



# NEWS

of the LEPIDOPTERISTS' SOCIETY

No. 5 Sept./Oct. 1987

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## ZONE COORDINATORS

- |                      |                  |                        |
|----------------------|------------------|------------------------|
| 1. Ken Philip        | 6. Ed Knudson    | 10. Dave Winter        |
| 2. Jon Shepard       | 7. Ross Layberry | 11. J.C.E. Riotte      |
| 3. Bob Langston      | 8. Les Ferge     | 12. Eduardo Welling M. |
| 4. Ray Stanford      | 9. Andy Beck     | 13. Boyce Drummond     |
| 5. Richard C. Rosche |                  |                        |

## BERKELEY 1987

Members gathered in Berkeley, California this past June from 22 states (including Hawaii) and the District of Columbia plus 3 Canadian Provinces. Two members came all the way from Israel and one from Brasil. They brought friends and families to enjoy the varied program of activities planned by Jerry Powell and his cohorts which kept us busy from early morning till late at night. Dave Winter again acted as our candid cameraman but unfortunately his camera malfunctioned and only his shots of the activities early on in the meetings turned out. We thank him for his efforts, though, since the candid shots are always an important and enjoyable reminder of the good times and fine fellowship at the meetings. Because of space considerations, the candid photos are being held over until the next issue. The official minutes which follow tell the story of our four days in Berkeley.

### MINUTES OF THE JOINT 38TH ANNUAL MEETING AND 34TH PACIFIC SLOPE SECTION MEETING OF THE LEPIDOPTERISTS' SOCIETY University of California Berkeley, California 25-28 June 1987

The joint 38th Annual Meeting and 34th Pacific Slope Section Meeting of The Lepidopterists' Society was held on the campus of the University of California, in Berkeley, California, 25-28 June 1987, sponsored by the Department of Entomological Sciences of the University of California's Berkeley campus. There were a total of 142 paid registrants, with over 170 individuals participating in various meeting activities. Thus the Berkeley confab was certainly one of the largest, and perhaps the largest Annual Meeting of The Lepidopterists' Society. It was the largest meeting of the Pacific Slope Section.

While the Essig Museum of Entomology hosted an open house in Wellman Hall on Thursday afternoon, 25 June, Society President Douglas C. Ferguson presided over a combined meeting of the Executive Council and Editorial Board in neighboring Giannini Hall. That evening, BioQuip Products, hosted a wine and cheese social at the home of Jerry Powell and Liz Randal in the Berkeley hills.

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The formal program commenced the following morning, Friday, 26 June at 8:45 a.m. in the Life Science Bldg., with a welcome and announcements by our meeting host, Jerry Powell. The program continued with

Art Shapiro presiding over a symposium on "LEPIDOPTERAN BEHAVIOR" that included the following papers (presenter's name given first in case of joint authorship):

"Flower preference and learning in *Pieris rapae*", A. Lewis, Univ. of Colorado, Boulder;

"Effect of predatory wasps on aggregated caterpillars", N. E. Stamp, State Univ. of New York, Binghamton;

"A method for measuring dispersal and gene flow in lepidoptera populations", J. L. Hayes, USDA/ARS, Stoneville, MS;

"Ecological aspects of ant association and hostplant use in rioidinid butterflies", P. DeVries, Univ. of Texas, Austin; and

"Rules of thumb vs. complex behavior in female and male butterflies", S. P. Courtney, Univ. of Oregon, Eugene.

A general discussion on lepidopteran behavior followed the presentation of the above papers.

After recessing for a group photograph and lunch, attendees reconvened in Dwinelle Hall for the afternoon's program of contributed papers on "SYSTEMATICS AND MORPHOLOGY", chaired by J. T. Sorensen. Paper titles and authors were:

"Genetic relationships among populations of the *Coenonympha tullia* complex (Nymphalidae: Satyrinae) in Northern California", A. H. Porter, Univ. of California, Davis;

"Asymmetry in male genitalia of Hesperiidae: a mathematical consideration", H. Chiba, Univ. of Hawaii, Honolulu;

"Possible origin and affinities of the hesperiid genus *Pyrrhocalles* (Hesperiidae: Hesperinae)", J. Y. & L. D. Miller, Allyn Museum of Entomology, Florida State Museum, Sarasota;

"A distinctive new subspecies of *Ochlodes yuma* (Hesperiidae) from New Mexico", R. E. Stanford, Univ. of Colorado Medical Center, Denver & S. J. Cary, Santa Fe, NM;

"The use of larval chaetotaxy in discriminating subgenera of *Callophrys* (Lycaenidae)", G. Ballmer, Univ. of California, Riverside;

"Eulini phylogenini: a troublesome tortricine tribe", J. W. Brown & J. A. Powell, Univ. of California, Berkeley;

"Probable interbreeding of *Callophrys* (*Mitoura*) *gryneus* (Hübner) and *siya* (W. H. Edwards)", S. J. Cary, Santa Fe, NM; and

"Is *Styx infernalis* a rioidinid?", R. K. Robbins, Smithsonian Institution, Washington, D.C.

Jerry Powell presided over a Panel Discussion entitled, "THE VALUE OF SUBSPECIES", which included brief presentations by five invited panelists, followed by a discussion open to the audience. The five presentations included:

"Rationales for infraspecific nomenclatural use", L.

D. Miller, Allyn Museum of Entomology, Florida State Museum, Sarasota;

"Intraspecific variation and evolution", J. E. Hafrenik, Jr., San Francisco State Univ., San Francisco, CA;

"Objective analysis in intraspecific differentiation", R. A. Arnold, Entomological Consulting Services, Pleasant Hill, CA;

"Politics of intraspecific differentiation", P. A. Opler, U.S. Fish & Wildlife Service, Ft. Collins, CO; and

"Conservation at the intraspecific level", D. Murphy, Stanford Univ., Stanford, CA.

On Friday evening, the group assembled at the Haas Clubhouse in Strawberry Canyon on the Berkeley campus for a barbeque picnic dinner and slide fest.

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The program resumed Saturday morning, 27 June, at 8:45, with a contributed paper session titled "BEHAVIOR AND PHYSIOLOGY", chaired by Ray Stanford. Eight papers were delivered, including:

"Spruce budworm: role of adult imbibing in reproduction (Tortricidae: Tortricinae)", W. E. Miller, Univ. of Minnesota, St. Paul;

"Plant chemistry and oviposition behavior in the Buckeye butterfly, *Junonia coenia*", M. D. Bowers and P. Pereyra, Harvard Univ., Cambridge, MA;

"Topographic determinants of habitat quality for the Bay Checkerspot butterfly", S. Weiss, Stanford Univ., Stanford, CA;

"Sex and comfort; the ultimate goal of behavioral evolution in papilionids?", J. T. & K. H. Sorensen, California Dept. of Food & Agriculture, Sacramento & El Dorado Hills;

"Larval mobility in checkerspot butterflies", R. R. White, City College of San Francisco, CA;

"Why and how *Nymphalis californica* migrates", O. A. Shields, Mariposa, CA;

"A little mustard is not too spicy for Tobacco Hornworm caterpillars (*Manduca sexta* L.)", F. S. Chew & W. L. Mechaber, Tufts Univ., Medford, MA; and

"Eye spots of satyrids, morphids, brassolids, and amathusids: satyrids do not exploit the false head pattern", B. H. Landing, Woodland Hills, CA.

After lunch, two concurrent sessions for presentation of submitted papers were held in opposing lecture rooms of Dwinelle Hall. Charlie Covell moderated the session on "SYSTEMATICS AND MORPHOLOGY", while Deane Bowers presided over the concurrent session on "ECOLOGY AND CONSERVATION". This marked the first time in the history of The Lepidopterists' Society that concurrent sessions were convened. Papers in the "SYSTEMATICS AND MORPHOLOGY" session included:

"Relationships within the *Agylla/Eilema* lineage of the Lithosiinae (Arctiidae)", N. L. Jacobson, Univ. of Texas, Austin;

"A rethinking of the higher classification of the Notodontinae (Noctuoidea: Notodontidae)", S. J. Weller, Smithsonian Institution, Washington, D.C.;

"The geographic patterns of enzyme polymorphisms in *Euphilotes battoides* (Barnes & McDunnough) (Lycaenidae)", G. Pratt, Univ. of California, Riverside;

"Differentiation of brachypterous syndromes in scythrid moths (Gelechioidea): quantitative genetic aspects of wing dimensions", J. T. Sorensen, California Dept. of Food & Agriculture, Sacramento & J. A. Powell, University of California, Berkeley;

"Transformation series analyses and biogeography of *Hamadryas*", D. W. Jenkins, Allyn Museum of Entomology, Florida State Museum, Sarasota;

"Biosystematics of the Opostegidae", D. R. Davis, Smithsonian Institution, Washington, D.C.;

"A proposed vicariance model for the biogeography of the West Indian butterflies", L. D. & J. Y. Miller, Allyn Museum of Entomology, Florida State Museum, Sarasota;

"*Hesperia/Atalopdes*: drawing the line and inferring phylogeny (Hesperiidae)", J. M. Burns, Smithsonian Institution, Washington, D.C.;

"Classification of North American Semothisini (Geometridae) by host plants", D. C. Ferguson, U.S. Dept. of Agriculture, Systematic Entomology Lab, Washington, D.C.;

"Revision and phylogeny of *Asterope* (= *Callithea*) (Nymphalidae)", D. W. Jenkins, Allyn Museum of Entomology, Florida State Museum, Sarasota; and

"A clarification of the type locality of *Catocala whitneyi* Dodge (Noctuidae)", E. H. Metzler, Columbus, OH.

Papers in the concurrent "ECOLOGY AND CONSERVATION" session included:

"Larval viability of hand-paired subspecific and interspecific crosses of *Papilio glaucus* and related species", R. C. Lederhouse & J. M. Scriber, Michigan St. Univ., East Lansing;

"The recovery of the endangered Schaus swallowtail in the Florida Keys", T. C. Emmel, M. C. Minno, & J. L. Nation, Jr., Univ. of Florida, Gainesville;

"Habitat enhancement techniques for the endangered El Segundo blue butterfly (Lycaenidae)", R. A. Arnold, Entomological Consulting Services, Pleasant Hill, CA & A. E. Goins, Chevron Corp., San Francisco, CA;

"The Day Butterfly Center: its goals and aspirations", F. C. Elia, Callaway Gardens, Pine Mountain, GA;

"The Viceroy butterfly in Florida: model or mimic?", D. Ritland, Univ. of Florida, Gainesville;

"Local Extinction and recolonization in the dynamics of a *Euphydryas editha bayensis* metapopulation", S. Harrison, Stanford Univ., Stanford, CA;

"Color morph determination in sphingid caterpillars", L. S. Fink, Univ. of Florida, Gainesville;

"The role of myrmecophily in the distribution of four Southern California populations of *Brephidium exilis* (Lycaenidae)", K. M. Calloway, Univ. of California, Irvine;

"The community ecology of butterflies in the upper Florida Keys", M. C. Minno & T. C. Emmel, Univ. of Florida, Gainesville;

"Butterfly ecology in the high Andes of northwestern Argentina- curiuser and curiuser", A. M. Shapiro, Univ. of California, Davis;

"Biology of two unusual Gracillariidae", D. R. Davis, Smithsonian Institution, Washington, D.C.; and

"Recolonization of butterflies in a chaparral burn", R. Kelson, Clayton, CA.

Saturday evening's activities began with an "Attitude Adjustment Hour", hosted by UC Berkeley's Dept. of Entomological Sciences at the University Dining Commons in Lower Sproul Plaza. Once everyone's attitude was appropriately adjusted, we enjoyed a delicious buffet-style dinner. The evening continued with an introduction by Tom Emmel of John Adams Comstock honoree, John S. Garth; a few reminiscences from Dr. Garth of his association with Comstock; and presentation of the Comstock Award to co-winners David Ritland (Univ. of Florida) and Susan Weller (Smithsonian Institution). Attendees then migrated back to Dwinelle Hall for the Presidential Address by Doug Ferguson, entitled "Man vs. moth - indications of a changing North American fauna". The Banquet program concluded with distribution of the numerous door prizes, with Charlie Covell as Master of Ceremonies.

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On Sunday morning, 28 June, attendees reconvened in Dwinelle Hall at 9:00 to listen to a panel discussion by editors of our organization's publications to learn about future plans and policies of the Editorial Board. Charlie Covell spoke about future planned publications of the Memoirs series, while *Journal* editor, Bill Miller, and *News* editor, June Preston, addressed future directions for both of these society publications.

Jackie Miller chaired the final session of contributed papers in a session titled "FAUNA AND DISTRIBUTION". Presentations included:

"Marina Dunes, Monterey County, CA: an unusual butterfly habitat", R. L. Langston, Kensington, CA;

"Interesting records of lepidoptera over the 23-year history of the Kentucky Lepidoptera Survey", C. V. Covell, Jr., Univ. of Louisville, KY;

"The Oecophoridae (*sensu lato*) of San Bruno Mountain, San Mateo County, California", J. A. DeBenedictis, Univ. of California, Berkeley;

"Butterflies of the Guadalupe Mountains, southeast New Mexico and west Texas", R. W. Holland, Albuquerque & S. J. Cary, Santa Fe, NM; and

"Lake County, California: butterfly biogeography", R. Kelson, Clayton, CA.

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## ANNUAL BUSINESS MEETING OF THE LEPIDOPTERISTS' SOCIETY

After a brief coffee break, President Ferguson called the Annual Business Meeting to order at 11:00 a.m., with approximately 60 people present. He began by introducing society officers and members of the Executive Council and Editorial Board, who were in attendance.

A parital Necrology of members who died in the past year was read by President Ferguson. He also commented on the contributions of each deceased member to the field of lepidopterology.

Eric Metzler briefly summarized the Treasurer's report for fiscal year 1986, and noted that income



## GROUP PHOTO IDENTIFICATIONS

1. Dave Winter, 2. undetermined drop-in, 3. Jo Brewer, 4. Alcinda Lewis, 5. Sarah Burns, 6. Ken Osborne, 7. John Burns, 8. Vri Caspi, 9. Irving Finkelstein, 10. Bob Langston, 11. Gloria Harjes, 12. Dick Arnold, 13. Ron Hodges, 14. Jean-Francois Landry, 15. P. T. Dang, 16. Susan Weller, 17. Nancy Jacobson, 18. Vitor Becker, 19. Karen Calloway, 20. Dorothy Martin, 21. Hazel Tilden, 22. Doug Ferguson, 23. Rich Kelson, 24. Boyce Drummond, 25. John Lane, 26. Olaf Mielke, 27. Ray Stanford, 28. Paul Opler, 29. Jim Tuttle, 30. John Vernon, 31. Peg Tuttle, 32. Frank Elia, 33. Don Davis, 34. Laurence Crabtree, 35. Denise Crabtree, 36. Art Smith, 37. undetermined Berkeleyite, 38. Paul Russell, 39. Linda Fink, 40. Sandy Russell, 41. Dubi Benjamini, 42. Phil DeVries, 43. Francis Chew, 44. June Preston, 45. Adam Porter, 46. Deane Bowers, 47. Floyd Preston, 48. Tom Eichlin, 49. Kirby Brown, 50. Fred Stehr, 51. Julian Donahue, 52. Charles Covell, 53. Ralph Wells, 54. Bill Miller, 55. Jerry Powell, 56. John DeBenedictis, 57. Stan Nicolay, 58. Isla Garth, 59. John Garth, 60. Joel Johnson, 61. Richard Priestaf, 62. Jane Hayes(?), 63. Nancy Stamp, 64. Bill Swisher, 65. Ray White, 66. Sterling Mattoon, 67. Ron Leuschner, 68. Ray Coyle, 69. Jim Mori, 70. Karolis Bagdonas, 71. Don LaFontaine, 72. Dale Jenkins, 73. Bob Robbins, 74. Ron Robertson, 75. Richard Brown, 76. Tim Friedlander, 77. John Nelson, 78. Bill Patterson, 79. Gordon Pratt, 80. Art Shapiro, 81. John Sorensen, 82. Greg Ballmer, 83. Hideyuki Chiba, 84. John Hafernik, 85. Clint Kellner, 86. Rudi Mattoni, 87. Chuck Hageman, 88. John Cooper, 89. Dale Habeck, 90. Steve Courtney, 91. Don McNeil, 92. Bill Preston, 93. David Ritland, 94. Jackie Miller, 95. Bob Lederhouse, 96. Lee Miller, 97. Richard Holland, 98. Steve Passoa, 99. John W. Brown, 100. Marc Minno.



exceeded expenses by \$7,957.51. Ferguson announced that a professional audit had been conducted and found the Treasury to be in good order.

Assistant Secretary, Julian Donahue, related that he had contacted many other entomological societies throughout the world to inquire about possible exchange of publications to include in our organization's library that is maintained at the Los Angeles County Museum of Natural History. We currently have about 35 active exchanges with other organizations. Society library holdings can be made available to members via inter-library loan.

President Ferguson deferred the usual Editorial reports to the panel discussion held earlier this morning by the Editors of our society's publications.

Jackie Miller announced that the manuscript on the Consensus List of Common Names had been completed and indexed, and is now in the review process. The Xerces Society expects to publish this list in the fall of 1987.

Secretary Arnold briefly summarized the results of a Special Membership Survey, mailed to about 25% (ca. 400) of the society's active members and designed to solicit input on various topics of concern to our organization. A more complete summary will be prepared for publication in the NEWS.

Arnold summarized results of a second survey, distributed to about 190 former members or subscribers that were dropped for non-payment of their 1986 dues. Many foreign members are experiencing difficulty in paying their dues in U.S. funds and thus dropping their membership. Boyce Drummond suggested that we establish a network with foreign entomological organizations to assist foreign members who experience currency problems in attempting to pay their dues.

Nominating Committee Chairman, R. Brown, reported a partial list of nominees.

Our Annual Meeting in 1988 will be hosted by the Carnegie Museum in Pittsburgh, PA. John Rawlins presented a brief slide show about the museum and Pittsburgh area, plus solicited comments about the proposed meeting dates, 14-17 July. After some discussion, it was decided to hold the meeting on these dates.

Invitations to host future Annual Meetings have been received from:

1) Richard Holland and the University of New Mexico in Albuquerque for 1989; and

2) Allen Young and Susan Porkin of the Milwaukee (WI) County Public Museum for 1990.

Both invitations were approved by the Executive Council.

Two members of the Resolutions Committee, Jo Brewer and Jackie Miller, recited several resolutions (all unanimously approved), with their usual troubadorish flair, including:

WHEREAS

William Miller has served the Society capably in the capacity of Journal Editor over the past two years and has put this publication on a sound schedule,

AND WHEREAS

Eric Metzler has served admirably as Treasurer of the Society,

AND WHEREAS

Charles Covell has served with distinction as Editor of the Memoirs and Chairman of the Editorial Board,

AND WHEREAS

We descended on Berkeley in June,  
The leps by the light of the moon,  
A large aggregation  
From states through the nation,  
From midnight to morning til noon.

AND WHEREAS

To Randal and Powell they flew,  
Thus forming a near endless queue;  
Conversations absurd  
Through the walls could be heard,  
And the decibels constantly grew.

AND WHEREAS

From kitchen to the bar did they slip,  
And no one had yet lost his grip;

They trusted the ration  
For which they had passion,  
Through courtesy of BioQuip.

AND WHEREAS

Shapiro and Sorensen toiled,  
In programming both of them broiled;  
Lep behaviour expounded,  
Subspecies compounded,  
With Hafernik, all were soon oiled.

AND WHEREAS

Stockwell and De Benedictis  
Were gophers and did not inflict us,  
But by slaving away,  
Everything was okay,  
We hope they were glad that they picked us.

AND WHEREAS

With Powell there leading the crew,  
The meetings could not go askew;  
With Poody and John,  
They all carried on,  
But 'twas Powell who steered up the stew.

BE IT RESOLVED THAT:

With the leps all revved up in high gear,  
The committee had nothing to fear,  
They perched on their bases  
With satisfied faces,  
It's on to Steel City next year!

President Ferguson concluded by thanking his fellow officers and members who had assisted him during his tenure, and then presented the gavel and presidential deely-bopper crown to incoming President Jerry Powell.

After a few brief remarks about possible solutions to minimize the need for future concurrent paper sessions, President Powell adjourned the meeting at 11:45 a.m.

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#### BUSINESS MEETING OF THE PACIFIC SLOPE SECTION

Jerry Powell called the annual business meeting of the Pacific Slope Section to order at 11:50 a.m. with about 15 people in attendance.

An invitation from Boyce Drummond and the Colorado Outdoor Education Center in Florissant to host the 1988 Pacific Slope meeting was unanimously approved. After some discussion about possible meeting dates, it was agreed that the meeting would be held the weekend of 8-10 July, 1988.

Tom Emmel will chair a committee to nominate a suitable candidate as honoree of the John Adams Comstock Award for 1988.

There being no further business, Jerry Powell adjourned the meeting at 12:15 p.m.

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Several attendees participated in post-meeting field trips to Marin County and various high mountain passes between Carson Pass and Tioga Pass in the Sierras, plus the 8th Annual Mt. Diablo Butterfly Count.

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Respectfully submitted,

*Richard A. Arnold*

Richard A. Arnold, Secretary

#### NORTH AMERICAN WILDLIFE STAMPS INCLUDE LEPS

A beautiful full color pane of 50 different 22c commemorative stamps saluting North American wildlife was issued this past summer. The designer was Chuck Ripper, a noted wildlife artist. In addition to the birds and animals featured on the stamps, are two butterflies, the Monarch and the Tiger swallowtail, a Luna Moth and a Ladybug Beetle. It is good to see a few insects



gracing our stamps again. The stamps are available as a full pane but not as specific individual species representatives, so if one wants a particular stamp or two, the whole sheet must be purchased. By this time supplies are very limited and the stamps can be obtained only through local post offices, where still available.

## 1987 DEALER LISTINGS UPDATE

Word has been received of a change of address for BioQuip Products and also from two dealers inadvertently omitted from the listings appearing in NEWS #4 1987 on pgs 57-59. These corrections are given below.

### Category 1. LITERATURE (address change and addition)

#### \*BioQuip Products: (C)

17803 LaSalle Ave, Gardena, California 90248-3678  
USA. Phone (213)324-0620

#### \*Flora & Fauna Books: (A,C)

P.O. Box 15718, Gainesville, Florida 32604 USA.  
Phone (904) 373-5630. Free catalogue.

### Category 3. INSECTS and Category 4. SAFARIS (addition)

\*Australasian Butterfly Company, Stephen Underwood:  
Australian Lepidoptera and Coleoptera (P), Rare and bred species. Catalogue available. Guided Australian Safaris by appointment. Night lighting a speciality.

P.O. Box 330, Lane Cove, New South Wales, 2066  
Australia. Phone 02 4282552.

## From The Editor's Desk

June Preston



The summer is over for the meandering Prestons, and the Annual meeting in Berkeley is a pleasant memory. We found collecting, in general, much poorer in most of the places we visited in the western U.S. because of the very early spring and near draught conditions which caused some species to fly almost a month earlier than usual and other species to be conspicuous by their absence, while numbers of specimens seemed to be considerably down. We have heard the same tale of woe from collectors in several sections of the country for this year already--that 1987 just wasn't a good year for leps. But there are always exceptions. We found huge numbers of *Nymphalis californica* in many areas of California and Oregon in early June. Did others of you experience the same phenomena? That information should be sent to the appropriate Zone Coordinator this fall for inclusion in the Season Summary, along with any other interesting collecting information you might have. The List of Coordinators and Guidelines for Reports appears in the Notices section of this issue of the NEWS. We found when we returned home that Kansas had had plenty of rain when it was needed to keep the grasslands green, although the Monarchs already seem to be headed south and the Cloudless Sulphurs have been visiting my zinnias earlier than usual this year. There was a large pile of mail awaiting me on my desk when I got home and I appreciate all the contributions for the NEWS. I do want to remind members that the Ripples column by Jo Brewer was created to be an outlet for controversial matter and unusual observations. Letters of this nature should be sent directly to her rather than to me. Her address is on the back cover of all issues of the NEWS. The letter which follows is printed here because it came to me. As always, the opinions expressed therein are those of the author and do not in any way reflect any policies of the Lepidopterists' Society.

Dear June:

After reading Tom Emmel's article on butterfly farming in England and then only two pages down, about an insect thief at L.A.C.M., I feel compelled to ask a

question which has long been on my mind, "Why can't rare butterflies be reared as to make them affordable, in time, to the average collector?"

Obviously this person wanted *O. paradisea* pretty badly in order to make them consider stealing it. They knew the chance of getting caught, the personal disgrace as well as the results of prosecution, not to mention the hardships caused to future visitors wanting to use the facilities for specimen identification, also the hardships on the staffs of all the museums who will probably now be less trusting and feel the need to accompany such visitors at all times, and can you blame them? What a mess!

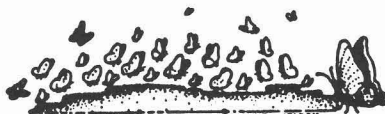
Less than ten years ago, a flight-worn male of *O. croesus lydius* sold on an average for \$300. Today, a reared pair, ex-pupae, can be bought for as little as \$30. And look how well our own *Eumaeus atala* has progressed, thanks to successful rearing in Gainesville, Fla.

If the same effort and success could someday be possible with *paradisea*, *goliath*, *meridionalis*, *alexandrae*, *chimaera* and *tiethonus*, not only would it solve the problem of cost to collectors, but it obviously would eliminate the threat of extinction of the species.

Possibly larva and food plant exchanges between countries through society-accredited farms with a certain percent returned to the wild, along with patient breeding instead of over anxious collecting in order to make sales, could someday eliminate the need of placing these most beautiful and desirable butterflies out of reach ever again.

What do others think of this? I hope to get some feed-back and some ideas, as I know there are some out there far more knowledgeable than I.

Thomas Ashby Jr.



## Forthcoming Meetings

### ENTOMOLOGICAL SOCIETY OF AMERICA

Symposium: Relationships Among  
Higher Groups of Lepidoptera

At the next meeting of the Entomological Society of America in Boston, MA, there will be two sessions of contributed papers on phylogenetic analysis and higher group relationships in the Lepidoptera. The meeting will run from November 29 to December 3, 1987, in the Sheraton Boston Hotel & Towers. Information about the meeting and hotel reservation may be obtained by contacting the ESA, 4603 Calvert Rd., College Park, MD, 20740. A list of titles and speakers can be obtained from David Wagner, Dept. of Entomology, California Academy of Sciences, Golden Gate Park, CA, 94118; or James Miller, Dept. of Entomology, American Museum of Natural History, Central Park West at 79th St., New York, NY, 10024.

### THE LEPIDOPTERISTS' SOCIETY

39th Annual Meeting

The 39th Annual Meeting of the Society will be held in Pittsburgh, Pennsylvania July 14-17, 1988. It will be hosted by the Carnegie Museum with John Rawlins in charge of arrangements. More info next issue.

### PACIFIC SLOPE SECTION ANNUAL MEETING

The Colorado Outdoor Education Center near Florissant, Colorado will be the location for the 1988 Pacific Slope Section meeting. It will be held on the Weekend of July 8-10. More details in future issues.

## 175th ANNIVERSARY, THE ACADEMY OF NATURAL SCIENCES

An International Symposium on SPECIATION will be presented November 5 to 8, 1987 in celebration of the 175th Anniversary of the Academy of Natural Sciences in Philadelphia, Pennsylvania. Contributed papers are welcomed. Committee selected papers will be presented as posters. The best contributed papers will be published in an issue of The Proceedings of the Academy of Natural Sciences.

Registration and reception the evening of November 5th and banquet on the 7th. Registration fee \$75.00; students and professionals "in transition" \$15.00. Banquet extra; limited numbers. Pre-publication discount for symposium volume, \$28.00; \$40.00 after the symposium.

For information or submission of papers, write or call Dr. George Davis, Symposium Committee, Academy of Natural Sciences of Philadelphia, Philadelphia, Pennsylvania 19103. Phone (215) 299-1132.

Accommodations: A special symposium rate of \$45.00 is available at the Center City Quality Inn, 501 N. 22nd St, Philadelphia, PA 19103. Phone (215) 568-8300. Reservations must be made by October 1, 1987.

## XVIII INTERNATIONAL CONGRESS OF ENTOMOLOGY

The 18th International Congress of Entomology will be held in Vancouver, British Columbia, Canada from July 3rd to 9th, 1988. The congress is sponsored by the Entomological Society of Canada and will be held at the University of British Columbia. For information on program, costs, accommodations, tours, etc., write to Dr. G. G. E. Scudder, Secretary-General, XVIII International Congress of Entomology, Dept. of Zoology, The University of British Columbia, Vancouver, B.C. V6T 2A9, Canada.



## Notices

### JOURNAL SOLICITS ILLUSTRATIONS FOR FRONT COVER

Illustrations on the Journal front cover are intended to be eye-catching yet factual. They are now changed but once a year, and it is time for a new one. If you have an illustration you think would enhance the cover, send it to Journal editor Bill Miller for consideration. An explanation of the cover illustration and an acknowledgment appear inside the front cover.

Cover illustrations can be drawings or photographs, but the original must be able to withstand the coarse reproduction called for by the texture of cover stock. Submissions should be no larger than a sheet of typewriter paper. If copyrighted or recently published, permission to use must accompany submissions. If interest is sufficient, cover illustrations might be changed oftener than once a year.

### CALL FOR NOMINATIONS FOR NEW MEMBERS OF THE INTERNATIONAL COMMISSION ON ZOOLOGICAL NOMENCLATURE

The following members of the Commission reach the end of their terms of service at the close of the XXIII General Assembly of the International Union of Biological Sciences to be held in Canberra in October 1988: Prof Dr R. Alvarado (Spain; specialist field Echinodermata); Dr G. Bernardi (France; Lepidoptera); Prof C. Dupuis (France; Heteroptera) and Dr L.B. Holthuis (The Netherlands; Crustacea). A further vacancy arises from the death of Prof B.S. Zheng (People's Republic of China; Ichthyology).

The addresses and specialist fields of the present members of the Commission may be found in the Bulletin of Zoological Nomenclature, 44(1): 2-3 (March 1987).

Under Article 3h of the Commission's Constitution a member whose term of service has terminated is not eligible for immediate re-election unless the Council of the Commission has decided to the contrary.

The Commission now invites nominations, by any person or institution of candidates for membership. Article 2h of the Constitution prescribes that:

'The members of the Commission shall be eminent scientists, irrespective of nationality, with a distinguished record in any branch of zoology, who are known to have an interest in zoological nomenclature'.

(It should be noted that 'zoology' here includes the applied biological sciences (medicine, agriculture, etc.) which use zoological names).

Nominations, giving the dates of birth, nationality and qualifications (by the criteria mentioned above) of each candidate should be sent by 31 March 1988 to: The Executive Secretary, International Commission on Zoological Nomenclature, c/o British Museum (Natural History), Cromwell Road, London, SW7 5BD, U.K.

### GOOD NEWS FOR JOURNAL AUTHORS

There is good news for authors considering submitting manuscripts to the Journal, and for those hesitating to submit because of the present \$60 page charge.

As established by the Executive Council at the Berkeley meeting, there are three new page-charge categories which dramatically reduce what authors have to pay:

- \$20. per Journal page for authors supported by institutions.

- \$10. per Journal page not to exceed a total of \$50 for authors lacking institutional support.

- Free publication for a limited number of manuscripts whose authors are unable to pay any amount because of foreign currency exchange problems, student status, or other compelling reasons.

Only four free publication slots will be available per Journal volume or year; thus the fifth through eighth manuscripts accepted in any one year for free publication would be held over for printing the following year, and so on.

Page charges apply to articles, general notes, and technical comments. The Society will continue to underwrite full publication costs for book reviews and obituaries; authors of these will not be charged anything.

The new page charges are among the lowest for entomological journals. They go into effect beginning with Journal volume 42 (1988). Authors need not delay submitting to take advantage of the new rates; because of the normal processing time, material submitted now is eligible.

### PROPOSED CONSTITUTIONAL AMENDMENTS

A few more changes in the constitution have been proposed to bring it into line with current practices as indicated below. Strikeouts denote deletions in current wording, ex. ~~strikeout~~; while squiggly brackets, { }, denote proposed new wording.

#### ARTICLE VIII. PUBLICATIONS

Section 1. The Society shall publish a periodical to be known as "Journal of the Lepidopterists' Society", a continuation of The Lepidopterists' News. The Journal shall be devoted to original papers, ~~literature abstracts~~, and other matters of permanent record. Each volume shall be issued for a calendar year, and shall be composed of four numbers. ~~In it shall be published a summary of the proceedings of the annual meetings.~~

Section 2. The Society shall also issue a periodical to be known as "News of the Lepidopterists' Society", which shall be devoted primarily to notices by members, lists of new members, announcements of nominations, committee appointments, forthcoming meetings, summaries of the recent field collecting season, {proceedings of the annual meetings,} and other matters of interest to members but not requiring permanent record. It shall

appear at more frequent intervals than the Journal. A list of members of the Society shall be issued at least every second year.

### Section 3. (no changes)

#### ARTICLE IX. EDITORIAL BOARD

Section 1. The publications of the Society shall be under the charge of an Editorial Board, ~~consisting of a Chairman and two other at-large members, the Editor of the Journal, the Editor of the News, the Editor of the Memoirs, and the two Associate Editors of the Journal.~~ {The Editorial Board shall consist of the Editors of the Journal, News, and Memoirs, plus two other at-large members of the Society.} ~~The Chairman may also be one of the above five editors.~~ {The two at-large members of the Editorial Board will be appointed by the Executive Council for three-year terms. They may be reappointed.} ~~It~~ {The Editorial Board} shall determine broad publication policies of the Society not otherwise provided for in the Constitution or the By-Laws. It shall consider potential candidates for editorships, and then make recommendations to the Executive Council for appointments of the three Editors.

Section 2. The Chairman of the Editorial Board shall be appointed by the Executive Council for the term of three years, and ~~he~~ may be reappointed. {The Chairman will be any one of the above five board members.} The Executive Council shall appoint, on recommendation of the Editorial Board, the three Editors, for terms of three years each; all three editors may be reappointed for an indefinite number of subsequent three-year terms.

The Associate Editors and other members of the editorial committee of the Journal shall be appointed by the Journal Editor; their terms shall terminate with ~~his~~ {the Editor's} term, but ~~his~~ {the} successor may reappoint any of them.

No proposed changes in last paragraph.

#### SEASON SUMMARY, INSTRUCTIONS TO CONTRIBUTORS

Format: type double-spaced, one side of paper only; please list, rather than writing narrative; use separate sheet for each state.

What to report: species of unusual occurrence with regard to geography, flight season, altitude, numbers; "choice" species; migrations; new food-plant observations; unusual behavior; aberrations. Contributors should be able to defend accuracy of determinations, assertions re county records, etc.

How to report: segregate by states or provinces; separate butterflies from moths; give name of species, locality (at least as definable on topographical or road map), county, date of record, how attracted or captured, if pertinent (primarily for moths).

Names and sequences: use Miller-Brown list (Lep. Soc. Memoir No. 2, 1981) for butterflies, MONA list (Hodges, 1983), for moths or the most up-to-date reference available to you for each group. List the species in the same sequence as in that reference (this will save the coordinator an immense amount of time). Cite the name of any expert who defined a difficult or unusual species for you.

Records from prior years, dated as such, may be included, if proper determination resulted in delay, or to respond to a statement in a previous Summary.

When to report: reports must reach coordinator by 5 January 1988 in order to allow him the next six weeks to compile data. EARLIER REPORTING IS ENCOURAGED, so that coordinator will have time to inquire about any data that are unclear.

Where to send reports: The 13 numbered and defined zones with the Coordinators' names and addresses follow this notice. Please send the state/province report directly to the Coordinator for the appropriate area.

All contributors will be acknowledged by name in the summary. However, the balance of significance vs. space available will determine whether a particular record is included by the coordinator.

NOTE: A record as used in the summary should mean the first time known to the collector that that species had been captured in a given province, state or county.

#### LIST OF ZONES AND COORDINATORS

1. FAR NORTH (Eastern Siberia, Alaska, Yukon, NWT, Greenland): Ken PHILIP, Inst. of Arctic Biology, Univ. of Alaska, Fairbanks, AK 99701 USA.
2. PACIFIC NORTHWEST (OR, WA, ID, B.C.): Jon SHEPARD, Sproule Creek Rd., R.R. 2, Nelson, B.C., V1L 5P5, CANADA.
3. SOUTHWEST (CA, NV, AZ): Bob LANGSTON, 31 Windsor Ave., Kensington, CA 94708 USA.
4. ROCKY MOUNTAINS (Alta, MT, WY, UT, CO, NM): Ray STANFORD, 720 Fairfax St., Denver, CO 80220 USA.
5. PLAINS (Sask., Man., ND, SD, NB, KS): Dick ROSCHE, 501 Shelton St., Chadron, NB 69337 USA.
6. SOUTH CENTRAL (OK, TX, AR, LA): Ed KNUDSON, 804 Woodstock, Bellaire, TX 77401 USA.
7. ONTARIO/QUEBEC: Ross LAYBERRY, 2220 Halifax Drive, #1409, Ottawa, Ontario, K1G 2W7, CANADA.
8. MIDWEST (MN, WI, MI, IA, MO, IL, IN, OH, KY, WV): Les FERGE, 7119 Hubbard Ave., Middleton, WI 53562 USA.
9. SOUTHEAST (TN, MS, AL, VA, NC, SC, GA, FL, Bermuda): Andy BECK, NDVECC, Box 43, Naval Air Station, Jacksonville, FL 32212 USA.
10. NORTHEAST (NF, Labr., Maritimes, New England, NY, PA, NJ, MD, DE, DC): Dave WINTER, 257 Common St., Dedham, MA 02026 USA.
11. HAWAII/PACIFIC ISLANDS: J. C. E. RIOTTE, Dept. of Entomology, Bernice P. Bishop Museum, P.O. Box 19000-A, Honolulu, HI 96817 USA.
12. NORTHERN NEOTROPICS (Mexico, Cent. Am., Antilles): Eduardo WELLING M., Apartado Postal 701, Merida, Yucatan, MEXICO.
13. SOUTH AMERICA: Boyce DRUMMOND, Pikes Peak Research Station, Florissant, CO 80816 USA.

EDITORS' NOTE: It frequently takes first class mail 3 to 4 weeks for delivery in Canada, so mail your Canadian records early with this in mind. The same is true for mail to reach the U.S. from Canada so give the Canadian based coordinators plenty of time. It takes over a week for mail to reach Mexico also. Also, note that the deadline for material to be in the hands of the coordinators is Jan. 5th and material received by them after this date is apt to be left out of their reports altogether.

#### ICZN

The following Applications have been received by the International Commission on Zoological Nomenclature and have been published in Volume 44, part 2 of the Bulletin of Zoological Nomenclature on 25 June, 1987. Comment or advice on them is welcomed and should be sent to the Executive Secretary, ICZN, c/o British Museum (Natural History), London SW7 5BD, U.K.

##### Case No.

- 1731 Polyommatus emolus Godart [1824] (currently Anthene emolus; Insecta, Lepidoptera): proposed conservation of specific name.

The following Opinions, rulings of the Commission, have been published in Volume 44, part 2, of the Bulletin of Zoological Nomenclature on 25 June, 1987.

##### Opinion No.

- 1445 HETEROGYNIDAE Rambur, 1866 (Insecta, Lepidoptera) and HETEROGYNIDAE Nagy, 1969 (Insecta, Hymenoptera): a ruling to remove the homonymy.

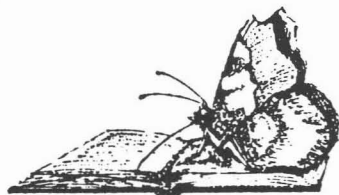
#### EARTHWATCH PROJECT IN PAPUA NEW GUINEA

Papua New Guinea, with its immense birdwing butterflies and plethora of other spectacular insects, is a true butterfly and insect fancier's nirvana. Those who have visited this remarkable nation usually describe it in unending strings of superlatives. Lepidopterists who have dreamed about visiting this remarkable nation, but were hesitant about trekking PNG's jungles on their own, will be interested in an upcoming EARTHWATCH expedition, sponsored by the nonprofit Center for Field



Research. Concentrating on moths, lepidopteran larvae, and certain other insect groups, project leader Larry Orsak and his volunteers will investigate trends in the possession of various defensive mechanisms, such as warning coloration, "sinister images," and chemical defenses. The goal is to test a new theory that may better explain why certain insects evolve highly sophisticated defensive mechanisms, or a complex defensive repertoire, while others at the same site employ only a few or very simple techniques to avoid predation. One of the project's special focuses will be on a presumed spider-mimicing moth, which appears to represent a new type of mimicry. The project takes place at the Wau Ecology Institute, a research station founded by Honolulu's Bishop Museum. Volunteers will each serve for a two week stint sometime between December 1987 to February 1988. Since volunteers aid in a scientific research project, most expenses are tax-deductible. Following the project, volunteers are free to stay at the station to collect and observe. Some may elect to explore other sites in Papua New Guinea, using travel information available during the project. Further information on this project, "Evolution of insect defenses in a tropical environment," may be obtained from: EARTHWATCH, 680 Mt. Auburn Street, Box 403, Watertown MA 02272.

## Books



### NEW BOOK

The Butterflies of Indiana by Ernest M. Shull is to be published this coming October by Indiana University Press, 10th and Morton Sts, Bloomington, Indiana 47405. There will be 272 pages, in 7 1/2" x 9 1/2" size, including 149 maps, 4 figures and 50 color plates illustrating all 149 species found in the state. Part I treats the biology of butterflies, techniques of collection and preservation, classification and identification, and conservation of habitat and endangered species. Parts II and III are species accounts of all the skippers and butterflies in Indiana, each account describing the adult and its range, its distribution in Indiana and the habitats in which it is likely to be found, plus its life cycle and various larval forms and the larval foodplants. Also included are a glossary, bibliography and index. Cloth edition at \$25.00 plus \$1.50 shipping and handling by 4th class mail or \$2.50 shipping and handling by U.P.S.

### BUTTERFLIES AND FLOWERS POSTER

The Smithsonian Institution announces the publication of a colorful Butterflies and Their Flowers poster. The poster is 23" x 35" and depicts 10 common North American butterflies, each on one of its nectaring sources. The paintings are by Biruta Hansen with the text by Bob Robbins (a Lep. Soc. member) and Stan Shetler (a botanist). A brief description of each butterfly is given plus a description of the pictured plant. Additional nectaring sources and larval foodplants which can be used to attract these butterflies to one's garden are mentioned as well as the general distribution of the butterflies. The egg, larva and pupa of the Monarch are shown. Common names are used for the pictured insects and plants but Latin names are included in the text for both. Cost is \$5.00 for each poster plus \$1.75 postage and handling for a single poster, and \$0.75 for each additional one. They can be ordered from Smithsonian Institution Press, c/o Tab Books Inc, 13347 Blue Ridge Ave, Blue Ridge Summit, Pennsylvania 17214. The poster should provide a convenient teaching tool for those promoting Butterfly Gardening or introducing the general public to the beauties of butterflies.

June D. Preston

## OFFICIAL LISTS AND INDEXES OF NAMES AND WORKS IN ZOOLOGY

A revised and updated edition of the Official Lists and Indexes of Names and Works in Zoology has now been published. For the first time all the names and works on which the International Commission on Zoological Nomenclature has ruled since it was set up in 1895 are brought together in a single volume. Entries are arranged in four sections giving in alphabetical order the family-group names, generic names, specific names and titles of works which have been placed on the Official Lists or the Official Indexes. There are about 9,900 entries of which 134 are for works. In addition, there is a full systematic index and a reference list to all relevant Opinions and Directions. The volume is 366 pages, size A4, casebound.

Copies can be ordered from: The International Trust for Zoological Nomenclature, c/o British Museum (Natural History), Cromwell Road, London SW7 5BD, U.K. Price £160 or \$110 or The American Association for Zoological Nomenclature, c/o NHB Stop 163, National Museum of Natural History, Washington, D.C. 20560, U.S.A. Price \$110 (\$100 to members of A.A.Z.N.)

## GUIDE TO SMITHSONIAN SERIAL PUBLICATIONS

The Denali Press, P.O. Box 021535, Juneau, Alaska 99802-1535, U.S.A., Phone (907) 586-6014, announces the forthcoming publication of the Guide to Smithsonian Serial Publications. Cost will be \$27.95 plus \$2.00 postage and publication of the 302 page volume is scheduled for November 1987. The Guide is an annotated listing, arranged by series, of fourteen important serial publications issued by the Smithsonian Institution since 1964. There are author, title and subject indexes. It provides easy access to approximately 750 titles issued between 1964 and 1986 for a wide variety of monographs dealing with subjects from Anthropology to Zoology.



## Research Notices

- Wanted: Correspondence and/or exchange with anyone having collected any Eupsilia sp. in N. America. I would appreciate any and all capture records especially those during winter months. Weather data would also be helpful. Barry S. Nichols, 7004 Ethan Allen Way, Louisville, KY, 40272, USA.
- Final call for Nevada butterfly information for forthcoming book. ALL data will be used and contributors acknowledged. ALL SPECIES. Date, location, ecology, hostplants, abundance, etc. Whatever you can send will be useful. George T. Austin, Nevada State Museum, 700 Twin Lakes Drive, State Mail Complex, Las Vegas, Nevada 89158.
- WANTED: Summer and fall records of Monarch butterflies (Danaus plexippus) from all provinces and states in western North America. I am especially interested in direction of travel and numbers observed. Chris Nagano, Entomology Section, Natural History Museum of Los Angeles County, 900 Exposition Blvd., Los Angeles, CA 90007.

## New Members



BEER, PAUL A.: 1508 West Rosemont Ave., Chicago, IL 60660.

BELICEK, JOSEPH: 9749 154 St., Edmonton, Alberta T5P 2G4, CANADA.  
 BLACK, DEBORAH: P.O. Box 27335, Escondido, CA 92027-0335.  
 BRADSHAW, BRUCE: 5024 North Oak, #328, Kansas City, MO 64118.  
 BRAKER, NANCY: Dept. of Environmental Management, Division of Planning and Development, 22 Hayes St., Providence, RI 02908.  
 BRYANT, MARK: 2408 Viking Dr., Independence, MO 64057.  
 CASAS, EMILIO: Calle Nueva San Antonio #8, Olot, Gerona, SPAIN.  
 CHEEVERS, ANTHONY: 1 Clifton St., Boston, MA 02119.  
 DANG, P.T.: Biosystematics Research Institute, K.W. Neatby Bldg., Central Experimentl Farm, Ottawa, Ontario K1A 0C6, CANADA.  
 ELIA, FRANK C.: Day Butterfly Center, Callaway Gardens, Pine Mountain, GA 31822.  
 EVANS, JUDY: 645 South Fuls Rd., New Lebanon, OH 45345.  
 GLEASON, DANIEL: P.O. Box 1033, Brookfield, WI 53005-1033.  
 HANAFUSA, HIROTO: 5-12-20-703 Higashimikuni, Yodogawa-ku, Osaka 532, JAPAN.  
 HARLEY, BASIL: c/o Harley Books, Martins, Great Horkesley, Colchester, Essex CO6 4AH, ENGLAND.  
 HOBBS, CAL: 5451 Rockwood Rd., Columbus, OH 43229.  
 JOHNSON, KELLY S.: 1175 Venita Dr., Athens, GA 30606.  
 KUN, KENT LI HING: A5, 2/F, Jubilee Gardens, Tan Kwai Tsuen Rd., Hung Shui Kiu, Yuen Long, New Territories, HONG KONG.  
 MARTIN, TERRY: Rural Route 07, #19 Greenbriar, Jefferson City, MO 65102.  
 MERZ, DAVID CHARLES: 30 Milton St., Rochester, NY 14619-1044.  
 OLSON, NIJOLE: 2111 Bancroft Pl., N.W., Washington, DC 20008.  
 PAPILLON BUTTERFLY FARM: 14 Jalan Pasar (1/21), Petaling Jaya 46000, MALAYSIA.  
 POSLA, MARIO: Ave. 6, Calles 15/17 #1555, San Jose, COSTA RICA.  
 SIBATANI, ATUHIRO (Prof. Dr.): Biological Laboratory, Kansai Medical University, 18-89 Uyama-Higasimati, Hirakata 573, JAPAN.  
 SMITH, DAVID: 18 Pecan St., #A, Naples, FL 33962.  
 SWENGEL, ANN B. (Mrs.): 315 Fourth Ave., Baraboo, WI 53913.  
 TURNER, LARRY: 361 Lighthouse Ave., Pacific Grove, CA 93950-2853.  
 URBANSKI, LEO S.: 4912 North Paulina St., Chicago, IL 60640-3419.  
 VORDENBERG, ROBERT: 1900 S.W. 84th Ave., North Lauderdale, FL 33068.  
 WANKHAR, D.: Riatsamthiah, Shillong-793001, Meghalaya, INDIA.  
 WILLEM, I.R.: 89 Schoeman Rd., P.O. Box 8594, Verwoerdpark, Transvaal 1453, SOUTH AFRICA.

## Address Changes



AGNEW, CHARLES W.: 2101 Manitou, Lafayette, IN 47901.  
 ASTON, C.E. (Dr.): 561 South Negley Ave., #12, Pittsburgh, PA 15232.  
 BURGESS, KATHRYN HAY: Museum of Comparative Zoology, Harvard University, Cambridge, MA 02138.  
 CALLAGHAN, CURTIS J.: c/o Louis Berger Int., 110 Lewis St., Lagos, NIGERIA.  
 CARY, STEVEN J.: 610-1/2 Miller, Santa Fe, NM 87501.  
 CASAGRANDE, MIRNA MARTINS (Prof.): Departamento de Zoologia, Universidade Federal do Parana, Caixa Postal 19020, 81504 Curitiba, Parana, BRASIL.  
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 FORS, MARY F.: 431 Browning Ave., Bismarck, ND 58501.  
 FULLER, EDWARD R.: Dept. of Entomology, University of Alberta, Edmonton, Alberta T6G 2E3, CANADA.  
 GASKI, ANDREA L.: World Wildlife Fund - Traffic (U.S.A.), 1250 24th Street NW, Washington, D.C. 20037.  
 GUPPY, C.S.: #101 - 235 Michigan St., Victoria, B.C. V8V 1R4, CANADA.  
 HARTMANN, PATRICIA PLUMB: 221 Old Spanish Way, Winter Haven, FL 33880.  
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 KENNEDY, CHANDLER J.: 28 Oakleigh Lane, Ladue, MO 63124-1341.  
 KINDER, STEPHEN R.: 11123 McGee, Kansas City, MO 64114.  
 KING, RON: 1321 Audubon Drive, Columbus, IN 47203.  
 MATTHEWS, DEBORAH L.: Dept. of Entomology/Bldg. 339, Archer Road Lab, University of Florida, Gainesville, FL 32611.  
 McCAFFREY, J.: 1 South 751 Avon Drive, Warrenville, IL 60555.  
 MIELKE, OLAF H.H. (Dr.): Departamento de Zoologia, Universidade Federal do Parana, Caixa Postal 19020, 81504 Curitiba, Parana, BRASIL.  
 MITKUK, KATHY: 385 Redding Rd., #152, Lexington, KY 40502.  
 MILLER, JOEL D.: P.O. Box 504, Westside Station, Worcester, MA 01602-0504.  
 MULLALY, HELEN: 1111 North 64th Street, #46, Mesa, AZ 85205.  
 PAGE, VERNON C.: P.O. Box 1996, 259 East New York Ave., Southern Pines, NC 28387.  
 PAVULAAN, HARRY: P.O. Box 20202, Affton, St. Louis, MO 63123.  
 PAYNE, TROY: 6422 Black Oak Lane, Louisville, KY 40216.  
 POGUE, MICHAEL G.: Dept. of Entomology, National Museum of Natural History, NHB 127, Smithsonian Institution, Washington, DC 20560.  
 RICHINS, ZEN O.: 813 Padre Dr., Salinas, CA 93901-2422.  
 ROBB, JEFFREY B.: 2008 North Lake Trail, Denton, TX 76201.  
 SANCHEZ-CONDE, ANTONIO: Generalisimo 43, Torrijos, Toledo, 45500 SPAIN.  
 SCHWARTZ, ALBERT (Dr.): 10000 S.W. 84th St., Miami, FL 33173.  
 SEWELL, BYRON: P.O. Box 8016, South Charleston, WV 25303-0016.  
 SEWELL, VICTORIA: P.O. Box 8016, South Charleston, WV 25303-0016.  
 SLEETER, RONALD T.: 1263 Semor Dr., Decatur, IL 62521.  
 SMITH, JEFFREY A.: 3789 Hillside Dr., Rocklin, CA 95677-1943.  
 STANSBERRY, JOHN: P.O. Box 2808, Ketchum, ID 83340-2808.  
 STEVENS, ROBERT E.: P.O. Box 1679, Jacksonville, OR 97530-1679.  
 TUSKES, PAUL M. (Dr.): 3743 Harris St., La Mesa, CA 92041-7615.  
 WALLING, DENNIS M.: 4600 University Dr., #1413, Durham, NC 27707.  
 WELLER, SUSAN J.: Dept. of Zoology, University of Texas at Austin, Austin, TX 78712-1104.  
 WIERNASZ, DIANE C.: Dept. of Zoology NJ-15, University of Washington, Seattle, WA 98195.

### CORRECTIONS AND MINOR CHANGES TO THE 1986 MEMBERSHIP DIRECTORY

BUTTERFLY COMPANY, THE: change area code from "212" to "718."  
 BROWN, F. MARTIN: change ZIP code to "80925."  
 GREGUS, FRANK J., Jr.: computer-garbled list of interests in Directory should read: "RHOP, MACRO, esp. livestock of Danaidae, Papilio, Morphidae, Heliconiidae, Prepona, Saturniidae; purchase of above for classroom use; books, correspondence. Coll., Ex., Buy."  
 McNAMARA, JOYCE C.: change ZIP code to "34209."

# Metamorphosis

ABNER A. TOWERS.....

On March 18, 1987, Abner A. Towers passed away in Atlanta, Georgia at the age of 71. He was a charter member of both the Lepidopterists' Society and the Southern Lepidopterists. Born in Gadsden, Alabama January 28, 1916, he earned his B.S. at Massachusetts Institute of Technology in 1939. After military service during World War II, he settled in Georgia, building a brilliant career as a chemical engineer and also resuming the study and collecting of butterflies, first initiated during his teens. He concentrated mainly on the Georgia and Florida species, eventually amassing a collection containing impressive series of virtually all the species recorded from these two states. His name appears frequently in The Butterflies of Georgia by Lucien Harris, Jr. (Univ. of Oklahoma Press, 1972) for numerous state records and significant field observations. More recently he added several species to the list of Georgia's butterfly fauna, including Mitoura hesseli, and, in 1981, he participated in the discovery of a new Geometrid, Narraga georgiana COVELL, FINKELSTEIN & TOWERS (J. Res. Lep., 1984, 23/2: 161-168). His collection was donated to the University of Florida in 1985 and deposited in the Florida State Collection of Arthropods, Gainesville.

Information provided by Irving L. Finkelstein

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D. G. SEVASTOPULO.....

Word has been received of the death of former member D. G. Sevastopulo in Mombasa, Kenya on June 5, 1987. Mr. Sevastopulo was a long time member of the Society until becoming ill about a year ago. He was 84 years old at the time of his death and had been interested in collecting lepidoptera since the age of 5.

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CHARLES F. ZEIGER.....

Charles F. Zeiger, known as Chuck to his friends, passed away this past spring in Jacksonville, Florida. He was well known to many lepidopterists here in the U.S. and abroad, and had been a Society member since 1957. He will be missed by many of us.

Mr. Zeiger worked for 30 years with the Army Corps of Engineers, a career which helped him in many ways in terms of gaining access to many interesting areas in Florida. His job was primarily with aquatic weed control, and this led him on many treks throughout the state, and his net was always packed along for collecting purposes. This foresight enabled him to record many rare species in Florida, including Paones viator zizaniae, which he found near the town of Suwannee in an area accessible only by airboat. Another highlight was the capture of the only N.A. specimen thought to represent Eurema chamberlaini. Many of his records are listed in Kimball's Lepidoptera of Florida (1965), to which he was a major contributor.

He was also a long-standing donor of specimens to the Florida State Collection of Arthropods in Gainesville, where his personal collection will ultimately come to rest in tribute to his lepidopterous activities. He was also one of the charter members of the Southern Lepidopterists, a group which will miss his enthusiastic support, and to whose members he might have been best known. He definitely will leave a great many friends behind.

Chuck was a very strong influence to my personal interest in lepidoptera, and I learned a great deal from him over the years, and spent many hours in the field with him in search of rare treasures. He is survived by

his wife, JoAnn, and three daughters, each of whom frequently accompanied him on his collecting forays.

Submitted by Dave Baggett

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## The Market Place

Buy • Sell • Exchange • Wants



Items submitted for inclusion in this section are dealt with in the manner set forth on page 8 of the Jan/Feb 1987 NEWS. Please note that in keeping with the guidelines of the Society, henceforth no mention of any species on any threatened or endangered species list will be accepted in these items. This will include all Ornithopterans now and for the foreseeable future. Items will be accepted from members only and will be printed only once unless entry in the maximum of two successive issues is requested. Please keep items short. A maximum of 100 words is allowed. SASE calls for a self addressed stamped envelope.

The Society, as always, expects all notices to be offered in good faith and takes no responsibility for the integrity of any advertiser. Any disputes arising from such notices must be resolved by the parties involved outside of the structure of the Society.

WANTED: Diapausing pupae of Heraclides cresphontes, Pterourus glaucus canadensis, Pterourus eurymedon and Pterourus rutulus. A.R. Pittaway, 15 Beech Hall Road, London E4 9NJ, England.

FOR SALE: Abstracts of 45 papers presented by 56 authors & co-authors at MONCON-2 (Second International Conference on the Monarch Butterfly, Los Angeles, California, 2-5 Sept. 1986). 23 pages, comb bound. \$5.00 U.S., postpaid, from Julian P. Donahue, Natural History Museum, 900 Exposition Blvd., Los Angeles, CA 90007-4057, U.S.A.

FOR SALE: One female Bhutanitis lidderdalei A1 quality, MAKE OFFER -- males available in lots of 1 to 6, 7 to 12, and 13 to 25. Write for prices per lot. Also for sale or trade Teinopalpus imperialis males and P. arcturus pairs. Some bred pairs of Papilio bairdii (f. brucei & bairdii) from Utah are still available. Write for list of Hard-to-Get Lepidoptera of the World. S.A.S.E. to: Wayne H. Whaley, Wymount Terrace 6B-349, Provo, Utah 84604, U.S.A.

WANTED: African Cetonidae, especially Eudicella, Mecynorrhina, Goliathini, etc. I wish to buy or exchange for papered butterflies from South Africa. Can also offer MANTICHOHA HERCULEANA (world's largest tiger beetle) plus many other coleoptera endemic to South Africa. I.R. Willem, P.O. Box 8594, Verwoerdpark, Transvaal 1453, South Africa.

FOR SALE: Butterflies from California, Arizona and Israel. Free list. SASE please. Robert Wuttken, 9506 National Blvd., Palms, California 90034.

FOR SALE OR EXCHANGE: Cocoons of H. columbia reared from wild collected females in Northern Ontario. Good quantities available in September. Prefer to trade for worldwide Sphingidae. Hal Donly, 30 Loweswater Ave., Unionville, Ontario, L3R 7W3 Canada.

WANTED: Contacts in Eastern North America to exchange leps with. Have European sp. and leps in my area. Also interested in rearing leps. Chris Schmidt, Didsbury, Alberta T0M 0W0, Canada.

FOR EXCHANGE: I am presently raising an abundant number of Dryocampa alba (pale form) of the Saturniidae. It is an extremely geographically isolated species. I'm interested in all forms of both butterflies and moths, both foreign and domestic - especially exotics. Would enjoy trading with anyone who would like to have this hard-to-find species. Also seeking A Field Guide to the Butterflies of the West Indies by N.D. Riley. Contact Mark Bryant, 2408 Viking Drive, Independence, Missouri 64057.

FOR SALE: "A review of migration in Libytheidae" by O. Shields, Tokurana 12(2), 1987. Send \$1.50 to cover publication and mailing costs. Oakley Shields, 4890 Old Highway, Mariposa, California 95338.



FOR EXCHANGE: I have a small quantity of butterflies from last season and I will be getting many more species throughout western Montana this summer. I would like to exchange these species for other North American butterfly species. Also, I may be interested in some moths such as Arctiidae, Sphingidae and Saturniidae. Please send a list of what you have to offer. Craig Odegard, 7385 Beryl Lane, Missola, MT 59801.

FOR SALE OR EXCHANGE: Live larva of Epargyreus clarus. Contact Kenneth R. Knight, 433 Brady N.W., Comstock Park, Michigan 49321 or Phone (616) 784-6243.

WANTED: Re-building my N.A. collection of Lepidoptera, and can use any papered material you can spare, any condition or quality. I am an old Charter Member and can't collect any more--shall be glad to pay all postage. Michael Zappalorti Sr., 123 Androvette Street, S.I., N.Y. 10309.

FOR SALE: Journal of the Lepidopterists Society, Vol. 1 to 40, complete, bound, with Memoir No. 1 and Commemorative volume. \$390.00 postpaid in USA. R. Rahn, 3205 W. Rochelle Road, Irving, TX 75062.

JOURNALS WANTED: Bishop Museum Library needs vols 1-30 of JOURNAL of the Lepidopterists' Society (through 1976); desire tax deductible donation, we pay shipping; please write before sending journals; also need TRANSACTIONS of the American Entomological Society vols 1-83. Scott Miller, Bishop Museum, Box 19000-A, Honolulu, Hawaii 96817-0916.

FOR SALE: Entomological cabinet with glass topped drawers. SASE for details. David Rahn, 3205 W. Rochelle Road, Irving, TX 75062.

FOR SALE: Bait traps and light traps. For information and prices, or help making your own, contact Leroy Koehn, 16225 Huntley Rd, Huntsburg, Ohio 44046. Phone (216) 636-5645, home or (216) 881-0100, work.

FOR SALE: Cocoons of A. luna, A. io and S. cynthia. SASE for prices. Larry J. Kopp, R.D. Box 30, Klingerstown, PA 17941.

WANTED: Contact desired with any persons having done business of any nature with Chuck Kondor, alias "Entomological Clearing House" of Hales Corners, Wisconsin. All responses will be kept confidential. Please contact Bill Wright, 18 Clinton Pl., Woodcliff Lake, N.J. 07675-8006.

#### MEMBERS COMMERCIAL NOTICES.....

AUSTRALASIAN BUTTERFLY COMPANY, P.O. Box 330, Lane Cove, New South Wales 2066, Australia. Phone (02) 4282552. For Sale: Australian rare and bred butterflies, moths, beetles and other insects. Magnificent original watercolor paintings of butterflies. Guided safaris to Australian collecting locations. Night lighting a speciality, all gear supplied. Catalogue available.

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PAUL OPLER, 5100 Greenview Ct, Ft. Collins, CO 80525. FOR SALE: Butterfly photos taken in nature. Slide copies and enlarged photographs, framed or unframed, with and without mats. Species and price lists available. Both eastern and western U.S. species.

APOLLO BOOKS, LUNDBYVEJ 36, DK-5700 SVENDBORG, DENMARK. The Lepidopterists' bookseller. DIE BOMBYCES UND SPHINGES DER WESTPALAEARKTIS. By de Freina & Witt. Recently published. 29 x 21 cm. 708 pages. 50 colour plates of a very high quality showing 1793 specimens. 369 text figs. 330 distrib. maps. Bound. Price DKK (Danish Kroner) 1,690. The most important book on these species for many years. Ask for a free colour prospect. Also available now: D'Abrera: BUTTERFLIES OF THE WORLD. NEOTROPICAL REGION. VOL. 3. DKK 1,190. SPHINGIDAE MUNDI. Hawk Moths of the World. DKK 1,170. ASK FOR A COPY OF OUR NEW CATALOGUE WITH EVEN MORE BOOKS ON LEPIDOPTERA.

THOMAS GREAGER, R.D. #6 Box 56-B, Greensburg, Pennsylvania 15601. Worldwide Lepidoptera for sale, also some Coleoptera. Top quality papered specimens with complete data. Good prices. Satisfaction guaranteed. ALSO FOR SALE: Elephant insect pins and the books "The Illustrated Encyclopedia of the Butterfly World" by Smart and "Butterflies of the World" by Lewis. Send \$1.00 and legal size SASE to receive price list. Your dollar refunded on first order.

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KEN THORNE, P.O. Box 684, Lambeth, Ontario N0L 1S0, Canada. Phone (519) 652-6696. FOR SALE: Lepidoptera and coleoptera from around the world. Specializing in world Papilio, Morpho and North American arctic species. Best quality and excellent service. Send \$1.00 for current price lists. Money refunded with first order. WANTED: Contact with collectors and breeders willing to supply good quality material on a regular basis from anywhere in the world. I am also interested in purchasing older collections, especially of Papilio, Morpho and North American species.

JOHN TROTTER, 11 Laurel Way, London N20 8HR, UK. Phone (01) 445 4293. WANTED: Livestock of USA Sphinx moths, Tiger moths, Papilionia & Silk moths. Will buy or exchange for European livestock and foreign silkmooths. List available. New catalogue of antique S/H and new lepidoptera books now available. No charge to Lep. Soc. members.

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DEADLINES: Material for the Jan/Feb issue should reach the NEWS EDITOR by Dec 1 of the previous year, and that for the Mar/Apr issue by Feb 15, for the May/June issue by Apr 1 and for the July/Aug issue by May 1, the Sept/Oct issue by Aug 15 and the Nov/Dec issue by Oct 15. Reports for the SEASON SUMMARY must reach the ZONE COORDINATORS listed on the front cover no later than the 5th of January. NEWS EDITOR is June Preston, 832 Sunset Dr, Lawrence, KS 66044, USA. RIPPLES EDITOR is Jo Brewer, 257 Common St, Dedham, MA 02026, USA.

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INFORMATION ABOUT THE SOCIETY.....

Membership in the Lepidopterists' Society is open to all persons interested in any aspect of Lepidopterology. Prospective members should send the TREASURER, James P. Tuttle, 3838 Fernleigh Ave, Troy, Michigan 48063, the full dues for the current year, \$25.00 US, together with mailing address and a note about areas of interest in the Lepidoptera; student membership (must be certified) \$15; sustaining membership \$35; life membership \$350. Remittances must be in US dollars, payable to the Lepidopterists' Society. All members will receive the JOURNAL (published quarterly) and the NEWS (published bimonthly). A biennial membership directory will comprise the last issue of the NEWS in even-numbered years.

Changes of address (permanent ones only), Additions or Changes in Telephone Numbers or Areas of Interest and Information about Mailing List Rental: Contact the ASSISTANT SECRETARY, Julian P. Donahue, Natural History Museum of Los Angeles County, 900 Exposition Blvd, Los Angeles, California 90007, USA.

Information on Membership and other aspects of the Society must be obtained from the SECRETARY, Dr. Richard A. Arnold, 50 Cleveland Rd, #3, Pleasant Hill, California 94523, USA.

Requests for Missed Issues (i.e. those not delivered although dues have been paid on time) should be sent to the TREASURER, James P. Tuttle, address above, or the PUBLICATIONS COORDINATOR, Ron Leuschner, address below. Defective issues will also be replaced by the TREASURER. Do not request these of the NEWS editor.

Manuscripts submitted for publication in the JOURNAL are to be sent to Dr. William E. Miller, EDITOR, JOURNAL of the Lepidopterists' Society, Department of Entomology, University of Minnesota, St. Paul, Minnesota 55108, USA. See the inside back cover of a recent issue of the JOURNAL for editorial policies.

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AVAILABLE PUBLICATIONS OF THE SOCIETY..... Order from the PUBLICATIONS COORDINATOR, Ron Leuschner, 1900 John St., Manhattan Beach, CA 90266, USA.

CATALOGUE/CHECKLIST OF THE BUTTERFLIES OF AMERICA NORTH OF MEXICO (Memoir No. 2), Lee D. Miller & F. Martin Brown: includes references to original descriptions and location of type specimens. Members and subscribers, \$10 cloth, \$5 paper; non-members, \$17 cloth, \$8.50 paper, postpaid.

COMMEMORATIVE VOLUME, 1947-1972: a 25-year review of the Society's organization, personnel, and activities; biographical sketches; JOURNAL 25-year cumulative index by author, subject, and taxon; clothbound. Members and subscribers, \$6; non-members, \$10, postpaid.

1986 MEMBERSHIP DIRECTORY (current to November 1986). Biennial directory of members and their addresses, with geographic and interest indices. Not available for commercial use. (NEWS #6 for 1986). \$5.00 postpaid.

BACK ISSUES of the JOURNAL and of the NEWS of the Lepidopterists' Society. For a list of the available issues and their cost, postpaid, send a SASE to the SECRETARY or to the PUBLICATIONS COORDINATOR.