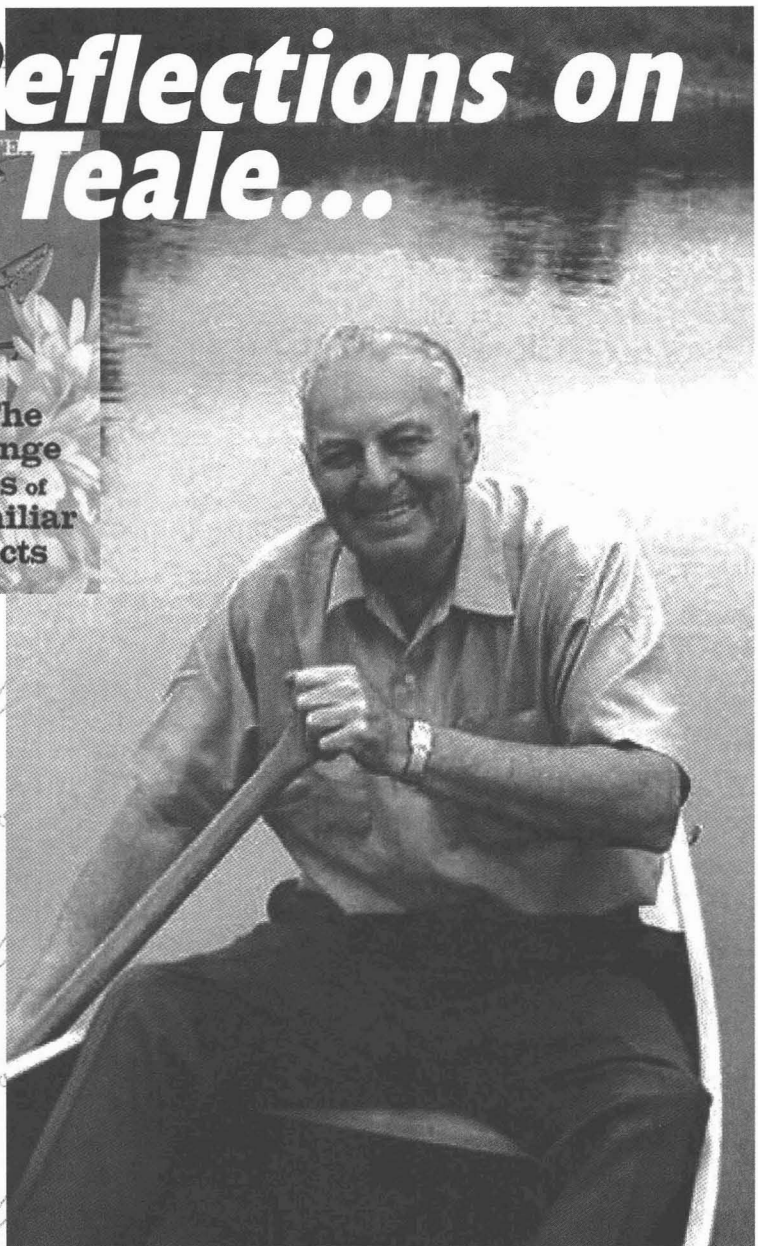
Lots of Letters...

Out of the Net...

Membership Update...

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...and more!



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)	\$ 45.00
Affiliate	10.00
Student	20.00
Sustaining	60.00
Contributor	100.00
Institutional Subscription	60.00
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 knowledgeable audience, illustrated, written succinctly, and under 1,000 words. Please submit your article or item in one of the following formats (in order of preference):

1. Article on high-density, DOS- or MAC-formatted, floppy diskette in any of the popular formats. You may include graphics on disk, too. Indicate what format(s) your article is in, and call if in doubt. Include a printed hardcopy and a backup in ASCII or RTF (just in case).
2. Electronically transmitted file in ASCII or other acceptable form *via* e-mail.
3. Typewritten copy, double-spaced suitable for scanning and optical character recognition. Articles may also be faxed directly to my computer for OCR but you must call first so that I can set up for reception of your fax. Artwork should be line drawings in pen and ink or good, clean photocopies suitable for scanning.
4. Handwritten or printed (very legible, short pieces only please, <500 words).

Submission Deadlines

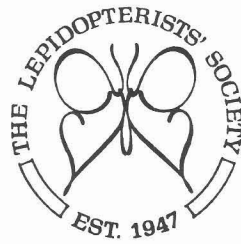
Material for Volume 41 must reach the Editor by the following dates:

Issue	Date Due
1 Spring	too late...
2 Summer	you missed it...
3 Autumn	it's a-goner...
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. 3 Autumn 1999



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

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.

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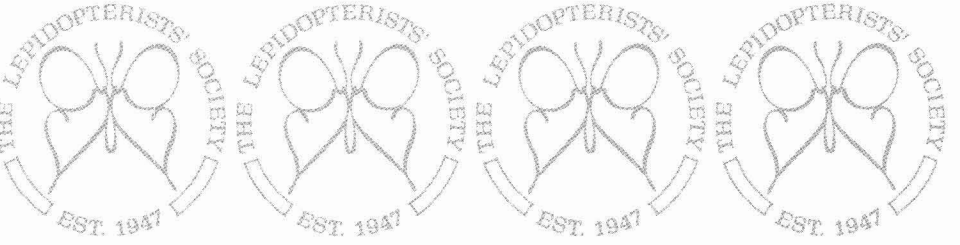
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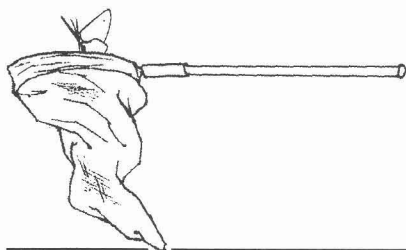
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Issue Date: September 1, 1999

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Cover: Edwin Way Teale (1899-1980) was an accomplished photographer who pioneered new techniques for close-up photography of insects and was a prolific, Pulitzer Prize winning writer who has been ranked with the likes of Henry David Thoreau, John Muir and John Burroughs. Paul Manton reflects on his life and his work, in this, his centenary year, in a two part article beginning on page 71 of this issue. Photo from the Library archives of the University of Connecticut (see spirit.lib.uconn.edu/Exhibits/carroll/ewteale/ for more info).





Mailbag...

Book Problems...

Dear Editor,

The review of **The Butterflies of Canada** by Layberry *et al.*, in the Spring 1999 **News**, prompts this note. That fine book deserves every good thing said about its contents! But I am surprised that neither that review nor any other notice of it I have seen reveals what I consider a major defect in the "softcover" or "paperback" edition. That is the edition I ordered over a year ago, finding to my dismay that the binding was in fact some sort of plastic-coated wire going through 21 rectangular holes punched in the pages.

The problem is twofold: (1) The diameter of the wire loops is too small for the number of pages they are expected to accommodate; consequently, it is impossible to open and close the volume near either end without damaging the pages. (2) While the punched holes in the margins of the text pages are not offensive, in some of the color plates (which have narrower margins) the holes are punched through portions of the color, e.g., nicking the wing of *Lycaena epixanthe* and mostly or completely punching out the identifying numbers for figures 1, 4, & 9 on pl. 23.

Edward G. Voss

Curator & Professor Emeritus,
University of Michigan Herbarium,
Ann Arbor, Michigan 48109-1057



Sponsorship Help Needed...

Dear Editor,

I recently became a person with a severe disability which has severely cur-

tailed my ability to do field data collection on the Lepidoptera, which have fascinated me to obsession since I was in the third grade. I also, unfortunately, live on a very small disability pension that is quickly demolished by medical fees. I wondered if perhaps you have scholarships available to members, or low income rates such as the Xerces Society does. I was a member of your society many years ago and would get great pleasure out of living vicariously through the Society and its actions. I wholeheartedly support your efforts and your mission and goals and simply wish to once again be a "part of all the fun".

I think I might be a good addition to your membership, and I know that membership will be good for me. I appreciate you taking the time to consider my unusual request, but even though it is unusual, it still is very important to me. If what I request is unavailable, please send regular membership info and application and I will try to find financial assistance elsewhere, as I mean to join, one way or another.

Eric Cooney, B.Sc.

1019 Sherman Street,
Boise, ID 83702-3653

Asst. Secretary Julian Donahue replied that, unfortunately, we are limited by our Constitution from offering preferential or free memberships to anyone (other than students) and suggested that Mr. Cooney request, in the pages of the News, that someone sponsor his membership. How about it? Anyone interested in playing "good samaritan" (see also the new President's note on pp. 69)?—Ed.



Kudos all around...

Dear Editor,

Only, only, to thank Kurt Johnson for, in such good and great detail, noting the intersection of curves of habit: Vladimir Nabokov as the lepidopterist, Nabokov as the writer (writer is such a limiting term). Off now to Amazon.com!

Many thanks to you, Mr. Editor, and all who add such dimension to the lives of us all.

Joanne Wells,

via email (*News* website)

Look at us. We're blushing!—Ed.



It's a BIG Centenary Year...

Dear Editor,

It is probably safe to assume that the last decade of every century, at least every century in modern times, has been one that stimulates a certain degree of retrospection. The year 1999 is the centenary of so many people who have defined our era. The 19th Century, in its last dying gasp, bequeathed us Vladimir Nabokov, Duke Ellington, and Fred Astaire. This last one is of particular interest to my wife and I, as avocational tap and ballroom dancers, but 1899 also saw the birth of Edwin Way Teale. In the pantheon of *fin de siècle* babies, Edwin Way Teale is the least known, notwithstanding the fact that in the 1950's and 1960's his books were widely read and influential.

I have written an item on him to mark his centenary with no particular mind of where to sell it. This is not the best

habit for a freelance writer but this is something of a labor of love. I think that this might be of interest to the Lepidopterists' Society and the *News* readership. Probably nobody in the last half of the 20th Century has done more to popularize entomology than Edwin Way Teale. I became an amateur lepidopterist in grade school in the late 1960's and early 70's in large part due to Teale's *Near Horizons* and *The Strange Lives of Familiar Insects*.

I have little doubt that this extraordinary man's books have likewise influenced many other Society members. I am, therefore, submitting my tribute to Teale's centenary to you with the aim of sharing it with the Lepidopterists' Society, its length aside. As in the past, I leave it to your better judgement.

Paul Manton

10 Flower Street
Hicksville, N.Y. 11801

See the beginning of Paul's homage to Edwin Way Teale, *Where the Bergamot Grows: a centenary reflection on Edwin Way Teale, on pp. 71 in this issue. The conclusion will appear in the next issue—Ed.*



Dues Increase...

Dear Editor,

After much debate, the Executive Council of the Lepidopterists' Society has reluctantly voted to increase all dues rates for the coming year. Deficits in the past few years, including an estimated loss for 1998 of \$7000, have made this increase necessary. The last increase was four years ago; we hope the new rates can remain constant for at least the next four.

Ron Leuschner

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

See the note from our new President at right and the inside front cover for the updated membership dues structure—Ed.



Mailbag continues on pp. 70...

President's Note:

Financial Challenges Lead to Dues Increase for 2000

John W. Brown

Systematic Entomology Laboratory, USDA, c/o National Museum of Natural History, MRC-168, Washington, D.C. 20560-0168

If I've learned anything from my three years of life in Washington, D.C., it's to never trust a politician. To help reinforce this notion to our membership, my first act as the new president of the Society is to inform you that the annual dues will increase from \$35 to \$45 for regular members starting in 2000! Something about "Read my lips..." [Actually, this is a decision of the Executive Council, not me alone.]

All kidding aside, our Society has been facing some financial challenges over the past few years, including increased publication costs and the consequences of naivete two to three decades ago in the management of some society funds. In particular, our category of life membership has become an increasing liability to the Society.

As most of you know, life membership involves the payment of a single lump sum to the Society that entitles the member to receive Society publications and benefits until his or her demise. In concept, life membership is a mutually beneficial arrangement—the Society receives a large sum of money that it can invest or "bank," and the member is immune to increases in dues, inflation, etc. Unfortunately, when many of our members became life members in the 1960's and 1970's, the fee was exceptionally low and the money was not invested by the Society. Consequently, the Society now has nearly 145 life members that receive the *News* and the *Journal* but from whom we receive no regular financial support.

To generate the money necessary to fulfill our obligation to provide life members with the *News* and *Journal*, we have decided to set up an endowment-

like fund. This money will be set aside to cover our financial obligation to our life members, so that we can continue to send them the *News* and *Journal* until they metamorphose out of this world. [We could have some of them bumped-off, but this too would cost money.]

In searching for creative ways to build this special fund, it was suggested that we make a plea to our life members, many of whom have reaped the benefit of their initial payment many times over. An annual "donation" in the amount of regular dues would go a long way towards helping the Society out of its current financial situation. Alternatively, the sponsorship of an additional member (e.g., student, school, nature center, foreign colleague) rather than an outright donation would broaden our membership base and may have a longer lasting benefit.

Like all clubs and organizations, this Society relies on its entire membership to provide the services and fees, mandatory and voluntary, which are needed to keep it afloat. Every member contributes in his or her own way, through presentations at national or regional meetings, through serving on committees or as officers, by submitting articles to the *News* or *Journal*, by contributing to the *Season Summary*, or through the simple act of paying dues. I sincerely hope that this increase in dues does not discourage membership or we will have failed in our attempt to satisfy the people we serve and whose interests we share. This increase in dues is an inevitable response to a changing financial climate in which the cost of producing quality products continues to rise.

Mailbag...continued from pp. 69**Responses to "Forest Collecting Closure Order"...**

Dear Editor,

I read with interest the letter from the USDA Forest Supervisor of the Lincoln National Forest in New Mexico (see **News**, Vol. 41(2): 61) that all collecting of Lepidoptera had been banned in certain districts of the Forest in order to "manage for viable populations of all native species" and to insure that "over-collection does not hamper the viability of endemic species." The order clearly intends to apply to *all* species present in the area, although the use of the word "endemic" seems to apply to species that are found *only* in the area (whatever they might be).

It appears that wildlife regulatory authorities persist in operating under the illusion that ordinary, non-commercial collecting of insects can severely limit or extirpate populations, despite the complete lack of any scientific evidence to support this contention.

If the authorities wish to be considered credible by a community of experienced, biologically knowledgeable lepidopterists, then they must disclose the reasons for decisions such as the one being considered here. Since we do not know if they have lepidopterological experts on their permanent staffs, it seems unlikely that they obtained the advice or counsel of outside consultants, perhaps members of this Society.

It would be useful if these experts would come forward and explain exactly what factors and considerations underlay this closure order.

J. Benjamin Ziegler

64 Canoe Brook Parkway,
Summit, NJ 07901-1434

**An Ethical Dilemma...**

Dear Editor,

I wrote a letter to Forest Supervisor Martinez in response to his public let-

ter published in the Summer 1999 **News** (see Mailbag, Vol. 41(2): 61). Several of my friends think that it is pretty good and expresses their views perfectly. It is herewith submitted for publication in the **News**.

Ralph E. Wells

303 Hoffman St.,
Jackson, CA 95642

*While I would normally publish (an edited version of) your letter, I cannot, in good conscience, do so because as far as I am able to determine you did not inform the recipient that the letter was "open" and would be published in the **News**. Since the original letter was not addressed to, or—at the least—carbon copied to, the editor, my duty as an editor requires that I honor the privacy of personal correspondence.—Ed.*

**Another Ethical Dilemma...**

Dear Editor,

This is in response to your editorial comments on my letter (see **News** 41(2): 40/61) which dealt, in part, with the number of collectors in the Society membership. More specifically, you questioned my assertion that our collecting members are in the majority.

I take exception to your intentional editorial decision to alter my wording "a majority" to read "some." I believe it is generally accepted that the opinions expressed in letters-to-the-editor columns are just that—opinions—and do not necessarily require proof. It falls to the readers to disagree with such opinions and express contrary views if that is their choice. I further believe that editors in such circumstances should make no material change in opinions so stated but should remain strictly neutral and edit for style but not substance.

In any event, returning to the question of collectors in the Society, given the Society's historic devotion to the science of lepidopterology, for which the study of collected, preserved specimens is a *sine qua non*, it had never occurred to me that this could be in serious doubt. However, relevant data support-

ing my contention are readily available in the Alphabetical List of Members (ALM) in the Society's 1998 Membership Directory. Members are encouraged to list their special interests, one of which can be "collecting." I selected 27 of the 45 ALM pages at random and counted the number of members listing "collecting." Summation of this count gave 539 members of a total of 925, 58%, which list "collecting" as an interest. I believe that this can be reasonably extrapolated to the entire ALM.

I suspect that this large number (estimated to total almost 900 members) of listed collectors might well be a minimum. For whatever reason, some Society members have chosen not to be listed at all while many others restrict their entry to name and address. Some known collectors do not list "collecting" and many list interests such as exchanging, selling, rearing, life history, etc., which usually involve some collecting.

J. Benjamin Ziegler

64 Canoe Brook Parkway,
Summit, NJ 07901-1434.

*I stand corrected on the matter of collecting and whether a significant number of members are collectors. This is exactly the information that I was looking for. However, in the context of the original letter (see **News** 40(4): 67), your contention that collecting, and legislative advocacy by the Society, was of "vital interest to the majority of its members" remains dubious. I am still to be convinced that such legislative advocacy is of "vital interest" to more than some of the members. In any event, I do not believe that my editing of your letter has in any way detracted from, or misrepresented, the point that you were making.*

On the subject of the ethics of editing "letters to the editor," I believe that you have the duties of an editor somewhat confused. While you are correct in your assertion that "letters to the editor" are opinion pieces, whether they are published at all, or in some edited form, is an editor's decision. It is my duty as editor to ensure, for example, that the Society is not held liable for libelous remarks made in such opinion pieces. Imagine if you will a letter that makes a valid point (well worth publishing) but then continues on to malign some group or other. No editor would publish such a letter without first editing the content. You have the right to write about your opinions but whether they are published (or not, unless you publish them yourself), and in what form, is not a right but a privilege granted by an editor.—Ed.

Where the Bergamot Grows: a centenary reflection on Edwin Way Teale

Paul Manton

10 Flower Street, Hicksville, NY 11801

The woodcock slipped away cautiously in clumsy flight into the late winter woods and dusk's silent gloom. It was also the winter of a man's life and the waning of a literary genre that in the middle decades of the 20th Century had millions of Americans reading about the pleasures of rambling through woods, combing along tidal pools, and poking about in overgrown meadows and vacant lots.

"As I come to these final sentences" he wrote at the conclusion of his last book, **A Walk Through the Year**, "I sit here wondering if the time will ever come when such a book as this will seem like a letter from another world." It was a final, bittersweet lamentation from Edwin Way Teale (1899-1980), perhaps America's most popular literary naturalist.

Indeed, as the most prolific and widely read nature writer of the 1950's and 60's, Teale should have been a litany of lamentation. He wrote his best and the most while much of unspoiled America was being wiped over with subdivisions, paved with eight lane highways, blacktopped for car lots, or entombed in vast aprons of concrete for international airports. Deep down it gravely distressed him that so much Florida wetland and South Carolina pine forest should yield to suburban development, that Lake Erie should become a veritable dead sea, or that the once pristine forests of the Pacific northwest that Jefferson thought would stand for centuries, should be denuded by reckless clear-cut logging.

Yet he matter-of-factly observed these changes, almost in passing. The alarm

and indignation that animated Stewart Udall and Rachel Carson was simply not the style of this mellow man; temperate in his opinions and mild in his demeanor. It perplexed many of the strident voices of environmentalism, which he counted among his intimates, that he had not the slightest taste for activism. Many, no doubt, concluded that Teale was a hopeless Thoreauvian who marched to the beat of a different drum like the teetotaler at a party who nevertheless proves to be the most entertaining and stimulating conversationalist of the evening.

This charm was endearing to say the least. In his heyday, killer smogs were claiming lives in London and Los Angeles, DDT and other pesticides were employed in what Edward O. Wilson styled an entomological Vietnam, and the Santa Barbara and Cornwall oil spills seeped across the headlines. To write about nature in this era and not write about "the Environmental Crisis" was to be dubbed a witless atavism. That Teale could emerge not merely unscathed from these criticisms but never targeted in the first place says much about what he, in describing the endurance and adaptability of insects, called the "strength of the frail."

Teale's nature writing had simply found a niche that most people in the biological fields had assumed to be extinct or too low on the academic food chain to be worth their bother. But the general public thought otherwise and it was for this audience that he always wrote.

Teale's "conversations" were with the millions of readers throughout the world who still harbored, if unconsciously, a residue of that old Victorian proclivity for natural history; a fondness for nature and the out-of-doors

untainted by what entomologist William Morton Wheeler once called "the dry rot of academic biology." He was in the company of many other nature writers—William Beebe, John Kiernan, Rutherford Platt, and Lorus and Margery Milne—who kept the legacy of popular natural history alive in the mid-20th Century when the decline of natural environs and the specialization of biology were well underway. All of these popular authors nurtured the spirit of John Muir, W. H. Hudson, and John Burroughs in what was becoming the post-frontier, post-agrarian America. But Teale was one of the most versatile, one of the most fecund, and enjoyed the broadest audience of the lot. He practiced his craft



Teale was a pioneer in many aspects of nature photography and is believed to be the first photographer to chill live insects for photography. Before you get up in arms, remember how primitive the equipment was in Teale's day. All photos in the article are from the Library archives of the University of Connecticut (see spirit.lib.uconn.edu/Exhibits/carroll/ewteale/ for more info)

First of Two Parts



"All the years of existence represent a long love affair with the earth, this earth, the only earth we know." Teale kept meticulous notes of his nature studies, his writing and photography including diaries, field notebooks, rough drafts, press clippings and all of his correspondence with his many fans, other writers, and naturalists such as Rachel Carson and Roger Tory Peterson.

at a time when, for the first time in history, a substantial number of Americans came of age resigned to nostalgically recalling childhood's "when all of this was farms."

Part of his popularity with this new breed of American, the suburbanite, lay in the fact that he never preached at his readers from some tenured university chair, decried their lifestyles with choice, and now cliched, appellations such as "cookie cutter housing" and "suburban mediocrity", nor demanded legislation and programs. His work was free of the trendy misanthropy, self-deprecation, and blatant political partisanship of many of his contemporaries. It would be difficult to imagine a Teale blasting Exxon and the oil industry writ large for a tanker spill—no matter how catastrophic—wrought by a tipsy sailor, a Teale sporting a Carter era "No Nukes" bumper sticker, or a Teale employing Paul Ehrlich's "brown backlash" to describe the environmental revisionism of Greg Easterbrook.

Indeed, a Teale scholarship may help to bring back into the fold those people who, frankly, may have been turned off by the environmentalism of eco-terrorists, pedantic Hollywood tree huggers, aging hippies, cry-wolf academicians, and jackbooted Green Meanie law enforcement types. All endeavored to en-

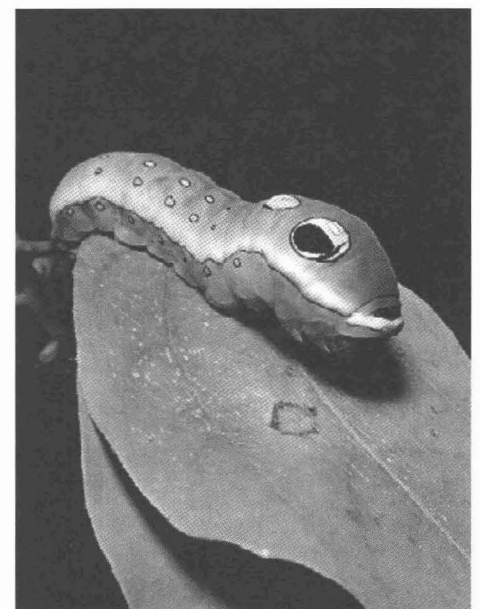
list Teale to join committees, to become keynote speaker at public rallies, and to jump on the bandwagon of petitioners and protestors. While admiring their concern and dedication, he was less than enthusiastic about their foreboding tone and frequently truculent demeanor.

It was not their basic message that disinterested him in as much as the dogmatic posturing of social movements in general. There was a sense that Teale felt that organized movements would become, in due course, ossified into mountains of bureaucratic oafishness and obstructionism. That today's wistful insight might become tomorrow's pious cliché. Or that somehow the message would be drowned in the process or discredited—baby and bathwater—as frustrated passions and a tincture of self-righteousness made intellectual dishonesty and appeals to "greater truths" enticing. Teale never lost sight of the message because a polite indifference so fundamental to his psyche immunized him from the environmentalist Lorelei song that accompanied the buzz of the chain saw in the virgin forest.

This is perhaps Teale's staying power. Many Americans believe that Paul Ehrlich terrorized the public back in 1968 with his predictions of global famine in **The Population Bomb**. Lowell Ponte's **The Cooling** seered the onset of a new Ice Age appropriate to the chilly winters of the 1970's. When the U.S. was not swept with mass starvation in the 80's as Ehrlich prophesized and "global warming" became the apocalypse *du jour* displacing Ponte's "global cooling", it became harder to take the dire predictions of environmentalist Chicken Littles seriously. Many believe that their political extremism injured the environmentalist cause even while the essential theme of conserving land and resources began to permeate the dominant social fabric. In a culture of rhetoric, however, it may be that the voice of moderation is oftentimes the most radical because it's the only one likely to foster a climate wherein constructive change is possible.

Edwin Way Teale did not set out to take a stand on "the Environmental Crisis". But his books, in avoiding the save-the-world-from-humanity view of nature, promoted a save-the-world-for-humanity approach. Nature out of sight, tucked away in some Borneo rainforest where few Americans not affiliated with an academic institution or government conservation agency will ever tread, is nature out of mind. If we want people to care about nature in exotic lands or in abstract terms about recycling or climatic change, they must care about it in their own backyards. There are simply too many people living in cities and suburbs to write off these areas as hopeless. Edwin Way Teale had a keener sense of this reality than any of the vocal and influential environmentalist activists of his day.

Correspondence with fanatical environmentalists was as unavoidable as in-person contact and as Teale's success in bringing nature to the man in the street grew with each book, so too did the entreaties for activism. Most eventually came to accept his "neutrality".



Teale's photographic studies of insects resulted in the publication of his first nature book, **Grassroot Jungles**, in 1937. He published thirty more books over his lifetime, all illustrated with his own photographs. This photo of a swallowtail caterpillar is from **Photographs of American Nature** published in 1972.

A few snubbed him. While probably a tad bit annoyed, Teale gave little indication of it, concerned instead with his hectic schedule of drafts, notebooks, and editor's deadlines.

"Trouble is," he wrote, "I go around the country and meet these good people who want to save the redwoods, save the dunes, save the Wisconsin wilderness. You can't give time to all of them but you can't tell them that either. Conservationists get mad at the drop of a hat; they are fighting people otherwise they wouldn't be conservationists. No excuse is much good because if you tell them the books come first, you tell them in effect that their Great Cause comes second."

Teale did have his own conservation message, though. But it was conspicuous by what many considered its absence. Absent, too, was any direct religious, political, or philosophical worldview. Darwin is frequently mentioned, but only insofar as references to specific observations. Nothing of the intellectual revolution the Victorian naturalist sired. It's as though Teale had been asked to pen a junior high school biology text that was sufficiently pale and diluted, with respect to editorial, as to satisfy—or rather, not to offend—either Stephen Jay Gould or Pat Robertson. He even walked the tight-rope between cutesy, anthropomorphic pets and animals of the Walt Disney genre and Sir David Attenborough's "red-in-tooth-and-claw", almost Calvinistic, approach to natural history.

This lack of ideological commitment on Teale's part was not owed to any dearth of intellectual prowess or methodical expunging of references that might compromise a book's market potential. It was, rather, the reflection of a man

possessing, according to his publisher, Edward Dodd, "little patience with psychology, and less with politics, business, sports, and other such common mortal fare." Polite, cordial, not the least bit brooding or distracted, as are many other men of letters, Teale was an individual of great ambivalence where human affairs were concerned. He didn't smoke, drink, or eat to excess. His home was "regulation suburbia" according to Dodd, and his tastes in art and music were restricted largely to nature themes. When his only offspring, David, went missing in action in the War, he took solace in the unchanging metamorphosis of insects and in the repetition of the seasons.

But Teale was no *Bartelby* with field glasses and butterfly net. He encompassed the aphorism, although humility would never permit its expression, that a common man is fascinated by extraordinary things and an extraordinary man by commonplace things.

In ***The Strange Lives of Familiar Insects***, for example, he described the ubiquitous monarch butterfly thusly:

"The black-and-orange wings of the monarch butterfly are familiar from Central Canada to the lowland bayous of Louisiana; from Long Island to the rocky California headlands of Monterey. They carry this far-ranging insect almost to the timberline of the Rockies; out over the Great Dismal swamp and the Florida Everglades; above the skyscrapers of New York and Chicago, Denver, Los Angeles, and even far from shore over the ocean."

This was the essence of Teale's universal appeal. The monarch butterfly's restless wanderings from the run of the mill suburban backyard to the grandeur

of America's national parks mirrored Teale's own tireless treks and interests. In 1951, he and his wife, Nellie, began a series of long journeys across America. The result was a travelogue of the continent capturing nature in its varying moods. He brought to his reader's intimate glimpses of the whole panorama of wild America. They were such personal anecdotes that the reader had the impression he was merely tramping through woods and fields; tagging along with the naturalist as he pointed out some interesting bird or wild flower or insect that one would otherwise never consider.

He appealed to many non-naturalists and stimulated the interests of many youthful bird watchers and bug collectors who went on to become more serious students of the biological sciences.

North with the Spring, Journey into Summer, Autumn across America, and Wandering through Winter, dubbed his "American Seasons Books," established his credentials as the chronicler of untamed North America in our century and paved the way for ***Springtime in Britain. Wandering through Winter*** clinched the Pulitzer Prize in 1966 and was his first work to be translated into multiple languages by his long time publisher, Dodd, Mead, and Company. The "American Seasons Books" differed from previous nature books in several respects. Most significantly, entomology was the epicenter of much of his early writing and he was the President of both the New York Entomological Society (1944) and the Brooklyn Entomological Society (1949-53). He also made notable contributions to the popularization of ornithology as a contributing editor of ***Audubon Magazine*** between 1942 and 1980.

Where the Bergamot Grows: a centenary reflection on Edwin Way Teale will be continued in the next issue of the **News**



It Won't Work...

Arthur M. Shapiro

Center for Population Biology, Univ. of California at Davis, Davis, CA 95616

A comment on Nagel, Seier and Dankert's proposal (see "The White-Lined Sphinx: a biological control agent for Purple Loosestrife?" **News of the Lepidopterists' Society** 41(2): 46) to use *Hyles lineata* as a bio-control agent on *Lythrum salicaria*: It won't work.

Several decades ago, Bernard Kettlewell tried using the specialist herbivore *Tyria jacobaeae* as a bio-control on Tansy Ragwort, *Senecio jacobea*, at Port Meadow in Oxford, England. It seemed to work like a charm—for one season. Then it didn't work anymore. It should have occurred to Kettlewell (as he freely admitted to me, calling it his stupidest mistake ever!) that, since the moth and the plant were already there and the moth was not controlling the plant, there must be some factor holding the

moth in check at a level below the control threshold. There was: Periodic winter flooding killed most of the pupae.

If White-Lined Sphinx isn't limiting *Lythrum* populations afield where it has a crack at them, chances are that it can't (without annual restocking, at least). Flooding (as hinted by the authors) may be a factor. So is the extreme mobility of the animal. Here in California, White-Lined Sphinx migrates annually across the crest of the Sierra Nevada, often flying over snow at 9,000–11,000 feet. It is certainly not obvious that there is such a thing as a permanent population of this moth here or in the desert Southwest, either.

Host plants commonly used by White-Lined Sphinx include a variety of

Onagraceae, and in many parts of the country Onagraceous plants are on various "protected" lists. Very high local densities of White-Lined Sphinx could have disastrous impacts on such species, just as imported enemies of weedy thistles are now impacting endangered native thistles.

Every year some of my organic-minded friends and neighbors buy ladybird beetles (Coccinellidae: Coleoptera) to release in their gardens to control aphids and scales, blissfully unaware that those very species are already there and breeding. The excess beetles simply fly away, and I end up with as many beetles as my neighbors without paying a penny.

Would that *Lythrum* were that easy to deal with!

Changes & Delays in Society Publications

John Brown (President), Eric Metzler (Chair, Publications & Budget Committee), & Bob Robbins (Chair, Editorial Board)

Over the past two years, the Society has initiated a number of changes in its publications. One reason has been to make the production and mailing of Society publications more cost effective. Another has been to improve their layout and overall appearance. These initiatives have been accompanied by changes in editors, who manage our publications in addition to their regular jobs and have had to learn new skills to do their editing job. With the massive changes in publishing over the past decade, the time needed to learn these new skills has increased dramatically.

Changes in the Journal

Following a cost analysis of page size, we discovered that an 8½" x 11" format would *potentially* save the Society 15-

25% in production costs. This format also allows better, more flexible layout of figures and tables. Consequently, beginning with Volume 53 the Journal will metamorphose into a larger format with fewer pages, but the number of articles, notes, and book reviews will remain the same.

The editor of the Journal has also changed. As often occurs during transitions, the production and distribution of the Journal has been delayed as the new editor got "up to speed" on copyediting and other technical aspects of dealing with Allen Press. This delay was not due to the change in format. The editor plans to bring the Journal back on schedule.

Changes in the News

The editor of the News implemented changes in style that appear to have been well received. We now have 4 regular issues of the News annually, and the Season Summary (annual) and Membership List (biennial) are supplements. The reason for these changes is to allow the News editor to apply for a 2nd class mail permit (we currently send issues 3rd class), which will lower postage costs, speed up delivery to domestic members, and remove postal regulations that restrict certain kinds of advertising. Being able to print advertisements for travel opportunities, for example, will generate much needed

continued on pp. 76...

General Preservation of Eggs, Larvae and Pupae for Morphological Work

David Carter and Dick Vane-Wright*

Eggs

For external examination, eggs with a rigid chorion can be air dried if they are killed before hatching, either by freezing for several days or by controlled heating in an oven (not more than 60°C). The eggs should be as close to hatching as possible to ensure that they will not collapse (McFarland, 1972). After eclosion, the incomplete shells that remain are also worth preserving.

Dried eggs and shells are often quite suitable for Scanning Electron Microscopy studies but in some cases, particularly "soft" eggs, it may be better to start by preserving the whole eggs in 80% alcohol. From this medium they can be dried by critical-point (Gordh & Hall, 1979) or chemical means (e.g. Brown, 1993), to help avoid subsequent collapse in the vacuum of the microscope column. Internal anatomical work on eggs is likely to involve special techniques and fixatives.

Larvae

A simple and very effective method of killing and preserving larvae, suitable for general morphological work, is to drop them into very hot water (just off the boil) for a few seconds, until they are fully extended, carefully blot them dry on absorbent paper, then preserve and store the caterpillars in 80% ethyl alcohol (with the optional addition of about 2% glycerine, to protect specimens from accidental drying out). Depending on the volume of preservative used, after 24 hours it is often advisable to transfer the specimens to fresh alcohol, as the body fluids can significantly dilute a relatively small volume. Pale larvae, in particular, tend to blacken if not killed first in hot water, but this

stage can be inconvenient.

An alternative method, more practical in field conditions, is to kill and fix caterpillars directly in a mixture of nine parts 80% alcohol to one part glacial acetic acid. The specimens should remain in this solution for at least 24 hours. This method is more likely to produce partly retracted specimens but this can be overcome if they are injected anally with alcohol, to expand them. Although specimens can be kept safely this way for several weeks, they should be transferred to 70-80% alcohol for permanent storage (to which a little glycerine can be added, as above). Stehr (1987) describes other methods of preserving larvae.

Various more complex fixative mixtures (usually based on alcohol and acetic acid) have been developed, usually in attempts to preserve colours, or the soft parts for detailed gross anatomy. (*An article by Harald Krenn will describe one example of this in a future issue of the News - Ed.*) However, such fixatives are dangerous, and even in laboratory conditions great care must be taken. For even more specialised applications, such as ultra-structural or histochemical work, advanced laboratory techniques for arthropod tissues must be employed.

Larvae that have dried or shriveled can be reconstituted, usually with reasonable success, by soaking in warm 10% potassium hydroxide or 2% sodium orthophosphate solution (or even weak detergent). Shed skins are also valuable; these can be treated in the same way, although they are very delicate and difficult to handle. A good method is to process them in the same way as small larvae, notably first instars, by preparing the larval pelt on a microscope slide (Hinton, 1956). Following treatment in

hot potassium hydroxide to digest any body contents, slit the skin along one side with a fine blade. After taking off the head, it can be spread out using standard slide-making techniques, as applied to genitalia preparations.

Pupae

In general, for gross external work at least, lepidopterous pupae can be preserved dry. For internal work, and especially studies intended to investigate the developing adult within, it will usually be necessary to make a "time series" of pupae preserved at various phases of development, from pre-pupa to the pharate adult stage. For gross anatomical work the methods described above for larvae can be adapted. After emergence of an adult, the shed pupal skin should be dry-preserved, as this will still represent most of the major external features. Information on pupal coloration, location and "suspension" should all be recorded, and any cocoon preserved (dry) wherever possible. An early, but still key reference for work on pupae is Mosher (1916).

Literature Cited

- Brown, B.V. 1993. A further chemical alternative to critical-point drying for small (or large) flies. *Fly Times* 7: 10.
- Gordh, G. & Hall, J. 1979. A critical point drier used as a method of mounting insects from alcohol. *Entomological News* 90: 57-59.
- Hinton, H.E. 1956. The larvae of the species of Tineidae of economic importance. *Bulletin of Entomological Research* 47: 251-346.
- McFarland, N. 1973. Notes on describing, measuring, preserving and photographing the eggs of Lepidoptera. *Journal of Research on the Lepidoptera* 10: 203-214.
- Mosher, E. 1916. A classification of the Lepidoptera based on characters of the pupa. *Bulletin of the Illinois State Laboratory of Natural History* 12: 17-159.
- Stehr, F.W. (ed.) 1987. *Immature insects*. Dubuque, Iowa: Kendall/Hunt, 754 pp.

(Reprinted from *BNET*, by permission. See *Out of the Net* in this issue for more information.)

* Correspondence: Biogeography & Conservation Lab., Department of Entomology, The Natural History Museum, Cromwell Road, London SW7 5BD, U. K.

Poetry Corner...

Metamorphosis

You come from an egg too tiny to see
That was laid on a leaf at the tip of a tree
You stay that way for a number of days
When the time is right, you end that phase
A caterpillar next—not the beauty you'll be
You've more growing to do, before the world is
to see
You spend your days crawling around
Eating leaf after leaf high above the ground
Many times as the days come and go
You shed your skin so a new one will grow
You think life is great, but sense there's much
more; You know you must risk, if you're going
to soar
So a home of fine silk you begin to weave
To keep yourself safe as the past you must leave
One final time, you change who you are
And emerge from a sleep much different by far
You flutter your wings and fly to the sky
This freedom you've earned—wasn't some-
thing to buy
For if you had been unwilling to risk
Just think of the future you would have missed
So the lesson here for each one to know
Is to shed a few layers and be willing to grow
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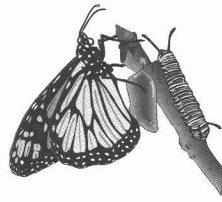
Delays...continued from pp. 74

funds to help offset the major increases in paper costs over the past 5 years.

Memoirs Update

A new memoir on lepidopteran collecting, observing, and rearing techniques was almost completed by Dave Winter before his death. We are excited about this volume because it may be one of the best publications that we have ever offered. It should be available for next spring's field season, perhaps sooner.

When changes take place in the Society's publications, we always hope for a better product and a smooth transition, but occasionally there are bumps and delays. We apologize for any inconvenience and are doing our best to solve these problems.

**Metamorphosis...**

The Society has learned of the death of the following member. Our condolences to his family.

Stephen Dolansky

of Fountain, Colorado, on 20 January 1997 (late notice just received). Mr. Dolansky was a member of the Society from 1990 until his death.

An Index to Smith & Dyar's Monograph of Acronyctids and Allied Noctuidae

Russell A. Rahn

3205 West Rochelle Rd., Irving, Texas 75062-4127

While working through some of the moth species in my collection, I had occasion to consult the 1898 revision of the *Acronycta* by John Smith and Harrison Dyar. While this work, with its numerous plates and complete descriptions, would seem to be helpful, there is one shortcoming that immediately becomes apparent. If one starts by consulting the plates (as I suspect most of us will customarily do), then there is no rapid, easy method of finding the description in the text. In other words, there is no page index to this thing! In addition, the authors do not match the order of the plates to the text nor do they match the order of the text to the checklist at the end.

In order to assist myself in easily navigating this paper, I finally bit the proverbial bullet and created my own index, paging through the text, writing down the taxa as they came along, and then had the computer sort the list alphabetically. After completing this task, it occurred to me that others might

profit from this labor—so here it is.

The list contains the species names of taxa treated by Smith and Dyar, followed by the genus in which they placed them. *Acronycta* is abbreviated as *A.*, and the other genera are given in full. The text page for the descriptions follows, and finally the plate and figure numbers for illustrations of adults. A few of the taxa are not illustrated, hence the final column is empty in some cases. In the most recent checklist (Hodges, 1975), some of these names have been synonymized, and it would be desirable to consult this before setting up a collection of these moths.

Literature Cited

- Hodges, Ronald W. et al. 1983. *Checklist of the Lepidoptera of America North of Mexico*; E. W. Classey Ltd., London.
Smith, John B and Harrison G. Dyar: 1898. *A Revision of the Species of Acronycta and of Certain Allied Genera; Proceedings of the United States National Museum XXI(1140)1-194.*

See Index Table on facing page...

Index to Smith & Dyar, 1898*

Taxa	Text Page	Plate(Figure)	Taxa	Text Page	Plate(Figure)
<i>acronyctoides</i> , <i>Panthea</i>	18	IX(5,6)	<i>lepusculina</i> , A.	63	I(1), XI(8)
<i>afflicta</i> , A.	127	I(15)	<i>lithospila</i> , A.	98	I(13)
<i>albarufa</i> , A.	134	III(10), XII(9)	<i>liturata</i> , A.	129	XIII(8)
<i>albovenosa</i> , <i>Arsilonche</i>	175	X(7)	<i>lobeliae</i> , A.	82	II(11)
<i>americana</i> , A.	44	I(2)	<i>lupini</i> , <i>Merolonche</i>	179	III(2), X(4)
<i>barnesii</i> , A.	162	XIII(10)	<i>luteicoma</i> , A.	152	I(5)
<i>betulae</i> , A.	75	II(19)	<i>manitoba</i> , A.	90	XII(1)
<i>brumosa</i> , A.	117	XIII(1)	<i>mansueta</i> , A.	100	XII(7)
<i>cinderella</i> , A.	64	XI(11)	<i>marmorata</i> , A.	131	XIII(3)
<i>clarescens</i> , A.	140	III(3), XII(11)	<i>mirella</i> , A.	96	
<i>connecta</i> , A.	115	II(16)	<i>modica</i> , A.	138	II(4), IV(9)
<i>cretata</i> , A.	58	XI(3,4)	<i>morula</i> , A.	76	II(10)
<i>dactylina</i> , A.	51	I(3)	<i>noctivaga</i> , A.	156	I(11)
<i>decora</i> , <i>Charadra</i>	28		<i>oblinata</i> , A.	169	IV(6,13,14)
<i>dentata</i> , A.	173	XIII(11)	<i>occidentalis</i> , A.	79	II(8)
<i>deridens</i> , <i>Charadra</i>	25	IX(12)	<i>ovata</i> , A.	135	IV(7,8), XII(10)
<i>dispulsa</i> , <i>Charadra</i>	27	IX(11)	<i>pacifica</i> , A.	56	XI(5)
<i>distans</i> , A.	161	XIII(6,7)	<i>palata</i> , <i>Demas</i>	23	X(1)
<i>edolata</i> , A.	164	IV(1)	<i>parallela</i> , A.	110	III(9)
<i>emaculata</i> , A.	158	XIII(2)	<i>paupercula</i> , A.	97	XII(2)
<i>extricata</i> , A.	165	XIII(3)	<i>perdita</i> , A.	163	III(6)
<i>falcula</i> , A.	109	XII(8)	<i>persuasa</i> , A.	130	III(11)
<i>felina</i> , A.	53	XI(9)	<i>populi</i> , A.	61	XI(7)
<i>flavicornis</i> , <i>Demas</i>	22	IX(9,10)	<i>portlandia</i> , <i>Panthea</i>	17	IX(4)
<i>fragilis</i> , A.	94	XII(3)	<i>propinquilinea</i> , <i>Demas</i>	20	IX(7,8)
<i>frigida</i> , A.	54	XI(6,10)	<i>pruni</i> , A.	123	IV(4)
<i>funeralis</i> , A.	102	III(7)	<i>pyralis</i> , A.	174	XIII(12)
<i>furcifera</i> , A.	85	II(13)	<i>quadrata</i> , A.	106	III(1)
<i>furcilla</i> , <i>Panthea</i>	15	IX(1)	<i>radcliffei</i> , A.	107	XII(4)
<i>gigantea</i> , <i>Panthea</i>	16	IX(2,3)	<i>retardata</i> , A.	145	II(5), XII(14)
<i>grisea</i> , A.	113	III(4)	<i>revellata</i> , A.	112	
<i>hamamelis</i> , A.	141	II(1,2,3), XII(12)	<i>rubicoma</i> , A.	42	I(4)
<i>hasta</i> , A.	87	I(14), IV(2)	<i>sperata</i> , A.	154	II(6)
<i>hastulifera</i> , A.	47	II(12), III(5)	<i>spinea</i> , <i>Merolonche</i>	179	X(2,3)
<i>hesperida</i> , A.	49	X(9)	<i>spinigera</i> , A.	122	XII(5)
<i>illita</i> , A.	151	XI(12)	<i>strigulata</i> , A.	92	XII(6)
<i>impressa</i> , A.	159	I(12), XIII(4,5)	<i>superans</i> , A.	119	I(6)
<i>incretata</i> , A.	144	XII(15)	<i>thoracica</i> , A.	91	III(8)
<i>innotata</i> , A.	73	II(17,18)	<i>tota</i> , A.	66	X(11)
<i>insita</i> , A.	56	IV(3), X(8)	<i>transversata</i> , A.	65	X(10)
<i>insolata</i> , A.	173		<i>tresignata</i> , <i>Harrisimemna</i>	181	
<i>laetifica</i> , A.	89	III(12)	<i>tritona</i> , A.	104	II(9)
<i>lanceolaria</i> , A.	171		<i>ursina</i> , <i>Merolonche</i>	180	X(5,6)
<i>leporina</i> , A.	59	XI(1,2)	<i>vinnula</i> , A.	93	IV(11)
			<i>xyliniformis</i> , A.	166	IV(5,10,12,15)

* Compiled by Russell A. Rahn, 3205 West Rochelle Rd., Irving, Texas 75062-4127



The Lepidopterists' Bookshelf

M. Alma Solis, Editor

Recently Published Books

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

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

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

Geometrid Moths of the World: A Catalogue

by M. J. Scoble (editor), L. M. Pitkin, M. Parsons, M.R. Honey, B.R. Pitkin. 1999. Co-published by Apollo Books and CSIRO Publishing in association with The Natural History Museum, London. 1400 pages in 2 hard-back volumes including CD-ROM. 21x29 cm. ISBN 87-88757-29-3, \$295.00 U.S. excluding postage, available from Apollo Books, Kirkeby Sand 19, DK-5771, Stenstrup, Denmark, FAX 45-62-26-37-80 or CSIRO Publishing, P.O. Box 1139, Collingwood, Victoria 3066, Australia. sales@publish.csiro.au or www.publish.csiro.au

The Geometridae is one of the most species-rich families of Lepidoptera. This book is the first comprehensive catalogue of the 35,000 names of these insects. It provides taxonomic information, much of it previously unpublished, on the available names of the Geometridae. The catalogue is based on the card index to genera and species in The Natural History Museum, London. The two volumes include information on type specimens, type localities, and where possible, larval foodplants. A CD-ROM listing all species referred to in the two text volumes

is included in the package and will be of great value to verify names and to check spelling.

Contents:

Volume 1: Foreword; Acknowledgements; Introduction; Purpose; The Family Geometridae; A Perspective; Patterns of species descriptions in the Geometridae; The Catalogue in Context; Construction of the Catalogue; The Global Taxonomic Facility (database); Sources; Entries to the Catalogue (protocols); Roles played by the Contributors; References; The Catalogue A-H; Index.

Volume 2: The Catalogue I-Z; Abbreviations to Type Depositories; Appendix; Genera in Systematic Order; Index.

Michigan Butterflies & Skippers

by M. C. Nielsen. 1999. Published by Michigan State University Extension, USDA, Michigan State University. 252 pages, ISBN 1-56525-012-5, paperback, alk paper, \$19.95 U.S. (postage included), available from MSU Bulletin Office, 10-B Agriculture Hall, Michigan State University, East Lansing, MI 48824-1039.

Sub-titled "A Field Guide and Reference," this new book covers 159 species—every butterfly ever recorded in the state. Each

species treatment includes information on adults and food sources, early stages and host plants, habitat, distribution (including map), flight period and tips on distinguishing similar species and overwintering stage. Endangered species and species of special concern are noted. Color photos, many taken in the field by award winning nature photographer Larry West, provide assistance in species identification. The book also contains sections on Michigan geography, climate, habitats, gardening and conservation, and references for further study. The author has more than 50 years of experience studying butterflies in the field, throughout the state.

Biology of Australian Butterflies

by R. L. Kitching, E. S. Scheermeyer, R. E. Jones and N. E. Pierece (eds.). 1999. Published by CSIRO Publishing. 456 pages, color illustrations, hardcover, ISBN 0-643-05027-2, \$150.00 U.S. excluding postage, available from CSIRO Publishing, P.O. Box 1139, Collingwood, Victoria 3066, Australia. sales@publish.csiro.au or www.publish.csiro.au

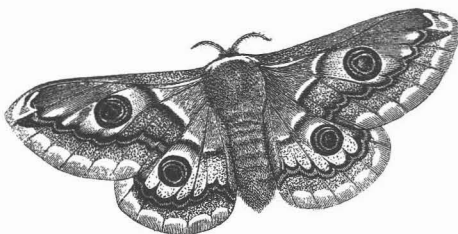
Provides accounts of life history strategies of a range of species, as well as background informa-

tion on general butterfly behavior, taxonomy and evolution. Each chapter is written by one of Australia's leading lepidopterists and provides a comprehensive literature review. Illustrated with figures, tables and color plates. Partial contents include chapters on history, classification, evolution and biogeography of Australian butterflies, food selection and use, butterfly communities, and rare butterflies. Fourteen additional chapters cover various species or species groups of all major families.

The Butterflies of Hong Kong

by M. Bascombe, G. Johnston and F. Bascombe. 1999. Published by Academic Press. 664 pages, hardcover, ISBN 0-12-080290-2, \$239.95 U.S. (tentative). Available from Academic Press, Order Fulfillment Dept., 6277 Sea Harbor Dr., Orlando, FL 32887, www.academicpress.com

Covers 219 species, a significant proportion of the butterfly species of the southern Chinese region, which can be seen within a few days from the city. Provides information on identification, systematics, biology and ecology and includes keys, full color plates and line drawings identifying males and females, as well as eggs and pupae. The authors are advocates of developing our understanding of butterflies in the field so the book emphasizes the study of live animals. Partial contents include chapters on Hong Kong, butterflies in the city, life cycle, classification and nomenclature, species treatments in 5 families (Hesperioidea and Papilionoidea), appendices, references and butterfly and general indices.



Look *That* Up in Your Funk & Wagnall's

Kurt Johnson

*Environmental Department, The Ethical Culture Society,
53 Prospect Park West, Brooklyn, NY 11215*

The fur began flying soon after bound galley copies of **Nabokov's Blues** were sent out to various lepidopterist reviewers. The issue was its publisher's (Zoland Books, Cambridge, Massachusetts) decision to use "genuses" as the plural of genus. Zoland follows the Chicago Style Manual, whose godmother is the Univ. of Chicago Press Dictionary. It, along with over a dozen other dictionaries, accepts "genuses" as "an" or "the" English plural for genus.

I was surprised at the vitriole from lepidopterists concerning "genuses" but should have known better. When Zoland first told *me* that the plural of genus was not just "genera" but also "genuses" I was aghast and asked for proof. They showed me the Random House, Oxford, and latest Websters (Unabridged, as of 1997) and I was satisfied but it sounded *awful*. I got used to it eventually, although as a scientist I much prefer "genera".

Some interesting tangles underlie the predicament concerning "genera" versus "genuses". First, you may pick up your dictionary (most probably Webster's Abridged or Webster's Collegiate, if your house or office is anything like mine). If that edition predates 1998 you won't find "genuses". Yet, Oxford began listing *genuses* in the 1970's and Random House picked up on it in the 1980's. In fact, there appears to be a commercial twist here— Random House bought the rights to publish Webster's in 1996 and it is *after that* that "genuses" finally found its way into "Mother Webster".

According to the 20 volume Oxford Dictionary of the English Language the English use "genuses" dates back to 1755, in scientific literature on mollusks. So, the usage has been

around a long time. Among the other dictionaries listing "genera", "genuses", and "genus's" as acceptable usages are the American College, Scribners, Collins, Chambers, Funk & Wagnall, Holt, Macmillan, Scott Foresman, Australian Concise, NTC and World Book. I had not even heard of half of these! But, when the fur flew I instantly ran to check at the New York Public Library's main branch— perhaps the only place that uses the taxpayers' money to stock the latest editions of dictionaries. So, awful or not, "genuses" may be here to stay.

On the humorous side, "genuses" may not take much more getting used to than "prospectuses", or that p-word that rhymes with "genuses". That, however, brings up the question of whether the plural of aedeagus would be "aedeaguses" (which sounds more like an obscure race of dinosaurs). One might also wonder if the plural of Lopsided Sowgus (that mammal whose short legs on one side allow it to stand level on steep mountains) would be "Lopsided Sowguses", or the plural of Noga (Latin genus *Nogus*, the mammal from which comes *Nogahide*) would be "Nogas". In fact, my brother in Iowa told me about a guy who recently turned to raising *Nogas*. In case you're interested, this fellow's name is Douglas Fingerhow (goes by the nickname "Dougie"), and lives in Atlantic, Iowa. My brother tells me a suitable address, for anyone interested, is Dougie Fingerhow, 2 blocks West of Water Tower, Atlantic, Iowa. [Believe me, I did not make that last part up.]

Interestingly, when I was laying this article out in Microsoft's Word 97, the spell checker program never complained about "genera." It did, however, balk at "genuses." Maybe I've had Bill Gates wrong for all these years (but I doubt it)—Ed.

Membership Update...

Julian Donahue

This update includes all changes received by 31 July 1999.

"Lost" Members

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

Gerald E. Einem (Brownsville, TX: "Temporarily Away")

Gary O. Stell (Eatontown, NJ: "Attempted, Not Known")

New & Reinstated Members

Members who have Joined/Renewed/or Rescinded their Request to be Omitted since Publication of the 1998 Membership Directory (NOT included in the 1998 Membership Directory; all in U.S.A. unless noted otherwise)

Anderson, Mike: 2113 South Kenwood Street, Olathe, KS 66062-2907.

Bloomfield, Norris: 10628 Escobar Drive, San Diego, CA 92124-2025.

Braun, Michael P.: 604 Blackpatch Drive, Springfield, TN 37172-9801.

Brown, Pat: 1225 10th Street, Los Osos, CA 93402-1308.

Brouwer, Joanne R.: [address omitted by request]

Champlin, Amy: 1151 East Orange Street, Apt. 3, Tempe, AZ 85281-4133.

Ciseski, John G.: 4611 East Maria Drive, Stevens Point, WI 54481-2548.

Conte, Helio (Dr.): Department of Cell Biology and Genetics, Caixa Postal No. 1387, Maringá, Paraná 87001-970, Brazil.

Dauphin, Jan (Mrs.): 7315 Cottonwood Drive, Baytown, TX 77521-4901.

Dawn, Douglas D.: 823 Saratoga Drive, Woodland, CA 95695-5024.

Dole, John M.: 2401 North Monroe Street, Stillwater, OK 74075-2124.

East, Raymond (Randy) James: 115 North American Avenue, Dover, DE 19901-3857.

Ely, Charles A. (Ph.D.): 811 Logansport Street, Nacogdoches, TX 75961-4513.

Hobson, Nancy: 1109 Bakewell Avenue, Normal, IL 61761-1207.

Homeyer, Bethany R.: RR 1, Box 447A, Mathis, TX 78368-9604.

Indence, Murray J.: 300 Central Avenue, Vallejo, CA 94590-7069.

Leach, William: 225 West Shore Drive, Carmel, NY 10512-3857.

Mack, Ronald G., Jr.: RR 1, Box 523, Gilman Falls Avenue, Old Town, ME 04468-9728.

Matula, Thomas L.: SOBT, National University, 11255 North Torrey Pines Road, La Jolla, CA 92037-1011.

McHugh, Kevin: 106 Fulkerson Street, Jefferson City, MO 65109-1434.

Mynatt, David R.: 11266 Taylor Draper Lane, Apt. 2324, Austin, TX 78759-3972.

Pike, Edward M. (Ted): 972 Edgemont Road, Calgary, Alberta T3A 2J3, Canada.

Ritland, David B.: Department of Biology, Erskine College, P.O. Box 338, Due West, SC 29639-0338.

Satsukevich, Natallia V.: 4115 Crooked Tree Road SW, Apt. 11, Wyoming, MI 49509-5245.

Savignano, Dolores A.: Division of Environmental Contaminants, U.S. Fish & Wildlife Service, 4401 N. Fairfax Dr. (MS 322 ARLSQ), Arlington, VA 22203-1622.

Schlegel, Steven: 2143 West 31st Street, Davenport, IA 52804-1409.

Severns, Donald G.: 2526 North 21st Street, Springfield, OR 97477-1719.

Swanson, Jana E.: 1752 Lynwood Drive, Concord, CA 94519-1211.

Tucker, Ruth (Ms.): 2704 Keator Street, Tallahassee, FL 32310-5110.

Wolf, Randy : 6740 Omalley Road, Anchorage, AK 99516-1805.

Address Changes

(all U.S.A. unless noted otherwise)

Cornwall, Diane E.: 841 Calle del Norte, Camarillo, CA 93010-8442.

Dale, Allen: 2117 Heights Drive, Boise, ID 83702-2829.

Davidson, Kathryn: 7633 Loucks Street, York, PA 17403-9405.

Gray, Richard E.: 19 Daniels Drive, Enfield, NH 03748-3060.

Harp, Charles E.: 8834 West Quarto Avenue, Littleton, CO 80128-4269.

Hilley, Leonard D., II: P.O. Box 1066, Rainsville, AL 35986-1066.

Implom, Harvey S.: 913 Eddington Road, Marshall, TX 75672-2057.

Itoh, Takao (Prof. Dr.): Chemistry Dept., Miyazaki Medical College, Kiyotake-cho, Miyazaki 889-1692, Japan.

Mayura, Komalam: P.O. Box 2275, Rancho de Taos, NM 87557-2275.

Meyer, Gretchen: University of Milwaukee, Field Station, 3095 Blue Goose Road, Saukville, WI 53080-1515.

Morgan, Dave: 4935 Shadowood Parkway SE, Atlanta, GA 30339-2347.

Nirmalan, Komalam: P.O. Box 2275, Rancho de Taos, NM 87557-2275.

Peterson, Judith D.: P.O. Box 1756, Rohnert Park, CA 94927-1756.

Peterson, Raymond L.: P.O. Box 1756, Rohnert Park, CA 94927-1756.

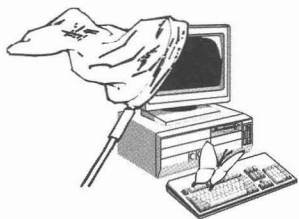
Richards, Sarah: 5 Greenough Street, Needham, MA 02494-1705.

Scaccia, Brian: 117 Del Valle Circle, El Sobrante, CA 94803-3373.

Taylor, Milton D. (Dr.): 200 Woody Road, Apt. 44, Pendleton, SC 29670-1822.

Tewksbury, Thomas R.: 226 East Alhambra Avenue, Lindenhurst, NY 11757-6504.

Continued on pp. 82...



Out of the Net...

by Jim Taylor, 1_iron@msn.com

One of my favorite (real, not electronic) sites is the Doyle Museum at Gainesville, Florida. It is housed with the Division of Plant Industry, Florida Department of Agriculture, located practically on the campus of the University of Florida. It is only about four hours from my home, and when I go down on a rainy day, John Heppner lets me play with the bugs. The Museum usually has several graduate students from the University of Florida hard at work on their projects. Add to this the regular contingent of employees and volunteers and it is sometimes difficult to find a table to work on.

I urge one and all to visit the Museum and look at the people, not just the bugs. Some of the volunteers are also worthy of study. Just don't go when Florida is playing a home game (hotel space tends to disappear)—and particularly don't go just after a loss.

This is a long introduction to report that the University of Florida has two free computer tutorials covering ten species of butterflies available at www.ifas.ufl.edu/~pest/. The tutorials have pictures of the caterpillar and adult of each species, as well as information on host plants, ecology and the like. The home site is **Buggy Software**; once there, click on "Butterfly Tutorials" to access the download mechanism.

You'll find some features that may be turnoffs. First of all, the download time per tutorial for me was about ten minutes, a bit long for someone just browsing. Secondly, the software insists on installing itself, so it unzips and has at you and your hard drive space—this isn't something you can cruise past on line and go on to something else on the spur of the moment. Lastly, the Q & A format demands a lot of clicking and

reading, "Correct Answer!" and such. In defense, however, remember this was put up for the general public, not hotshot butterfly mavens such as you.

Most of the "Buggy Software" tutorials are for sale, not for free. However, there are other accessible parts of the site of some interest. For example, click "Featured Creatures" to search for bugs, mites, plant diseases, and other organisms found in Florida. The search can be by common name, habitat or host, or scientific name. Try "fall army worm" to get an introduction to the moth, description of its life cycle, pictures of the larva and of the adult, both male and female, damage done, natural enemies, etc. In all, several pages of discourse on *Spodoptera frugiperda* (whose eyes are patterned, by the way, more on this later). And there are hundreds and hundreds of species in this section. Don't give up on just these headings, however; there are a dozen or so other tabs worthy of your attention. This is a great site, and you should nose around some.

Editor Phil recently passed on to me a note from Andy Brower of Oregon State University with the URLs of two sites that school is whelping. The first is the Oregon State Arthropod Collection web site at www.ent.orst.edu/osac/. I visited this one and found myself stumbling over piles of bricks and falling into freshly-dug holes—it is still under construction. I was visitor 588, and I had the URL a month or more before I took a peek; it is not yet heavily traveled.

Under the heading "Holdings" in Lepidoptera there are eleven families with fewer than 2000 species—and I was unable to get any one family to come up so I could look. The heading "Search the Collection" yields a sheepish admission that the only search capacity avail-

able at present is analog; i.e., go and physically look in the drawers yourself. Planned are an Oregon Butterfly Atlas and a section on Costa Rica—but neither is yet available. Give this one a few months and see what develops; wear a hard hat if you go now.

The other site is **Butterfly Net International** at www.ent.orst.edu/bent/. I have always considered butterflies to be just showy moths that are too cowardly to be out at night. Since this innate prejudice may show through, I'll use Andy's description of the site:

"This is an outgrowth of a newsletter founded by Rienk de Jong, Dick Vane-Wright and Phil Ackery a few years ago, that is intended to foster communication among systematists interested in butterfly phylogeny. The idea of this site is to provide links to other web sites, and to offer some basic information, such as classification. The BNET site is still somewhat skeletal, but I would appreciate feedback from the members of the Lep. Soc. on it (or the OSAC site—I'm web master of both, at the moment). People are also encouraged to submit links, and to join the membership list."

The site does just what Andy says. I confess I clicked "Old Issues" thinking to find an argument about collecting versus just looking or maybe whether Clinton should be impeached, but I discovered the 1996 and 1997 issues of the publication instead. I was also baffled by the caption of the button, "Trees," but there I found two cladograms based on DNA. I looked at the one on Nymphalidae, and sure enough there was the tree as advertised. You butterfly folks should hop on board here.

continued on pp. 82...

Net...continued from pp. 81

One last site just to get the taste of butterflies out of our collective mouths. members.EUnet.at/f.puehringer/sesiidae.htm is the home page of Dr. Franz Pühringer and he is enthusiastic about Sesiid moths—those little wasp-like critters. He is an Austrian, but he has thoughtfully included English as well as German text. There is good deal here about pheromones, offers to exchange, links to other sites, and the like.

And now, as promised, back to eye patterns. In the last issue I asked about the apparent random patterns in the eyes of many moths. Not all ommatidia are the same color, and the clusters of the dark ones make for patterns that are not the same even in the two compound eyes of the same moth. I asked you, the assembled multitude, if anyone knew anything about this. That issue has been in your hands for some weeks now, and I have had not one response to the question.

There are several possible reasons for this. First, you may not know. However, I invited you, in that event, to make up something. Also, you may know, but would rather not tell. As eager as this group is to share knowledge, however, I doubt that very much—your usual behavior is to run somebody down and tell him stuff against his will. Another possibility is that not one of you is reading this column, and that is the one that concerns me.

Considering the time I spend looking at truly BAD web sites, winnowing through the not-so-bad, writing, arguing with Editor Phil (*Hey! I resemble that remark!—Ed.*), etc., this takes at least half a day to put together. That is two days each year. Not to be morbid, but to an insurance salesman my current life expectancy is probably somewhere between ten and fifteen years. This means if I don't do this article each quarter I will have between twenty and thirty days available for an extensive cruise to the South Seas.

How about it?



From the Editor's Desk

Phil Schappert

Once again, not an issue goes by that I don't screw-up somewhere, usually in more than one somewhere.

My apologies to Randy Lyttle for misspelling (I take some "pride" in, at least, consistently misspelling) *Catocala* in his "Better Baits for *Catocala*" article in the last issue (News 41(2): 52. Randy took it humorously, writing in sci.bio.entomology.lepidoptera that, "I just thought I'd let all of you know this, in case you go out and buy some watermelon...to catch something of the genus "*Catacola*" (is there even such a genus??), while you are shooing away the droves of *Catocala* coming to the watermelon instead of your prized *Catacola*." Just goes to show you the value in submitting your articles in electronic form! How's that for a copout?

Paul Opler writes, "Thanks for putting in the article on the North American Scientific Names Committee (see News 41(2): 52). Unfortunately, the P.O. Box listed for me is incorrect! It should be P.O. Box 2662 [not 2663]. Please correct it in the next issue of the News. If it

was my fault, I apologize for sloppy keyboarding. I'll let the Post Office know to look out for items sent to me at the wrong box." I'm almost ecstatically happy to report that, this time at least, it wasn't my "sloppy keyboarding" at fault! To reiterate, it just goes to show you the value (dubious to Paul, I'm sure) of submitting your articles in electronic form! (The "value" in this case is in protecting my butt...)

Rudy de Mordaigle (fast becoming my post-publication proofreader) points out that *Drastena mirifica klotsi* (see 41(1): 34, 3rd column, 5th one down) should be *Drasteria* etc. as per the other 8 taxa of that name on the page. This one was scanned into text and I missed it on proofing. *Mea culpa*.

Through a "comedy of errors" (largely precipitated by improperly formatted email), the address for the advertisements placed by Manuel Carrasco González (see News 40(4): 90, 40(5): 119 and 41(1): 27) was incorrect. The correct address is given in his corrected advertisement in this issue.

More next time (I'm sure).

Members...continued from pp. 80

Wiedorn, William S., Jr. (M.D.): 1710 Valence Street, New Orleans, LA 70115-4840.

Zebrowski, Michael: 793 Medinah Drive, Rochester Hills, MI 48309-1032.



Lepidopterists' Calendar

The Lepidopterists' Calendar will return next issue...

The Marketplace

IMPORTANT NOTICE TO ADVERTISERS: If the number following your advertisement is "411" then you must renew your advertisement before the next issue! Remember that all revisions are required in writing.

Books/Videos

For Sale: How to know the butterflies. J.H. Comstock & A.B. Comstock, 1913. Poor condition (old library stock). Butterflies. The new naturalist, a survey of British butterflies, E.B. Ford 1967. Excellent condition with paper jacket. Everyday Butterflies, A group of biographies. Samuel Hubbard 1899. Excellent condition. Butterflies of Australia & New Guinea Barrett & Burns 1966. Excellent condition. Beautiful Butterflies and companion volume, Beautiful Moths, J. Moucha 1963. Excellent condition. Butterflies & Moths Werner & Bijok. Printed in Germany, three dimensional plates. Excellent condition. Harvey Implom, 4818 Berkley Drive Wilmington, NC 28405, Himplom@aol.com ⁴¹³

Lepidoptera Books for sale: Send SASE for list of available publications, including D'Abrera, R.W. Poole, etc. Dr.

Eugene J. Gerberg, 5819 NW 57th Way, Gainesville, FL 32653. ⁴¹³

Wanted: Looking to purchase a copy of W.H. Howe's **Butterflies of North America**, 1975, Doubleday. Contact: Bruce Bradshaw, 4019 N. Bennington #102, Kansas City, MO. 64117, (816) 453-3855, burmeselvr@compuserve.com ⁴¹²

Common Butterflies of the Southeast. Spectacular digital video footage of the region's 55 common species. Field identification, butterfly habitats, and basic resources provide an excellent introduction to butterfly flying. 30 min. VHS. Also available: **Common Butterflies of the Northeast.** 30 min. VHS, **Skippers of the Northeast.** 48 min. VHS, **Common Dragonflies of the Northeast.** 30 min. VHS. For further info see www.concord.org/~dick/ or contact: Dick Walton, 7 Concord Greene #8, Concord, MA 01742,

dick@concord.org

⁴¹²

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

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

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

cause they jeopardize our nonprofit status.

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

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

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

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

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

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 known 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 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. **Bug-books@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 Butterflies** 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: Hesperidae, 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, Eng-

land. Tel/Fax: +44 181 561 5494; **ij@pembooks.demon.co.uk**; Website: **www.pembooks.demon.co.uk**. 411

Livestock

Overwintering cocoons of *Actias luna* and *Automeris io* for sale. Send SASE for prices. Larry J. Koop, Rd. 1, Box 30, Klingeringstown, PA 17941-9718. 413

Captive-bred Philippine butterfly pupae for sale, available all year. Imogene L. Rillo, P.O. Box 2226, Manila 1099, Philippines. Fax: (632) 824-02-22, **clasinse@mindgate.net** 413

Cocoons of *Actias luna*, *Automeris io*, *Antheraea polyphemus*, *Callosamia promethea*, *Hyalophora cecropia*, *H. columbia*, *H. gloveri*, *Samia cynthia* available fall of 1999. Pupae of *Nessus sphinx*, *Hemaris thysbe*, *Darapsa pholus*, *Sphinx poecilus*, *Pachysphinx modesta*, *Paonias excaecatus*, *Smerinthus cerisyi* also available. Chrysalids of *Papilio asterius*, *P. glaucus* and *P. troilus* also available. Visit **www3.pei.sympatico.ca/oehlke** for complete price list or send one dollar and self addressed envelope to Bill Oehlke, Box 476, Montague, P.E.I. Canada, C0A 1R0, (902) 838-3455, **oehlke@pei.sympatico.ca** 413

For exchange: ova, larvae or pupae of *Battus polydamus*. Wanted: any Satyridae species, White Admiral (*B. arthemis*), *Nymphalis vau-album*, *Speyeria* sp. or Lycaenidae not found in Florida. Any African Saturnidae. Leroy Simon, 5975 SE 122 Place, Bellview, FL 34420-4396, 352-245-8351. 413

Cocoons and pupa for Spring 2000: *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. 413

For sale or exchange: Large selection of Iranian butterflies, perfect quality, with data. All *Louristana* sp., *Hybushirica*, *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 ⁴¹²

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 papered specimens of western North America. 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 consider 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

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; Leptap@aol.com ⁴¹¹

Specimens

Wanted: to buy (preferably wholesale) dried butterflies, beetles, spiders and other insects from Mexico, Central America, Brazil, Colombia, Peru, Australia, South Africa, Indonesia and/or other countries. Georgianna Guthrie, 3 Grey Birch Place, The Woodlands, TX

77381-4625, wingart@worldnet.att.net ⁴¹³

Wanted: to exchange butterflies and macro moths with interested people from other countries. I'm also interested in live material. Manuel Carrasco González, Bda Andalucía, Bque 5-5^oC, 11540-Sanlúcar de Barrameda, Cádiz-España, jcuberog11@smail1.ocenf.org ⁴¹³

Wanted to trade: various *Colias* of Canada and the U.S. I can send many butterflies of Japan. Also interested in butterflies of the West Indies, especially *Phoebis avellaneda*, *P. philea huebneri*, *Parides gundlachianus*, *P. machaonides* and various *Papilio*. Offering various rare *Parnassius* and *Colias* of Tibet, the Himalayas and China in exchange. Also rare *Papilio* of South India, Sikkim, the Himalayas, North Vietnam and China. Shin-ichi Ohshima, Shimohideay 707-99, Okegawa, Saitama, (363-0025) Japan. Fax: 81 48 78 70 29 0. ⁴¹³

For sale/exchange: Butterflies and insects of the world. Price list available on request. Richard Souciou, La Martinière, 79500 Melle, France. Phone: 549291165/Fax: 549271608. ⁴¹²

For sale/exchange: papered specimens from unusual locales, all in A1 condition. Rare specimens like *Papilio krishna krishna* (male, India); *P. manlius* (male, Mauritius); *Pathusa phidias* (Laos) and *Pachlipota jophon* (female, Sri Lanka). John Kamps, 6994 Nickerson Way, Greely, Ontario K4P 1A3, Canada, 613-821-1654. ⁴¹²

Wanted: Neotropical Saturniidae. Interested in all sp. and ssp from *Arsenura*, *Caio*, *Copiopteryx*, *Titaea*, *Rothschildia*, *Pradaemonia* and *Rhescynitis*. Specimens must be A1 quality. John Kamps, 6994 Nickerson Way, Greely, Ontario K4P 1A3, Canada, 613-821-1654. ⁴¹²

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 air-

mail and packaged free of charge. For price list and information contact: Stanislav Kocman, Horymírova 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 allotiei*—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

Equipment

Display/Storage cases. Solid wood with inset glass top and hinged tongue and groove design for easy access and tight closure. White foamcore pinning bottom and insecticide vials included. Antiqued brass corners/hasp, stained/varnished finish to show natural beauty of wood. Matching cabinets to hold display cases are also available. Custom sizes/styles quoted on request. Free color brochure available. Larry Holden, 509 N. 12th Ave., Marshalltown, IA 50518-2161. 412

Museum quality insect display cases. Made from recycled antique wood: red elm, white oak, red oak. Very high quality. Chris Ward, 305 Polk Ave. North, Frederic, WI 54837. 412

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; Lep-trap@aol.com 411

Help Needed

Wanted to purchase: high quality 35mm color transparency photographs depict-

ing underside of Hessel's Hairstreak, *Callophrys (Mitoura) hesseli* Rawson & Ziegler, preferably but not necessarily, in-life. To be used only for private, personal and non-commercial purposes. J. Benjamin Ziegler, 64 Canoe Brook Parkway, Summit, New Jersey 07901-1434, (908) 273-2288. 413

Wanted: Seeds of the following plants: *Parietaria officinalis*, *Urtica dioica*, *Stratiotes aloides*. Also would like 6 to 8 small cuttings of *Salix atrocinerea*. Contact: Randy Robinette, 7302 Midland Trail Rd, Ashland KY 41102-9294, RRobin2244@Aol.com. 412

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

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

Miscellaneous

For Sale: Small amount of dormant rootstock of *Aristolochia clematitis* (very hardy winter plant) and seeds of *Coronilla varia*, *Medicago sativa*, *Rumex hydrolapathum*, a few others and annual flower and grass mix. SASE to Randy Robinette, 7302 Midland Trail Rd., Ashland, KY 41102-9294, RRobin2244@Aol.com. 412

Research Requests

I am interested in any Florida records of the Miami Blue, *Cyclargus thomasi*, since 1989. Please submit relevant data

regarding dates, location, sexes, observations etc. Recent attempts to verify its existence in Florida have been unsuccessful, suggesting it may nearly be extirpated from the region. Likewise, I am gathering all Florida records of the newly established *Cyclargus ammon* which appears to be invading at least one area formerly inhabited by *C. thomasi*. All responses would be appreciated. Submit data to: John Calhoun, 977 Wicks Dr., Palm Harbor, FL, 34684-4656, jcalhoun@maxximmedical.com 413

I am in the process of writing a book on the biology/ecology of the Sphingidae of the U.S. and Canada. I hope to include color photos of the last instar larvae of each of the 102+ resident species. To date I have reared and photographed 93 species and the only species that I lack from east of the Mississippi River is the Ash Sphinx (*Manduca jasmineearum*). Request that field collectors attempt to collect eggs from a wild female and forward them to me so that I may photograph the life cycle. U.S.D.A. permit process pending. Please call or e-mail *before* shipping. Jim Tuttle, 4285 N. Homestead Ave, Tucson, Arizona, 85749, telephone (520) 749-6358, jtuttle@fiaaz.net 412

Michael Pogue, John Brown, and I are collaborating on an upcoming MONA fascicle treating the Cochylini (Cochylidae in the MONA check list). We currently are gathering as much material as we can to ensure that we accurately portray geographic distributions, variation, etc. At least 2/3 of the North American species are undescribed, and many are cryptic species that can be distinguished only through genitalic examination. Our plan is to borrow as many specimens as possible for a master database of the North American fauna. We'll promptly return all specimens that can be identified, and work up the others. We do not want to retain specimens, only data. If you have any specimens that you'd like to contribute for our project, please let us know. Eric H. Metzler, 1241 Kildale Sq. N., Columbus OH 43229-1306 USA, spruance@infinet.com. 412

Executive Council

President

John W. Brown
Syst. Entomol. Lab., USDA,
c/o NMNH, MRC-168,
Washington, D.C. 20560-0168
(202) 382-1778
jbrown@sel.barc.usda.gov

Past President

Michael J. Smith
1608 Presidio Way
Roseville, CA 95661
(916) 786-7950
mjs323@aol.com

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Eric W. Classey
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Lawrence F. Gall
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P.O. Box 208118,
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CT 06520-8118.
lawrence.gall@yale.edu

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Naturkundemuseum,
Rosenstein 1, D-701191
Stuttgart, Germany
113217.3422@compuserve.com

Secretary

Ernest H. Williams
Department of Biology, Hamil-
ton College, Clinton, NY 13323
(315) 859-4387
ewilliam@hamilton.edu

Assistant Secretary

Julian P. Donahue
Natural History Museum
900 Exposition Boulevard
Los Angeles, CA 90007-4057
(213) 763-3363 (office)
(213) 746-2999 (fax)
donahue@caroli.usc.edu

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David C. Iftner
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kerichers@lightspeed.net

Publications Manager

Ken Bliss
315 Morningside Avenue
Linden NJ 07036

Editor, News of the Lepidopterists' Society

Phil Schappert
Integrative Biology, C0930,
University of Texas at Austin,
Austin, TX 78712-1064
(512) 471-8240 (office),
(512) 471-3878 (fax),
(512) 237-3864 (home),
philjs@mail.utexas.edu

Editor, Journal of the Lepidopterists' Society

M. Deane Bowers
Entomology Section, Univer-
sity of Colorado Museum, Cam-
pus Box 218, University of
Colorado, Boulder, CO 80309-
0334, (303) 492-5530 (office)
(303) 492-8699 (fax)
bowers@spot.colorado.edu

Editor, Memoirs of the Lepidopterists' Society

William E. Miller
Department of Entomology,
University of Minnesota, St.
Paul, MN 55108,
(612) 624-7493 (office)
mille014@maroon.tc.umn.edu

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Season Summary Zone Coordinators

Refer to Season Summary for
Zone coverage details.

Chief Season Summary Coordinator And Editor

Jim Tuttle
4285 N. Homestead Avenue
Tucson, Arizona 85749
(520) 749-6358 (home)
jtuttle@fiaaz.net

Zone 1, The Far North:

Dr. Kenelm W. Philip
Institute of Arctic Biology
University of Alaska
P.O. Box 75700
Fairbanks, Alaska 99775-7000
(907) 479-2689
fnkwp@aurora.alaska.edu

Zone 2, The Pacific Northwest:

Jon H. Shepard
R.R. #2, S.22, C.44
Nelson, British Columbia
V1L 5P5 Canada
(250)352-3028
shep.lep@netidea.com

Zone 3, The Southwest:

Robert L. Langston
31 Windsor Avenue
Kensington, CA 94708-1040
(510)524-3001 (home)
evlangston@aol.com

Zone 4, The Rocky Mountains:

Dr. Ray E. Stanford
720 Fairfax Street
Denver CO 80220-5151
(303)377-1332 (home)
rstanford@earthlink.net

Zone 5, The Plains:

Dr. Ronald Alan Royer
Division of Science
Minot State University
Minot, North Dakota 58707
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FAX: (701)839-6933
royer@uarp6cs.misu.nodak.edu

Zone 6, South-Central:

Charles Bordelon, Jr.,
8440 Washington Boulevard
Beaumont, TX 77707
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34 Seaton Drive, Aurora,
Ontario L4G 2K1 Canada
Phone: 905-727-6993 (home)
A.Hanks@aci.on.ca

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Leslie A. Ferge
7119 Hubbard Avenue
Middleton, Wisconsin 53562-
3231
(608)836-9438
ferge@chorus.net

Zone 9, The Southeast:

Brian G. Scholtens
Biology Department
College of Charleston
Charleston SC 29424
Phone: (803)856-0186
scholtensb@cofc.edu

Zone 10, The Northeast:

Mark J. Mello
P.O. Box 87037
South Dartmouth MA 02748
Phone: (508)990-0505
mmello@ma.ultranet.com

Zone 11, Hawaii & the Pacific Islands:

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Isabel Vargas Fernandez
Museo de Zoología, Facultad de
Ciencias, Univ. Nacional
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Postal 70-399, Mexico 04510
D.F., Mexico
ivf@hp.fciencias.unam.mx



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1032 58 7
1725
John A. Snyder
Department of Biology
Furman University
Greenville SC 29613-0001

