



NEWS

of the LEPIDOPTERISTS' SOCIETY

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OTTAWA 1986

A total of 90 persons registered for the 37th Annual Meeting in Ottawa, Ontario, Canada. They came, many bringing their families with them, from 7 Canadian provinces and from 22 states plus the District of Columbia, to enjoy the varied program of technical papers and extracurricular activities that Don Lafontaine had arranged. Although the weather was damp (one of the rainiest Mays in Ottawa's history), our spirits were not and the sun cooperated for the planned field trips following the meeting adjournment, although hoped for specimens were generally scarce. *Erora laeta* was a much sought prize on one of these field trips, with 13 net wielders searching for it, but only one was seen all day and it was the good fortune of the NEWS editor to be the one who saw and captured it. We wish to thank Dave Winter for again providing candid photos from the meeting. The official minutes which follow tell the story of a well planned and interesting meeting.

MINUTES OF THE 37th ANNUAL MEETING OF THE LEPIDOPTERISTS' SOCIETY

Carleton University
Ottawa, Ontario, Canada
23-26 May 1986

The 37th Annual Meeting of The Lepidopterists' Society was held on the campus of Carleton University, Ottawa, Canada, 23-26 May 1986, sponsored by the Biosystematics Research Institute of Agriculture Canada.

While the Canadian National Collection hosted an open house in the Neatby Building at the nearby Central Experimental Farm on Friday afternoon, 23 May, Society President Clifford D. Ferris presided over a meeting of the Executive Council in the Commons Building on the campus of Carleton University. That evening the Don Lafontaines hosted a moth-trap-saturated open house at their residence in the Ottawa Suburb of Nepean.

The formal program commenced the following morning, Saturday, 24 May, at 8:43 a.m. (74 persons present) with a "Welcome to Ottawa" by J.D. Lafontaine in the Loeb Building on the campus of Carleton University, where all paper presentation sessions took place. The program continued (J.D. Lafontaine, presiding) with the following papers (presenter's name given first in cases of joint authorship):

Presidential Address: "Unexplored horizons--the role of the amateur lepidopterist," Clifford D. Ferris, University of Wyoming, Laramie;

"Breaking the rules: courtship and mating in *Parnassius* butterflies," Boyce A. Drummond, Colorado Outdoor Education Center, Florissant;

"Mortality in *Euphydryas gillettii*: sources and some

measurements," Ernest H. Williams, Hamilton College, Clinton, New York;

"Developmental and structural constraints: why are Nystaleine genitalia so variable?" Susan Weller, University of Texas at Austin.

Peter W. Hall chaired the remainder of the morning session following the coffee break, with the following papers:

"Evolution of host associations in the Papilionidae: coevolution or colonization?," James S. Miller, Smithsonian Institution, Washington, D.C.;

"Evolution of feeding strategies in Tortricidae: the scene from root to fruit," Richard L. Brown, Mississippi State University, Mississippi;

"Antipredator adaptations of the feeding behavior of swallowtail caterpillars," Robert C. Lederhouse & Sylvio G. Codella, Jr., Rutgers University, Newark, New Jersey;

"Chemical defense in *Eumaeus atala* (Lycaenidae)," Deane Bowers, Colorado State University, Fort Collins.

After a luncheon recess, Dale F. Schweitzer presided over a Symposium on Endangered Lepidoptera, consisting of the following papers:

"The status of eight potentially endangered butterflies and moths in Ohio," John A. Shuey, The Ohio Lepidopterists, Columbus;

"Conservation and management of prairie butterflies," Robert P. Dana, University of Minnesota, St. Paul;

"A survey of *Lycaeides melissa samuelis* (Lepidoptera, Lycaenidae) in Sherburne National Wildlife Refuge, Minnesota," Steven J. Mueller, Howard Christensen Nature Center, Grand Rapids, Michigan;

"A new species of *Hemileuca* (Saturniidae) in the *maia* group from the Lake Ontario area," John F. Cryan, New York City, and Robert Dirig, Ithaca, New York;

"The Schaus Swallowtail (*Papilio aristodemus ponceanus*): a status report," Charles V. Covell, Jr., University of Louisville, Kentucky, and Thomas C. Emmel, University of Florida, Gainesville;

"Lepidoptera conservation strategies: prioritizing needs and implementing protection," Dale F. Schweitzer, The Nature Conservancy, Boston, Massachusetts.

Friday evening was devoted to a sumptuous picnic at Vincent Massey Park, after which one intrepid contingent managed to navigate its way across the Ottawa River for a night of dancing in Hull, Quebec.

* * * * *

On Sunday morning, 25 May, the formal meeting continued with P.T. Dang presiding over the following papers:

"The higher classification of the Neotropical Castniidae," Jacqueline Y. Miller, Allyn Museum of Entomology, Sarasota, Florida;

"Systema Scythrididae Nearcticorum: a modern

Linnean exercise on forgotten Microlepidoptera," Jean-Francois Landry, University of Alberta, Edmonton and Biosystematics Research Institute, Ottawa;

"A preliminary cladistic analysis of the Pyraliformes (sensu Munroe) (Lepidoptera: Pyralidae)," Maria Alma Solis, University of Maryland, College Park;

"Survey of the immature stages of Nearctic Depressariinae (Oecophoridae) with an examination of Gelechioidea evolution," Steven Passoa, University of Illinois, Urbana;

"Classification of the Dichomeridinae," Ronald W. Hodges, U.S. Department of Agriculture, Washington, D.C.

After a coffee break, J.F. Landry chaired the remainder of the Sunday morning session of contributed papers:

"Analysis of the Limenitis arthemis-astyanax complex of Greenridge State Forest in western Maryland," Austin P. Platt, University of Maryland-Baltimore Co., Catonsville, Maryland;

"The relationships of fertility to mating frequency and spermatophore size in the tiger swallowtail, Papilio glaucus," Robert C. Lederhouse, Rutgers University, Newark, New Jersey, and J. Mark Scriber, University of Wisconsin, Madison;

"Bait traps for Lepidoptera," Leroy C. Koehn, Huntsburg, Ohio;

"Possible new species of moths from the western United States," Ronald H. Leuschner, Manhattan Beach, California;

"Monarch butterfly overwintering sites in California," John Lane, Santa Cruz City Museum, Santa Cruz, California.

After recessing for the group photograph and lunch, the Sunday afternoon program began with a series of faunistic papers, chaired by Austin P. Platt:

"New Lepidoptera records from Wyoming wilderness areas," Karolis Bagdonas, Casper, Wyoming;

"The other side of the Bering Sea: return to NE Siberia," Kenelm W. Philip, University of Alaska, Fairbanks;

"Three new species of carpenter moths from the United States and Costa Rica," Julian P. Donahue, Natural History Museum, Los Angeles, California;

"Some comments on the Canadian Geometridae and their food plants," W. C. McGuffin, Biosystematics Research Institute, Ottawa, Canada;

"Observations on the butterflies of Great Inagua Island, Bahamas," Lee D. Miller, Allyn Museum of Entomology, Sarasota, Florida.

After a coffee break the afternoon program concluded with a series of contributed papers, Karolis Bagdonas, presiding:

"False head patterns of lycaenid butterflies--some geographic aspects," Benjamin H. Landing, Los Angeles, California;

"Identification of hairstreaks in the spurina/zebina complex from northern Mexico and southern Texas," Robert K. Robbins, Smithsonian Institution, Washington, D.C.;

"Microcomputers as tools for collection management," Kenelm W. Philip, University of Alaska, Fairbanks;

"A lightweight light trap equipped with electrifying central panels for collecting nocturnal Lepidoptera," P.T. Dang, Biosystematics Research Institute, Ottawa, Canada;

"Preview of the 1987 Annual Meeting in Berkeley, California," Jerry A. Powell, University of California, Berkeley.

On Sunday evening a lavish Canadian buffet was served at the Annual Banquet in the Carleton University Commons, followed by a Photo Salon of slides submitted for the National Lepidoptera Photographic Salon, organized by John Fowler.

The evening continued with the Karl Jordan Program, Clifford D. Ferris, presiding. After opening remarks by Lee D. Miller of the Allyn Museum of Entomology, President Ferris presented the Karl Jordan Medal to Dr. Frederick H. Rindge of the American Museum of Natural History, New York, New York, in recognition of his outstanding body of taxonomic work on the ennomine

Geometridae of the Western Hemisphere. Dr. Rindge's Address was entitled "Museums, Collections, and Research."

The Banquet program concluded with the distribution of door prizes, Charles V. Covell, Jr., Master of Ceremonies.

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On Monday morning, 26 May, J.D. Lafontaine presided over the final session of contributed papers, with 52 persons present:

"Secondary contact between genitalic differentiates, Pyrgus communis and P. albescens (Hesperiidae)," John M. Burns, Smithsonian Institution, Washington, D.C.;

"Notes on the occurrence of Erythroecia hebardii (Noctuidae) in Ohio," Eric H. Metzler, Jeffrey D. Hooper, and William F. Babcock, Columbus, Ohio;

"Weediness and hostplant adaptations of pierid butterflies," Frances S. Chew, Tufts University, Medford, Massachusetts.

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After a coffee break, President Clifford D. Ferris called the Annual Business Meeting to order at 10:32 a.m., with approximately 45 persons present. He began by making the following announcements:

*Assistant Secretary Julian Donahue had been appointed Secretary Pro Tempore for the meeting, as Secretary Arnold was expecting his second child this weekend.

*June Preston has been appointed to another term as Editor of the NEWS.

*Charlie Covell has been appointed Acting Editor of the MEMOIRS, because of a Constitutional limitation on the number of terms one can serve as Editor.

*An amendment to the Constitution, to remove the limit on the number of terms the Society's three Editors may serve, will be submitted to the membership for ratification.

*Eric Metzler has been appointed Assistant Treasurer, effective 1 January 1987, when his present term as Treasurer expires.

*The Society's Archives are now officially housed at the Natural History Museum of Los Angeles County; contributions of old programs, photos, official correspondence, etc. are solicited. The Society still needs a Historian; anyone interested should contact Julian Donahue.

*The final draft of the common names list of North American butterflies will be published by the Xerces Society.

*Memoir #3 (supplement to Memoir #2) is 3/4 finished; should be submitted mid-fall 1986 to Memoirs Editor.

*Memoir #4 (Techniques Handbook) approved in concept; Covell is senior editor in charge.

Ferris announced the following committee appointments:

*Nominating: Lee Miller (chair), Charlie Covell, Bob Platt

*Resolutions: Jackie Miller, Ken Philip, Jo Brewer

*Meetings (future meeting sites): Jackie Miller, John Lane, John Rawlins

*Economic Analysis of JOURNAL: Lee Miller, Floyd Preston, Eric Metzler, Bill Miller

The Treasurer's Report, showing a net operating surplus of \$3,055.69 for 1985, was summarized.

Bill Miller, new Editor of the JOURNAL, reported that the JOURNAL is back on schedule "from where I sit." Several issues are now at the printer. The large backlog has been eliminated, and new papers are now being solicited.

The Executive Council has approved a donation of Society publications to the Tyrolian Museum in Innsbruck, Austria, to replace material lost in the disastrous flood of 6 August 1985.

A partial Necrology of members who have died in the past year was read by President Ferris, followed by a

moment of silence for departed members.

On behalf of the Society and those present, Ferris thanked everyone responsible for the highly successful meeting, in particular the Program and Organizational Committee (Don Lafontaine, P.T. Dang, Suzanne Allyson, Peter Hall, and Ross Layberry), with special thanks to the projectionist (who even had to cope with a power failure).

The 1987 Annual Meeting (joint meeting with the Pacific Slope Section) will be held at the University of California, Berkeley, 25-28 June. Additional future

meeting sites are pending.

The Nominating Committee read its slate of proposed candidates for the November ballot.

The Resolutions Committee offered resolutions of thanks, all unanimously approved, to:

*Thomas D. Eichlin, after five years of service as Editor of the JOURNAL;

*Julian P. Donahue, retiring after nine years of service as Secretary of the Society;

*everyone (in rhyme) who contributed to the success of this meeting.



Group Photo
Identifications

1. Kien Dang, 2. Heather Lafontaine, 3. Dick Holland, 4. Steve Passoa, 5. Penner Jr., 6. Penner Jr., 7. Mrs. Penner, 8. Henry Penner, 9. Peg Tuttle, 10. Ron Leuschner, 11. Jeanne Leuschner, 12. Bob Dirig, 13. Eric Metzler, 14. Bill Edmonds, 15. Cliff Ferris, 16. Steve Mueller, 17. Dottie Landing, 18. Arthur Rupp, 19. Flo Rupp, 20. Jean-Francois Landry, 21. John Burns, 22. June Preston, 23. R. A. Valerio, 24. Ben Landing, 25. Barry Wright, 26. Gerry Wright, 27. Floyd Preston, 28. Lars Crabo, 29. Reggie Webster, 30. Verna Hardwick, 31. Jo Brewer, 32. Ron Hodges, 33. Elaine Hodges, 34. John Franclemont, 35. Susan Weller, 36. Doug Ferguson, 37. Dale Schweitzer, 38. Don Lafontaine, 39. Deane Bowers, 40. Herma Lafontaine, 41. Bernard Landry, 42. P. T. Dang, 43. John Eberlie, 44. Suzanne Allyson, 45. Jerry Powell, 46. John Shuey, 47. Deborah Matthews, 48. Boyce Drummond, 49. Bob Lederhouse, 50. Charlie Covell, 51. Alma Solis, 52. Dave Winter, 53. Dave Hardwick, 54. Austin Platt, 55. Mark Mello, 56. Jim Miller, 57. George Sutton, 58. Anton Littahorsky, 59. Quimby Hess, 60. George Balogh, 61. John Walas, 62. Gene Munroe, 63. Les Ferge, 64. Monty Wood, 65. Mo Nielsen, 66. Tony Thomas, 67. Ernest Williams, 68. Earl Bailey, 69. Bob Robbins, 70. Ken Philip, 71. Bill Miller, 72. Nancy Jacobson, 73. John Rawlins, 74. Jackie Miller, 75. Lee Miller, 76. Hazel Tilden, 77. Bill Tilden, 78. Stan Nicolay, 79. Lillian Nicolay, 80. Karolis Bagdonas, 81. Ross Layberry, 82. Francie Chew, 83. Peter Hall, 84. Robert Dana, 85. Anthony Downes, 86. John Lane, 87. Jim Tuttle, 88. Julian Donahue, 89. Fred Stehr, 90. Rich Brown, 91. Leroy Koehn, 92. John Cryan, 93. Ken Thorne, 94. Rod Parrot, 95. Joan Parrot



CANDID PHOTOS from OTTAWA, Dave Winter photographer: 1. Eric Metzler; 2. Herma Lafontaine and Steve Mueller with the picnic cake; 3. Sharon Williams and son with unidentified blonde; 4. Charlie Covell hands out door prize; 5. June Preston and Terry Schweitzer; 6. Bob Robbins; 7. Assembled multitude at banquet; 8. Don Lafontaine, Lee Miller, Cliff Ferris and Phyllis Rindge; 9. The Frederick Rindge family; 10. Jo Brewer and Jackie Miller reading the Resolutions; 11. Doug Ferguson receives the presidential gavel from Cliff Ferris; 12. New president Doug Ferguson with deely boppers of office.



President Ferris concluded by thanking his fellow officers and members for their help during his tenure, then presented the gavel and deely-bopper of office to incoming President Douglas C. Ferguson.

After a few brief remarks, President Ferguson adjourned the meeting at 10:53 a.m.

Respectfully submitted,
Julian P. Donahue
Secretary Pro Tempore

KARL JORDAN MEDAL AWARD 1986

One of the highlights of the 1986 meeting was the awarding of the Karl Jordan Medal to Dr. Frederick H. Rindge. In his acceptance address following the award, Dr. Rindge stressed the importance, for all lepidopterists, of making adequate provisions for the preservation of their collections after they are no longer interested or able to care for them. A special plea was made on behalf of all public museums for such collections and he emphasized the importance of these collections for scholarly study.

Frederick H. Rindge was born in Los Angeles,

California, on January 1, 1921. Education: University of California, Berkeley, B.S., 1942; Ph.D., 1949. He is married to the former Phyllis J. Denton, and they have three daughters, Janet, Barbara, and Marguerite.

Dr. Rindge is a member and has held office in numerous professional and honor societies including the New York Entomological Society, Pacific Coast Entomological Society, Southern California Academy of Sciences (fellow), Society for the Study of Evolution, American Association for the Advancement of Science (fellow), Sigma Xi, and the Lepidopterists' Society (Secretary, 1949-1954, President, 1965, Karl Jordan Medal Representative, 1973). He is also an honorary life member of the American Museum of Natural History and Research Associate in Entomology at the Natural History Museum of Los Angeles County.

Dr. Rindge began his early entomological training under the able tutelage of Dr. John Comstock and Lloyd Martin at the Natural History Museum of Los Angeles County. His formal education at Berkeley was interrupted by service in the Navy during World War II, and he managed to collect in the Pacific, specifically on Florida Island, Solomon Islands, in addition to Guam, Keramo Retto, and Okinawa.

Upon completion of this doctoral degree, Dr. Rindge joined the Department of Entomology, American Museum of Natural History in 1949. He has served as Assistant Curator (1949-1953), Associate Curator (1953-1962), and Curator (1962-present). Through extensive field collecting in the Rocky Mountains (1959-1966), Dr. Rindge collected more than 100,000 specimens which have been incorporated into the American Museum Collections. More recently his field work has concentrated on northeastern and northcentral United States in addition to southeastern Canada.

With more than 88 research publications in entomology and associated disciplines, Dr. Rindge's contributions on the systematics and zoogeographical distribution of the New World Geometridae are well recognized. His detailed studies on this family and especially on the New World Ennominae have provided a means of the proper identification of a large poorly known lepidopteran group in which no previous revisionary studies existed. It is for his excellent revisionary studies on the taxonomy, systematics, and zoogeography of the Geometridae that Dr. Frederick H. Rindge is recognized by the Committee and awarded the Karl Jordan Medal.

RESOLUTIONS FROM OTTAWA, CANADA

WHEREAS:

The members of the Society wish to thank Thomas Eichlin as retiring editor of the JOURNAL.

AND WHEREAS:

To Julian Donahue, our gratitude and thanks for serving in the capacity of Secretary of this august body for the past nine years. His innovative ideas have aided in the organization of this Society and his laughter continues to enliven these meetings.

AND WHEREAS:

To the capital city we came,
The news of the leps to proclaim,
To study faunistics,
Not to mention cladistics,
To add to the Lep Soc's great fame.

AND WHEREAS:

We covered a lot of terrain,
All guided by Don Lafontaine,
The methods he took,
Indeed made him look,
Delighted instead of insane.
And whereas that Herma his wife,
Who valiantly wielded a knife,
And chopping and carving,
While people were starving,
She brought the whole crew back to life.

AND WHEREAS:

For new names and methods we groped,
With habitat problems we coped,
P. T. Dang's great symposia,
Made everything rosea,
For species endangered - - we hoped.

AND WHEREAS:

Suzanne received bushels of mail,
And sorted them all without fail,
Peter Hall played liason,
Funneled leps through a maze on
The campus of Carleton's great dale.

AND WHEREAS:

The leps at their least beck and call,
Had the combo of Layb'ry-Hall,
With Agriculture rated,
And then celebrated,
100 years of success on terrain ten times as large
as a mall.

BE IT RESOLVED THAT:

Next year we are planning to go,
To the city of San Francisco,
So save enough gravel,
To pay for your travel,
Respectfully, Ken, Jackie, and Jo.



PACIFIC SLOPE MEETING, 1986

Over 50 Lepidopterists, with their families, met August 1 to 3, at El Coronado Ranch on Turkey Creek on the west slope of the Chiricahua Mtns in Cochise Co, Arizona for the 33 annual meeting of the Pacific Slope Section. A wine and cheese party, hosted by BioQuip Products, Inc of Santa Monica, California, started out the festivities Fri. evening. Following dinner, an informal slide show entertained the group. Many white sheets and black lights were visible around the ranch after dark, and nets had been swinging in the area all day.

Saturday morning, Julian Donahue presided over the NATURAL HISTORY CHRONICALS: SURVEYS, MAPS AND BOOKS symposium at which the following papers were presented:

"Grand Canyon Butterflies in Retrospect; California Butterflies in Prospect (1950-1986)." by John S. Garth, Allan Hancock Foundation, University of California, Los Angeles, California

"Introduction to the Natural History of the Chiricahua Mountains." by Vincent D. Roth, Resident Director (retired), Southwest Research Station, American Museum of Natural History, Portal, Arizona

"The Western States Butterfly Mapping Project: Current Status." by Ray E. Stanford & Paul A. Opler (University of Colorado, Denver; U.S. Fish and Wildlife Service, Fort Collins, Colorado)

"Lopsided Arizona: The Season Summary." by Robert L. Langston, Kensington, California, read by John W. Brown of The University of California, Berkeley, California.

At the afternoon session, chaired by Ray Stanford the following papers were contributed.

"Some Unusual Aspects of False Head Patterns of Riodinid Butterflies." by Benjamin H. Landing, University of Southern California, Los Angeles, California.

"A New Twist on an Old Taxonomic Tool: Hybridization and Genitalia of Andean *Tatochila* by Adam H. Porter, University of California, Davis, California

"Sundaland--in the Footsteps of Alfred Russell Wallace." by James R. Mori, Great Valley Museum, Modesto, California

"New Species of Moths from the Southwest." by Ron Leuschner, Natural History Museum, Los Angeles, California

"Tina and Tinacrucis: North America's Largest Tortricine Moths." J. A. Powell, University of California, Berkeley, California.

"The Biology and Taxonomy of a New Leafmining Yucca Moth from Colorado (Prodoxidae)." by David L. Wagner and Jerry Powell, University of California, Berkeley, California.

"Taxonomy vs. Subspecies, Clines, and Hybrid Zones: A Noble but Futile Contest?" [a bemused bystander leads a discussion session] by Michael M. Collins [a grant wars refugee from the University of Wisconsin].

Following a happy hour well supplied with cheeses and goodies from the night before we enjoyed a Buffet Barbecue dinner. After dinner, the announcement was made of the John Adams Comstock Award honoring F. Martin Brown who was unable to attend at the last minute on doctor's orders. The evening program was presented by Paul Opler of the U.S. Fish & Wildlife Service, Fort Collins, Colorado on "Photographing Western Butterflies." Julian Donahue presided over the ever popular Door Prize award event.

Sunday morning's program started with a mini-symposium on LEPIDOPTERA OF SONORA with Ron Leuschner presiding. The following papers were presented:

"Habitats of Sonoran Lepidoptera, and Selected Macrolepidoptera Results." by Michael J. Smith, Nevada State Museum, Las Vegas, Nevada.

"An Overview of the Butterflies and Skippers of Sonora, Mexico" and "Rare and Little Known Chlosyne Butterflies of Mexico" by Douglas D. Mullins, Sonoran Arthropod Studies, Inc., Tucson, Arizona.

The formal program ended with the Annual Business Meeting with J. A. Powell presiding. The Minutes from that meeting are presented below. Next day, several attendees took part in an organized collecting trip to Guadalupe Canyon.

MINUTES OF 1986 PACIFIC SLOPE BUSINESS MEETING

It was decided that 1987 should be a joint meeting of the Society and the Pacific Slope Section at Berkeley on June 25-28. Program Chairmen will be Dr's Hafernik and Sorenson.

For the 1988 meeting, the Pike's Peak Research Center in Colorado was suggested for the last weekend in June. The facilities seemed excellent for a Pacific Slope meeting with both indoor (50-60) and camping (40-50) accommodations. It was voted to pursue this plan, coordinating the dates to avoid conflict with the National meeting in Pittsburgh.

Considerable discussion was spent on the Comstock award, summing up a lot of correspondence effort coordinated by Jerry Powell. Following is the consensus of this discussion.

1. The Comstock Fund and Award should be continued--additional contributions are to be solicited for the fund which now has \$1200 approximately.

2. The definition of "student" should be broadened to include any person who is not a professional entomologist.

3. Student awards should be of two types: \$25 off registration fees for students who contribute papers (limited to those still actively registered in school) and one or more "outstanding student contributor" certificates awarded by an ad hoc committee including the Program Chairman.

4. The annual Comstock honoree will continue to be chosen as a person making significant contributions to the study of western Lepidoptera, with emphasis on those still living as opposed to historical figures such as Behr or Boisduval. The selection of the honoree will continue by majority closed vote at the business meeting.

The meeting concluded by voting selection of John Garth as the 1987 Comstock honoree. Tom Emmel will coordinate preparation of the biography.

Submitted by Ron Leuschner

THE JOHN ADAMS COMSTOCK AWARD, 1986 THE MAN WE HONOR, F. MARTIN BROWN

Nearly every American butterfly enthusiast recognizes the name of F. Martin Brown, if not from his 1957 book, "Colorado Butterflies," then from the Catalogue/Checklist of North American butterflies he coauthored with L. D. Miller, or the book on butterflies of Rocky Mountain States coedited with C. D. Ferris, or the several species named for him. Those more familiar with him know that he has written over 150 scientific papers on Lepidoptera, and many feel that his 14-part work on the type specimens of butterflies described by William H. Edwards represents his best achievement. Brown himself, however, will tell you that this enormous output represents merely his hobby, and that his most significant scientific research was on bacterial genetics, and that his major contributions were in education and writing text books on earth sciences!

Frederick Martin Brown was born in New York City on 24 March 1903, the first of three sons by Frederick Wellington Brown, a research chemist, and Josephine Agnes Louise von Rilke, a botanist, musician and housewife. The Brown side of his family were noted mainly as scientists and educators: a forebear founded Brown University in Providence, Rhode Island in 1764, and a cousin described the motion of particles later to become known as Brownian movement. His mother's family had been principally engineers and parsons; his maternal grandfather, a noted hockey player, designed and

constructed the first refrigerated ice rink. Martin, or "Brownie" as his friends and colleagues came to call him, attended public schools in New York City, then attended Columbia University where he studied mathematics, geology and engineering. Wishing to "get into the action," he quit after 3 years and took a job with Frank E. Lutz as assistant in entomology at the American Museum of Natural History, where he is still a research associate. Summers found him in the Caribbean working as a pilot and map maker; with Basil Rau and Clarence Chamberlin he founded West Indian Air Express, which was later purchased by Juan Tripp, who offered Brown either 25% interest in the company or \$2000 cash. He took the cash, but later wished he had taken the 25% in what was to be Pan American World Airways! During these years he collected insects in nearly all of the Lesser Antilles, Trinidad, Ecuador, Colombia, Panama, Costa Rica, Guatemala and Mexico.

Brown's first research and publications were in the fields of insect pathophysiology and bacterial genetics while he was working at the AMNH and teaching in Rhode Island in the early 1920's. He met and did bacteriological research with Hazel M. Heffron, a bacteriologist at Newport Hospital in Newport, RI; they were married on 1 September 1927 and will celebrate their 59th wedding anniversary this year. His pioneering work on the genetics of bacteria helped lay the foundation for study of elucidation of the structure and chemical composition of DNA, and recent advances in genesplicing and the production of monoclonal bacterial products.

He taught at several schools in the 1920's in Rhode Island and Connecticut, but made an important decision to move to Colorado Springs, Colorado in 1930 where with Francis M. Froelicher and the financial support of Spencer Penrose he helped found the Fountain Valley School. Teaching and for many years heading the science department there was his principal occupation from then until his retirement in 1973; that year he also received the Sc.D. degree from Colorado College in recognition of his many contributions as scientist, educator, author and civic leader. He has received several other honors including the Legion of Merit for work on the War Department General Staff during World War II, the University of Colorado medal for contributions to knowledge of Colorado, and the Outstanding Science Teacher award by the National Association of Science Teachers.

The Fountain Valley School years enabled Brown to pursue interests in entomology, geology, archeology, anthropology and the history of science, and he has published over 230 scientific articles and books as well as many educational, military, engineering and magazine articles and informal book reviews. He also made lifelong friends with two illustrious Coloradans: Dr. Gerald Bertram Webb, the world-renowned tuberculosis physician who started what is now the Webb-Waring Lung Institute; and Theodore D. A. Cockerell, professor and man of letters at the University of Colorado.

Brown's publications on Lepidoptera have covered nearly all aspects of study, including descriptive morphology, life history, taxonomy, historical reviews, butterfly gardening 50 years before that term became popular, biochemistry, use of statistics, biogeography, bibliography, reviews of pertinent literature, and most recently descriptions of fossil insects in several orders. He has described many new species and subspecies of butterflies, and has written revisions of Phoebis, Aphrissa, Steroma and relatives, Pierella, Heliconius charitonius, Plebejus saepiolus, Oeneis uhleri, O. alberta, Coenonympha tullia (in North America), and Glaucopsyche piasus. Of special interest to those of us in the West are his numerous papers on early western butterfly and moth collectors, including the Wheeler expeditions, Edward Palmer, Hayden, Oscar Theodor Baron, David Bruce, Tryon Reakirt, Theodore Mead; and his painstaking analyses of various correspondences, notably those between William H. Edwards and Spencer F. Baird, William G. Wright, and J. A. B. de Boisduval, many of which revealed important unpublished information about western butterflies.

Brownie claims no students in the field of entomology, since he never taught the subject formally, but many of us have been influenced strongly by him and consider him one of our most important teachers. These people include William D. Field, Lee D. Miller, Thomas C. Emmel, Robert M. Pyle, William Creighton, Kurt Johnson, James A. Scott, Scott L. Ellis and the writer.

One can appreciate readily that F. Martin Brown has had a remarkable career in and out of science, and is an extraordinary individual, truly a renaissance man. He has had an active role in putting together what we know today about western Lepidoptera, and has known personally all but one of the previous Comstock awardees. It is therefore most fitting that we welcome Dr. F. Martin Brown to this meeting as honoree in the name of the John Adams Comstock Award for 1986.

Ray Edmund Stanford

Special Techniques

LEPIDOPTERA SPREADING TECHNIQUES

Spreading lepidoptera is usually a chore to the dedicated lepidopterist and the casual collector. Undoubtedly, the task of spreading these insects, whether fresh or relaxed dried specimens, has discouraged many potential lepidopterists. Countless books, bulletins and notes have been published on the subject, and yet the proper technique of spreading lepidoptera for the collection remains a "lost art" to many collectors.

To help other lepidopterists and insect collectors improve their techniques, and to encourage more attention to the appearance and condition of their collections, I present several tips that have proven useful in my efforts. Remember, there is no substitute for experience and PATIENCE. Collecting since 1939, I have "logged" countless hours just spreading butterflies and moths for the collection; yet, with each year my technique improved so that I became totally dissatisfied with my earlier efforts. A specimen that has been properly handled, mounted and labeled is not only attractive but important to the taxonomist and other lepidopterists in describing or identifying the insect.

1. Attempt to mount all, or a series, of Hesperidae, Lycaenidae, Geometridae and Microlepidoptera IMMEDIATELY to avoid problems of relaxing dried specimens. Losing appendages or rubbing off unique wing characters make it difficult, if not impossible, to properly determine many specimens to species. All green colored moths should be spread immediately to prevent color displacement in the relaxing container.

2. Freshly collected material may be stored in airtight boxes (layered in cotton) with chlorocresol crystals, which will retard drying, for spreading at a more convenient time. I have kept stored specimens "fresh" for periods up to 6 weeks in my refrigerator!

3. All specimens not to be immediately spread may be dried by placing in glassine envelopes or merely pinned and stored in cigar boxes. It is suggested that all moths and many Hesperidae be pinned if they are to be spread later for the collection. Generally, thick-bodied specimens are flattened by papering and may lose their tegulae in the spreading process.

4. Dried specimens should be placed in the relaxing container so they are insulated from direct contact with the moist sand or other medium (I use plastic "sand" from an old water-softener). Papered and pinned specimens can be placed on loose gauze, perforated wood or styrofoam. Be sure to place a few FDB crystals in the container to inhibit mold. Specimens can be left in the relaxer from 24 hours to several days depending on the size of the specimen or amount of moisture in the relaxer. DO NOT leave them in too long as there will be

some color displacement or "wetting" of the wings and body.

5. Select the largest size of insect pin for the specimen to be spread. Be careful to insert the pin into the middle of the thorax perpendicular to the length of the body. Just prior to spreading, I usually "tenderize" the thorax muscles by gently jabbing the thorax at the base of the wings (underside) with a minuten pin inserted into a wooden match. This method is especially useful in softening the wing muscles of Hesperidae and Lycaenidae--two groups that are usually difficult to spread satisfactorily.

6. Tease all wings into place using minuten pins described above. You will find that this size of pin will leave a small hole in the wings that is not objectionable, especially important in spreading "micros". These pins may be left in the wings while the paper strips are being applied, and until the specimen has completely dried. Be careful to cover the entire edge of the wings with papers to prevent curling. Also, to insure a 'flat' spread to all wings, place a narrow strip of paper immediately adjacent to the thorax on each side. I have found strips cut from a standard 3x5 card to be most satisfactory for spreading lepidoptera. The spreading board should be marked with pencil lines, at right angles to the groove, approximately every 1 inch so the inner margin of the forewings can be properly aligned to form a straight line with each other and at right angles to the body. Actually, I spread most specimens so the forewings are slightly above the straight line; this allows for some adjustment in the wings once the papers are removed.

7. The abdomen and legs can be adjusted with pins to prevent breakage after drying. Sometimes, large drooping abdomens can be elevated by inserting a wad of cotton or gauze below in the groove. Antennae can be adjusted and straightened to lie flat along the costal vein by stroking them with a camel hair brush dipped in alcohol. This is especially useful in adjusting the antennae of the *Catocala* and other noctuids.

8. Specimens should be left on the spreading board for at least a week in a dry location. It is desirable to keep them on the board as long as possible. Do not be in a hurry to remove the specimen!

9. During this entire process, be careful to keep a temporary label with each specimen. DO NOT rely on your memory! Mislabelled specimens are scientifically WORTHLESS!

M. C. Nielsen

Taken with permission from NEWSLETTER/MICHIGAN ENTOMOLOGICAL SOCIETY. Vol. 15, No. 1-5, March 1970

HINTS ON PAPERING SPECIMENS

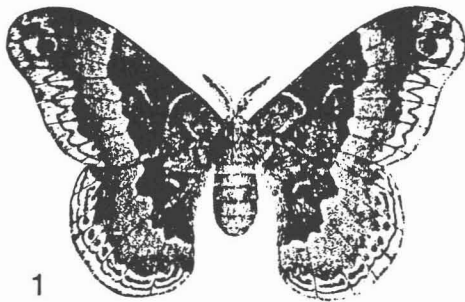
Many lepidoptera specimens end up with broken antennae because of inattention to certain basic practices when papering them when they are fresh. Although there are several different types of papers used, ranging from folded triangles to glassine envelopes to letter envelopes, the same precautions should be taken with all specimens, independent of type of paper, to attain a minimum of antennae breakage in either storage or shipping conditions. If the antennae are moved so that they lie along the leading edge of the primaries after the specimen has been folded with the uppersides of the wings touching, they will be protected by this leading edge suggests John Reichel of Revelstoke, B.C. The specimen should then be placed into the paper with this leading edge toward the fold of the triangle or the bottom fold of the ready made envelope. The specimen might also be slipped into a small folded piece of toilet tissue or paper towel for added protection before it is put into its triangle or envelope. Even if staples are not used in ready-made envelopes, there is apt to be much less antenna damage from any movement of the specimen within the envelope because of the protection afforded by the leading edge of the primaries. Staples may be helpful in keeping specimens stationary within their envelopes but their advantages in

immobilizing the specimen may become a disadvantage for the collector who is trying to extricate a specimen from its envelope. Even opening triangles can cause antenna damage when the antennae have been allowed to stick out unprotected. A double envelope system can also provide extra help in protecting specimens when glassine envelopes are used. The breakage from handling is minimized when individual specimens in glassine envelopes are placed in manila coin envelopes or even letter envelopes as these latter are less flexible and so give better protection. Storage of large numbers of the envelopes where they are not subject to pressure from the weight of overlying specimens is also crucial in preventing breakage of antennae, legs and even wings.

Ed.

COLLECTING GIANT SILK MOTHS

The Saturniids or giant silkmoths are among the largest and most spectacular of American moths and favorites of collectors (Fig. 1). All are beautifully and brightly colored and the largest of the group may have a wingspan that exceeds 6 inches. What insect collector has not wanted to catch or rear the lovely luna moth or the uncommon Columbia moth!



Silkmoths can be collected at any stage of their development but it is most rewarding to collect them in winter when they are in their cocoons and awaiting their emergence. This is good winter sport and needs only a minimum amount of effort, and you certainly will get the best specimens.

Several species of silkmoths spin cocoons on trees or shrubs which become conspicuous after leaf drop. Hunting cocoons is simply just knowing where and what to look for. Several silkmoths such as the cecropia and polyphemus have a wide range of food plants; a few like the Columbia moth feed only on one tree species (Table 1). Some skill in recognizing their food plants in their winter apparel is useful. Once located, the cocoons, because of their size and shape, stand out against the narrower twigs and branches. A good cocoon hunter, in order to find the most desirable trees or shrubs, must think like the female moth. When she is ready to lay her eggs she searches for shrubs or young trees and prefers isolated ones or those at the outer edges of woods, marshes, and bogs where maneuvering is easiest. Your most profitable searches then should be along fencerows, in backyards, along railroads and roadsides, and in openings where there are small clumps of trees and shrubs.

Cecropia moth cocoons are often over 3 inches long and the largest produced by native silkmoths. They are made of tough silken threads and always attached lengthwise to the twigs or branches of the host plants (Fig. 2). Those high on the plant tend to be longer and more compact while those spun near the ground are more bulky and somewhat loosely spun. Cecropias, probably because they have such a wide variety of food plants, frequent urban areas where lilac, maple, fruit trees, and birch are planted.

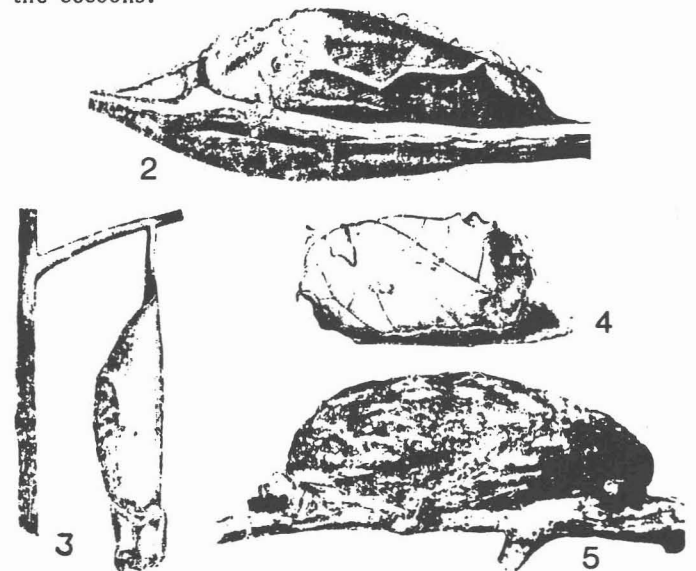
Promethea moths are usually the most common of the silkmoths and their cocoons resemble curled leaves that didn't fall from the tree in autumn (Fig. 3). Actually, each cocoon is wrapped in a leaf that the larva pulls about itself as it spins its silken home. The silk

covers the leaf petiole and firmly anchors the leaf and cocoon to the twig. It is about 1 to 2 inches long and hangs vertically from the twig. Prometheas prefer wild habitats to urban ones so hunt for them along roadsides, railroads, and forest edges for best results. When you find one there should be others nearby. "Where there's one there's four; and where there's four, there's more," is a good saying quotes Dave Eppelheimer, an avid cocoon collector. It's not uncommon to find 6 or more on a single small tree or shrub.

Polyphemus moth cocoons are about 2 inches long but more rounded than those of Promethea moths (Fig. 4). The Polyphemus larva camouflages its cocoon by incorporating leaves into its structure and then fills the fibers with a fluid that becomes white and chalky. Like the cecropia it readily feeds on plants in urban situations, so look for this cocoon on shrubs and small trees in yards, vacant lots, and parks. Also search beneath these food plants as some cocoons are spun on the ground and others fall off the plant.

The thin papery cocoon of the highly coveted luna moth is similar in form and size to that of the Polyphemus but contains much less silk. Although it is spun among the leaves it falls to the ground in autumn and thus is more difficult to find than the latter. If you search diligently beneath its food plants you may be rewarded with a cocoon or two.

Columbia moth cocoons are oval, about 1½ to 2 inches long and comprised of tough brown silken threads. Silver streaks often mark its sides. Like the cecropia, its nearest relative, the Columbia attaches its cocoon to the twig (Fig. 5) or occasionally to the trunk of its host plant. However, it is a rarer insect and feeds only on larch (tamarack) so you must search for it in localities where larch thrives such as in or near acid bogs, and on young trees up to 25 ft tall. Most cocoons are 2 to 6 ft from the ground and toward the tips of the branches. Occasionally it spins its cocoon on shrubs beneath the larches. Larch cones sometimes make it difficult to spot the cocoons. The best time to collect is in autumn shortly after larches lose their needles but before the birds and other predators locate and destroy the cocoons.



The cocoon of the Cynthia moth is spun up in a single leaf and resembles that of the Promethea moth. This species is far less common, however, and feeds only on the ailanthus or tree of heaven which is planted in urban areas. Introduced in eastern North America in 1861 from Asia for silk production, it has now become widespread in the Northeastern part of the United States.

The Io moth cocoon occurs on the ground as does that of the Luna moth, and though possible to locate, you must do considerable hunting. You can collect the larva, which feeds on numerous hosts, or the adult much more readily.

Table 1. Food plants of common silkmoth larvae
(in order of preference)

SILKMOTH	FOOD PLANT
Cecropia moth	cherry, maple, boxelder, elderberry, willow, lilac
Polyphemus moth	maple, boxelder, basswood, plum, oak, walnut
Promethea moth	cherry, lilac, spicebush, ash, basswood, plum
Luna moth	walnut, hickory, butternut, oak, beech, birch, willow
Io moth	cherry, willow, elm, boxelder, aspen, maple, corn
Columbia moth	larch (tamarack)
Cynthia moth	ailanthus (tree of heaven)

Silkmoths in autumn- or winter-collected cocoons will not emerge unless given a "winter period". You can overwinter cocoons in an unheated garage or in the refrigerator from October to late winter. If you plan to have the moths mate and lay eggs and then rear the larvae, be sure to overwinter them until at least late April or until their food plant has sufficiently leafed-out.

Silkmoths can also be collected in the larval and adult stages. The conspicuous larvae or caterpillars of some reach 3 inches in length and many are armed or adorned with tubercles, spines, or hairs. All can be handled except the Io moth larva which has stinging hairs on its body. When touched it feels like stinging nettles, so collect it without handling it. Blacklights attract most adult silkmoths so they can be collected this way during their summer evening flights.

Whichever way you choose, collecting these beautiful moths is a rewarding pastime.

Louis F. Wilson

The above article, printed with permission of the Michigan Entomological Society, is from Entomology Notes, No. 9.



EASTERN REGAL FRITILLARY (*S. IDALIA*)

Since these beautiful butterflies have become quite rare in eastern U.S., I record my observations of them in MD, WV, NJ and especially on the Battlefield at Gettysburg where they were last seen in 1983. Almost 30 years ago they were seen in two places in flocks of greater numbers than I have seen other large fritillaries. In most cases the regals were seen in open abandoned fields with tall grass and bushes, not far from trees. However on the Battlefield they were seen most frequently near a moist weedy ditch in a cultivated field about ¼ mile from the nearest trees. Most sightings were in full sunlight between 11 AM and 3 PM.

I first photographed a regal in a moist field on the north edge of Frederick, MD on Sept. 9, 1937. This surprisingly fresh-looking butterfly was nectaring on swamp thistle. Another was seen in a field edge about 10 miles east of Frederick in late summer 1958.

I was surprised to find many regals together in a high abandoned field above Sleepy Creek in WV, east of Berkeley Springs on 6/26/57. They flew around and within clumps of sumach and other bushes. Some nectared on white flowers of mountain mint (*Pycnanthemum tenuifolium*). These regals and those from a similar environment in NJ were smaller and more difficult to approach than those around Gettysburg, PA. Those which I succeeded in photographing were females.

In another high abandoned field near woods between Chester and Long Valley, NJ on 7/14/57 were a dozen or more regals which took nectar occasionally from pink flowers of the alien *Centaurea maculosa*. Here, as at Sleepy Creek, were more regals together than I have seen of *S. cybele*, *S. aphrodite* or *S. atlantis* in 50 years of watching. At the same place about 30 were seen on 7/20/58. The 7 which I caught were all males. On returning to the more overgrown field on 6/17/60 and 7/28/63 I still found regals but much less numerous. Living in northern NJ from 1947 to 1959 I did not see regals elsewhere in the state, but did see one in a clover field near Old Chatham, NY.

On the north edge of Gettysburg on 9/6/59 I saw a fresh-looking regal in a marshy abandoned field. I observed regals there on swamp milkweed flowers (*A. incarnata*) on 7/13/80 and 8/1/82. A new drainage ditch made the flowers and the butterflies disappear.

Regal fritillaries persisted slightly longer in the northwest part of the Battlefield in a cultivated field south of the Peace Light Memorial and north of Buford Avenue. Here a large patch of *A. incarnata* flourishes in a frequently plowed marshy field drained by a weedy ditch where all trees and bushes were removed in the early 1960's. In this area regals were more abundant formerly than *S. cybele*, but they rarely visited my garden among trees on Oak Ridge about ¼ mile away. In my garden they nectared on orange and orange-red zinnias. When released there among trees they flew at once toward the open fields. Dates of sighting near the ditch and the swamp milkweed area on flowers of teasel, common milkweed, thistle and *A. incarnata* included 7/21/61, 6/30/62, 7/3/63, 8/1/70, 7/26/77, 6/25/78. On 7/5/79 I saw 6 fresh regals and others on 7/18 and 7/21/79. The greatest numbers were seen on the Battlefield in 1980-82, for example on 7/4 and 7/12/80, 7/12 and 7/18/81, 8/1 and 8/18/81, 7/6, 7/11 and 7/19/82, 8/2 and 8/13/82. There were only two sightings in the summer of 1983 on 8/2 and 8/13 after which I have seen no more regals anywhere. When the location was visited in early August 1984 all was brown and the dry weather had permitted mowing down all plants of the ditch. There are no large rocks on this part of the Battlefield to prevent thorough mowing.

Large regals formerly frequented the famous Wheatfield of the Battlefield and occasionally the adjoining moist pasture along Plum Run, north of Devil's Den. The females were easy to photograph at close range and could be caught in hand on common milkweed and bull thistle flowers. Dates here included 7/15/61, 7/1/78, 8/31/79, 7/18/81. After the Wheatfield was plowed for the first time in many years the regals disappeared.

The male regals generally had more direct and fluttering flight than cybele males. Regal males tend to fly almost continuously, very seldom nectaring on flowers and become frayed and tattered quickly. In contrast the females frequent flowers and remain fresh looking even in September. They generally nectar in upright position with wings closed. On 7/15/83 a male with about half of its wing area worn away flew in a buzzing manner entirely different from normal flight. About 7:30 PM on 7/27/79 several regals flew up from tall grass near the swamp milkweed patch.

C.E.Schildknecht
135 Doubleday Avenue
Gettysburg, PA 17325

EVERES COMYNTAS IN THE SOUTHERN SAN JOAQUIN VALLEY, CALIFORNIA

Everes comyntas Godart is a common and widespread butterfly in the Eastern United States but has a much more limited distribution in the West. In California, the species is best known from the San Francisco Bay area, the Delta region in the Northern San Joaquin Valley and the Owens Valley east of the Sierra Nevada. Until recently, it was not known that *E. comyntas* ranges southward into the Southern San Joaquin Valley.

Emmel and Emmel in their book *The Butterflies of*

Southern California (1973) correctly speculated that E. comyntas could occur in the region, but they knew of no records. The butterfly was therefore not included as a part of the Southern California fauna.

Unknown to the Emmels and other lepidopterists at that time, I had found E. comyntas in limited numbers along the Kern River at Hart Park (now part of Bakersfield) on August 4, 1970. The colony site was subsequently destroyed by flooding and subsequent search failed to turn up any more specimens when the record was reported in the Journal of the Lepidopterists's Society [37(1), 1983, 61] in an article discussing the butterfly fauna of Kern County, California.

However, a visit to the site on August 8, 1985 revealed that E. comyntas had returned. Several adults were taken in a bottomlands "swamp" near the south end of the park, often associated with Melilotus indicus (Linnaeus). Frequent visits to the site (occupying only about one acre of land) found that the butterfly flew more or less continually, but usually in limited numbers through the 3rd of October.

The butterfly survived the winter of 1985-86 and was very abundant at the site on March 20, 1986. Two adults were taken a mile upstream at the north end of the park, perhaps indicating the species might be colonizing other favorable spots. Comyntas continued to be common in April and was still present, but in reduced numbers on May 24. Perhaps the Hart Park colony site is only transient, but comyntas could occupy more permanent sites in Kern County. Only future observations will tell.

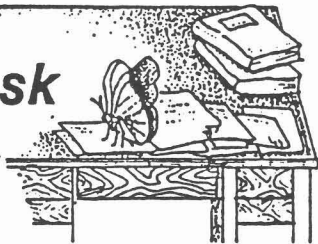
The Kern County colony site suggested that E. comyntas might occur in Tulare County to the north as well, since there was a distribution gap between Hart Park in the south and the Delta region to the north. Searching along the Kaweah River turned up positive results at Venida and on the south side of the river at Hwy. 216, 5 miles south of Woodlake on September 6, 1985.

Do these records and observations indicate that the range of E. comyntas is expanding southward? Or has the butterfly inhabited these riparian habitats, now greatly altered by man's influence, for centuries?

Ken Davenport
Bakersfield, California

From The Editor's Desk

June Preston



My collecting summer is over and after 19,000 miles in our camper, including the annual meeting in Ottawa, the Pacific slope meeting in Arizona and collecting in a dozen different states (including Florida) and several Canadian Provinces, its time to settle down to the business of getting the NEWS out on time and attendant household duties. There are also many papered Leps awaiting my attention and I hope to be able to dig into my backlog and keep my spreading boards full this winter. This is the last issue of the NEWS I have to worry about this year. The next issue will be the biennial Membership directory which will be compiled again by Julian Donahue. Any changes in name, address or interests should be sent directly to him before October 15. Any ads or notices received too late for this issue (the deadline was Aug 15) will appear in NEWS #1, 1987.

The following letter arrived this summer and deserves attention.

Editor:

Thank you very much for printing Chris Nagano's excellent summary of The Monarch Project's activities in

California to date. It should be noted as a matter of record, however, that The Monarch Project is an endeavor of The Xerces Society, Incorporated, and not an independent organization. All contributions to The Monarch Project, which are earnestly sought and which will go directly toward Monarch conservation in California or Mexico, are tax deductible as charitable contributions to the nonprofit, IRS-eligible Xerces Society. Thank you.

Robert Michael Pyle, Chairman
The Monarch Project

Metamorphosis

GEORGE PETERS.....

George Peters of Adamstown, Pennsylvania has passed away. He was a Life Member of the Society, and also a Charter Member.

Dr. MIGUEL R. GOMEZ BUSTILLO.....

We have been informed that Dr. Miguel R. Gomez Bustillo of Madrid, Spain passed away on December 17, 1985. His untimely death represents a tremendous loss to his family and professional collaborators. He had been a member of the Society since 1971.

JOHN STEVEN BUCKET.....

John Steven Bucket, 46, died this past January 16 in Davis, California following a long illness. He was a Life Member of the Society and was formerly associated with the U.C. Davis Entomology Dept. He contributed many papers on Western Heterocera, mainly Noctuidae, during the 1960's before his failing health curtailed his activities. He was influential in directing others from his home town of Petaluma, California into entomological careers.

Information from L. P. Lounibos

DON BLEITZ.....

Don Bleitz, President of the Bleitz Wildlife Foundation, died on June 23, 1986 at the age of 70. He had been a Society member since 1974, and resided in Hollywood, California.

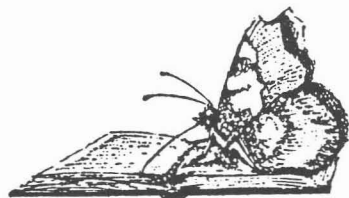
PROF. Dr. CESLAV MARIO BIEZANKO.....

Word has been received of the death of Prof. Dr. Ceslav Mario Biezanko of Rio Grande do Sul, Brasil in April, 1986. He was 89 years old. He had been a member of the Society since 1955 and was a Vice President in 1963. He authored approximately 300 papers on South American Lepidoptera.

C. STEPHEN QUELCH.....

The Executive Board granted a lifetime membership to C. S. Quelch this past May. He had been a Charter Member of the Society and was almost 88 years old when he died on June 11, 1986 in Toronto, Canada. He was particularly interested in the Lepidoptera of Manitoba where he had lived for many years.

Books



PRE-PUBLICATION NOTICES

CALIFORNIA BUTTERFLIES by John S. Garth and J. W. Tilden is scheduled for publication this fall by University of California Press, 2120 Berkeley Way, CA 94720. It is #51 in the California Natural History Guides series. There are 208 pages in a 4 1/2"x8" size. There are 16 pages of color illustrations by David R. Mooney plus numerous black and white illustrations. Cost is \$19.95 clothbound. With the help of this field guide, users may learn where to find butterflies and skippers ranging from the tiny Pygmy Blue to the Two-tailed Swallowtail, which may have a wing span of half a foot. The volume is filled with the fascinating lore of butterflies: their remarkable migrations, their congregating on hilltops, their strange larval and pupal (chrysalis) stages.

The guide is small enough to be carried in the field, yet complete enough to enable users to identify the more than 230 kinds of butterflies they may encounter anywhere in California or nearby areas. This comprehensive coverage is achieved through generous color or black-and-white illustrations of all but a very few subspecies, together with a text that provides compact descriptions followed by information on size, habitat, distribution, abundance and larval food-plant preferences.

Detailed tips are provided for observing, rearing, collecting and preserving butterflies. A special section recounts the history of butterfly collecting in California. For all butterfly enthusiasts, this volume will provide the key to new enjoyment and understanding.

SPHINGIDAE MUNDI--HAWKMOTHS OF THE WORLD (SPHINX MOTHS) by Bernard D'Abrera based on a list by Alan Hayes. Published by E. W. Classey Ltd, P.O. Box 93, Faringdon, Oxon SN7 7DR, ENGLAND. Circa 256 pages, 250 mm x 340 mm in size. It covers 1,050 species in full color with a half-tone appendix of material not in the British Museum (Natural History). It uses a new high tech 5 color printing process, setting a new standard in printing. This is the first work of such magnitude on the subject since Rothschild & Jordan *A Revision of the Lepidopterous family Sphingidae* was published as a Supplement to *Novitates Zoologicae* No. 2 in 1903. The Rothschild coverage is, as must be obvious, now very much out of date and the publishers are confident that the demand for this new work will be heavy. Publication is expected in November 1986. The prize is US \$150.00 inclusive of postage and packing (Sterling £97.50). Orders may be made directly through the publisher or through any reputable bookseller. The publisher is accepting orders now with payment in US Dollar or Sterling Cheques or Mastercard or VISA cards.

NEW BOOK

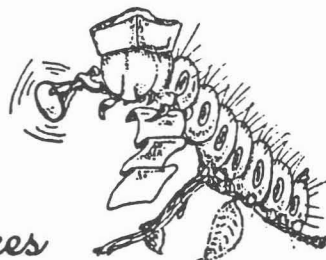
MEXICAN LEPIDOPTERA: EURYTELINAE I by R. de la Maza E. and R. Turrent D. with color photographs by Rafael Doniz. Text in Spanish. The authors present an exhaustive treatment of the taxonomy, behavior, and distribution in Mexico of this colorful subfamily of Nymphalidae.

In all, there are 44 species (plus many subspecies, several of which are here described as new) in 3 tribes (Eurytelini, Catonephelini, Callicorini) and 16 genera (*Biblis*, *Mestra*, *Dynamine*, *Pseudonice*, *Bolboneura*, *Eunica*, *Myscelia*, *Catonephele*, *Nessaea*, *Pyrogyra*, *Temenis*, *Epiphile*, *Cyclogramma*, *Diaethria*, *Perisama*, and *Callicore*).

Following the section on Adult Behavior, Distribution, and Taxonomy is a brief section on the known Life Cycles. The 43 maps graphically illustrate the distribution of each taxon in Mexico.

The 19 plates are well executed, particularly the 8 color plates of photographs of adult specimens (the remaining plates consist of 7 illustrating topographical and morphological details, mostly genitalia, and 4 halftone plates of photographs of adult butterflies).

Sociedad Mexicana de Lepidopterologia AC, Publicaciones Especiales 4. 1985. 44 p., 43 maps, 19 plates (8 in color), 4 unnumbered halftone photos in text. Paperbound. \$25.00. Distributed exclusively in the United States by Entomological Reprint Specialists, P.O. Box 77224, Dockweiler Station, Los Angeles, California 90007.



Notices

NOTICE OF PROPOSED AMENDMENT TO CONSTITUTION

In accordance with Article XII, Section 1 of the Society's Constitution, notice is hereby given of a proposal to amend Article IX, Section 2 of the Constitution. The purpose of this amendment is to remove the six-year limit on the amount of time the Society's three Editors (NEWS, JOURNAL, MEMOIRS) may hold office, while still requiring renewal of editorial appointments every three years. The reason for this change is to allow the retention of willing and capable Editors beyond the six year maximum term of office now imposed by the Constitution. The Editors will continue to serve at the pleasure of the Executive Council.

Present and proposed wording of Article IX, Section 2 are as follows (language to be stricken is underlined, new language in CAPITALS):

"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 Executive Council shall appoint, on recommendation of the Editorial Board, the three Editors, for terms of three years each; all three editors may succeed themselves once. **BE REAPPOINTED FOR AN INDEFINITE NUMBER OF SUBSEQUENT THREE-YEAR TERMS.**"

This proposed Constitutional amendment will appear on the 1987 ballot to be mailed in November 1986.

MISSING, MOVED OR OUT OF BUSINESS?

While in the process of compiling an updated list of dealers in entomological and/or lepidopterological supplies, books, organizations, etc. to be published in the NEWS shortly, several letters written to ascertain correctness of addresses and offerings were returned by the post office as undeliverable. If anyone knows anything about the following firms or organizations, please advise the NEWS Editor of the facts of the situation. The old, no longer current, address is given so as to indicate the locality of former operations.

Anthropod Specialties Co., P.O. Box 1793, Sacramento, California 95809 USA

Lane Science Equipment Co., 105 Chambers St, New York, New York 10007 USA

Librairie de las Faculte de Sciences, 7 Rue des Ursulines, 75005 Paris, FRANCE

Masson Publishing USA, Inc., 14 E 60th St, New York, New York USA

The Butterfly Club of America, 736 Main Ave, Suite 200, Box 2257, Durango, Colorado 81302 USA

INSECTS FOR SCIENTIFIC STUDY

Carnegie Museum of Natural History has a large and diverse collection of world insects for study, esp. Coleoptera, Lepidoptera; African, Neotropical, Nearctic. Systematists worldwide are encouraged to borrow material in any insect order for revisionary work. Visits and correspondence with both professionals and amateurs solicited. Please write: Dr. John E. Rawlins, Carnegie Museum (Natural History), Invertebrate Zoology, 4400 Forbes Avenue, Pittsburgh PA 15213 USA.

SOCIETY ARCHIVES ESTABLISHED AND CONTRIBUTIONS SOLICITED

The Society's Executive Council has accepted an offer of the Natural History Museum of Los Angeles County to house the archives of the Society. For the first time in its history the Society finally has a permanent home for its old files, documents, meeting programs, photographs, correspondence, and all other items even remotely related to the operation and history of the Society. Former officers who never knew what to do with their old files, but still managed to resist the temptation to discard them, are now being asked to pack them up and ship them to the Archives for permanent storage. Everything related to the Society is potential archival stuff, so don't hold back (let a professional archivist decide whether it's worth saving). So clean out those files now, and mail your offerings to The Lepidopterists' Society Archives, c/o Gretchen Sibley (Archivist) or Julian Donahue (Asst. Secretary), Natural History Museum, 900 Exposition Blvd., Los Angeles, California 90007-4057, U.S.A.

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 1987 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.

EDITOR'S 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.

BIRD WATCHERS-BUTTERFLY COLLECTORS VISIT COSTA RICA

Over 800 species of birds and 1,500 species of butterflies abound throughout the country. Low fully-inclusive prices, 2 to 6 persons per group. Write for details, stating interests. TRANSWORLD (LS), Apartado 7911, San José, COSTA RICA, Central America.

SOCIETY HISTORY FILE IN MAKING

WANTED as donation or on loan to copy: programs of early Lep. Soc. annual meetings for a Society History file. Need 1952-1961 and 1965-1967. Also group photos from these meetings. Contact Ron Leuschner, 1900 John St, Manhattan Beach, CA 90266 USA if you can be of assistance.

OLD MEETING PHOTOS SOUGHT FOR ANNUAL MEETING ALBUM

A highlight of the 1986 Ottawa meeting was a photograph of the first Ottawa meeting in 1952, allowing some people to see what they looked like in the same habitat 34 years earlier! More than one person suggested that we should have an Annual Meeting Photo Album to accompany the traveling Registration Book to our meetings. I will be glad to prepare such an album in time for the 1987 Berkeley meeting, but I will need contributions of photographs to get it started (I only have an incomplete personal set that I would prefer to

retain for personal use for the time being). Donation of original prints is preferred; if, however, you have some old photos that you won't part with, but will loan to me long enough to be copied, please let me know what years you have represented. Julian P. Donahue, Natural History Museum, 900 Exposition Blvd., Los Angeles, CA 90007-4057, U.S.A.

ATTENTION NONWESTERN HEMISPHERE MEMBERS

The Executive Board has voted to take advantage of an International Cooperative Airmail Service offered by our publisher, on a one year trial basis, for speedier delivery of the JOURNAL (for 4 issues). We invite our members in Europe, Africa and the Far East to watch for speedier delivery and to notify the Society Secretary, Richard Arnold (address on back page) of their feelings in this matter so that after the trial period is over a decision can be made whether or not to continue the service. This service for the trial period will be at no additional cost to benefited members. The charge of approximately \$1.60 per member per year is being borne by the Society. Promised delivery time should be 2 to 3 weeks rather than 2 to 3 months. The mailing date for each issue is printed on the front cover.

FINANCIAL SUMMARY, CALENDAR YEAR 1985....

1. Beginning Balance, 1985 (cash on hand)	44,698.65
Adjustments:	
Vol 39 Journal Expenses to come	13,200.50
1986 income on hand	3,256.00
Unbudgeted 1984 income	<u>1,467.68</u>
Total	<u>14,988.82</u>
Adjusted balance	29,709.83
2. Allocation of Assets, end of 1985	
Permanent Publication Fund	30,025.46
Illustration Fund	700.10
General Operating Fund	<u>2,039.96</u>
Total	32,765.52
3. EXPENSES for 1985*	
NEWS publication	7,425.61
JOURNAL publication	26,000.00
Supplies	484.44
Mailing List Maintenance	--
Dues Notice	--
Back Issue Handling	1,210.54
Printing	406.55
Postage	1,511.32
Bank Charges	215.00
Programming	--
Publication's Handling	354.11
Miscellaneous	<u>668.50</u>
Total	38,276.07
4. INCOME for 1985	
Member dues	28,092.26
Institutional subscribers	1,893.00
Air mail postage	445.00
Page charges	2,400.00
Back issue sales	556.04
Rent of membership list	1,381.24
Permanent Publication Fund	4,164.62
Illustrations fund	128.00
Interest earned	1,213.26
Miscellaneous	<u>1,058.34</u>
Total	41,331.76

*Several budgetary categories were changed in 1985
For comparison, the 1984 figures may be found in the NEWS #6, 1985 on page 75.

Eric Metzler, Treasurer

1987 INTERNATIONAL SCIENCE FAIR

The 1987 INTERNATIONAL SCIENCE FAIR will be held in July at Université Laval in Sainte-Foy, Quebec, Canada. Organized to provide an opportunity for young scientists from around the world to meet and discuss their accomplishments and plans, and to promote scientific pursuits as leisure activities, the Fair also welcomes representatives and exhibitors from related educational, scientific, technological, and commercial fields. For further information write directly to Conseil de Développement du Loisir Scientifique, 4545 Pierre-de-Coubertin Ave., P.O. Box 1000, Station M, Montreal, Quebec H1V 3R2, Canada.

JOURNAL UPDATE

Volume #40 for 1986 of the JOURNAL of the Lepidopterists' Society is well on the way to being brought up to date. Issue #1 should be out by late October; #2 should follow in November and #3 in December with #4 following soon afterwards.

ICZN

The following applications have been received by the International Commission on Zoological Nomenclature and have been published in Volume 43, part 2 of the Bulletin of Zoological Nomenclature on 9 July, 1986. Comment or advice on them is welcomed and should be sent to the Executive Secretary, P. K. Tubbs, c/o British Museum (Natural History), Cromwell Road, London SW7 5BD, England. Use reference number ITZN 11/5.

English: 655 Reference number: 1127: 1791
 Case No.

2463	<u>Antispila</u> Hübner, [1825] (Insecta, Lepidoptera): proposed validation of <u>Antispila stadtmüllerella</u> [Hübner], 1825 as type species.
2495	<u>Napomyza</u> Westwood, 1840 (Insecta, Diptera): proposed conservation by the suppression of <u>Napomyza</u> Curtis, 1837.
2397	<u>Microgaster</u> Latreille, 1804 (Insecta, Hymenoptera): proposed designation of <u>Microgaster australis</u> Thomson, 1895 as type species.
2494	<u>Sigara scholtzi</u> Fieber, [1860] (Insecta, Heteroptera): proposed conservation by the suppression of <u>Sigara Scholtzii</u> Scholtz, 1846.
2519	<u>Micronecta griseola</u> Horváth, 1899 (Insecta, Heteroptera, Corixidae): proposed conservation by the suppression of <u>Sigara minuta</u> Fabricius, 179x and <u>Sigara lemana</u> Fieber, 1860.
2395	<u>Agromyza</u> Fallén, 1810 (Insecta, Diptera): proposed validation of <u>Agromyza reptans</u> Fallén, 1823 as type species.
2537	<u>Tropiphorus</u> Schönherr, 1842 (Insecta, Coleoptera): proposed conservation by suppression of <u>Brius</u> Dejean, 1821.
2534	<u>Tetropium</u> Kirby, 1837 (Insecta, Coleoptera, Cerambycidae): proposed conservation by the suppression of <u>Isarthron</u> Dejean, 1835.
2511	<u>Cyclaxyra</u> Broun, 1893 (Insecta, Coleoptera): proposed conservation by the suppression of <u>Melanochroa</u> Broun, 1882.

The following Opinions, rulings of the Commission, have been published in Volume 43, part 2, of the Bulletin of Zoological Nomenclature on July 9, 1986. The Commission regrets that it cannot supply separates of opinions.

Opinion No.	
1386 (p. 128)	<u>Papilio erato</u> Linnaeus, 1758 (Insecta, Lepidoptera): neotype designated.
1391 (p. 138)	<u>Zygaena anthyllidis</u> Boisduval, [1828] (Insecta, Lepidoptera): conserved.
1398 (p. 152)	<u>Capys</u> Hewitson, [1865] (Lepidoptera, Lycaenidae): conserved.

NEW MEMBERS & ADDRESS CHANGES

NEWS #6, 1986 will be the Membership Directory and it should be out on time again and in the mail long before the Christmas rush. Since all new members and all address changes will appear in the Membership Directory and since space in the NEWS is needed for other items, the lists of new members and address changes will not appear in this issue.



Forthcoming Meetings

39TH ANNUAL MEETING OF THE LEPIDOPTERISTS' SOCIETY
BERKELEY, CALIFORNIA, USA, 25-28 JUNE 1987

The 39th annual meeting of the Society will be held at The University of California, Berkeley, during the last weekend in June, 1987. We expect to organize an interesting program, co-chaired by Drs. John E. Hafernik and John T. Sorensen. Accommodations will be available through the University Conference Center, in dormitory style similar to those on other university campuses during our meetings in recent years. Other motel and hotel rooms are available within walking distance at somewhat greater cost.

Late June is an excellent time for both moth and butterfly collecting in the region and is sufficiently late in the season that a wide range of elevations and habitats should provide good hunting within a few hours drive of Berkeley. Several options for organized field trips following the meetings are planned.

Unparalleled tourist opportunities are accessible within a short distance in the San Francisco Bay area, for spouses or meeting attendees who wish to spend additional days in the region.

Further details and registration forms will appear in the Jan/Feb, 1987, issue of the NEWS.

J. A. Powell



Research Notices

● WANTED: All records of capture of Hyalophora euryalus from Baja California, adults or cocoons. Information gathered will be used to verify the present status of that insect at the Southernmost limits of its range. Send all data to: Ralph E. Wells, 303B Hoffman St., Jackson, CA 95642, USA.

● In order to continue my project, I need A1 solid orange, un-marked ♂ specimens of Dryas delila from the following locations: South Texas, Mexico, Central and South America; also I need un-marked ♂'s of Dryas julia cillene from South Florida and/or Keys. Will buy.

Many thanks to those who supplied me with specimens from Jamaica and The Bahamas. Thomas Ashby, 667 Halifax Dr., Mobile, AL., 36609.

● "In connection with an ongoing study of the natural history and distribution of the butterfly Incisalia henrici (Grote and Robinson) in the state of New Jersey, I should appreciate receiving data on date and locality of capture of this insect from collectors of New Jersey and eastern Pennsylvania specimens. Associated data on habitat type, flower preferences, plant associations,

etc. would also be most helpful. Contributors of data will be acknowledged in a projected paper to appear on this subject." J. Benjamin Ziegler, 64 Canoe Brook Parkway, Summit, N.J. 07901.

The Market Place

Buy • Sell • Exchange • Wants



Items submitted for inclusion in this section are dealt with in the manner set forth on page 10 of the Jan/Feb 1986 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.

FOR EXCHANGE: Two dozen adults of Agapema homogena (Saturniidae). Ex-larvae, from the Santa Catalina Mountains of Arizona. Will consider trades for other choice Lepidoptera. SASE. Richard Carl Priestaf, P.O. Box 14203, U.C.S.B., Goleta, California 93106.

FOR SALE OR EXCHANGE: pupae of Acanthobrahmaea europaea, Brahmea leddereri and cocoons of European Saturniidae. Looking for contact with breeder of Brahmea sp. Write to Andreas Gahr, Talbrede 19, 4937 Lage, West Germany.

FOR SALE: "Journal of Res. on the Lep." Vol 1-17 inc. and "JOURNAL" of the Lep. Soc. Vol 15-39 inc. Best Offer. ALSO, XERXES BLUE: Will sell or exchange for extra choice N.Am. or exotics. Best offer. John M. Snider, 3520 Mulldae Ave., San Diego, CA 90732.

FOR EXCHANGE: Wish to enhance small university's Lepidoptera collection by exchange with North American institutions of similar nature or with individuals, outside the Southeast U.S. Can provide specimens from South Carolina Piedmont and Appalachian regions. John Snyder, Dept. of Biology, Furman University, Greenville, SC 29613.

FOR EXCHANGE OR SALE: Bolivia Lucanidae. New Species Sphenognathus furumii n.sp. ♂ very rare. Quality is perfect and sell or exchange. Wanted rare Lucanidae, rare Dynastinae, African Pycnoschema, Dynoryctes, Cyphonistes, Xenodorus. South American Antodon, Agaocephala, Brachysiderus, Aegopsis. yoshiaki FURUMI 97-71 komizo, Iwatsuki-SHI, Saitama-KEN, 339 Japan.

FOR SALE: Good quality cocoons (and papered adults) of A. luna, A. io, C. promethea and S. cynthia. SASE for prices. Larry J. Kopp, R.D. Box 30, Klingerstown, PA 17941.

FOR EXCHANGE / SALE: Midwest Catocala, ova and papered. Want all U.S. Catocala, ova and adults, or N.A. Papilionidae. John Jordison, 414 North 61st St., Omaha, Nebraska 68132.

FOR SALE: Live pupae of Eurytides marcellus. Hand paired, ex-ova. Available in quantity, in season or diapause. John Tewell, RR2 Box 304AAA, Pittsburg, KS 66762 USA.

WANTED: Copy of D'Abbrera's "Butterflies of the Australian Region" Vol. 1. Will buy. Bob Gondek, 11164 Marsha Place, Warren, Michigan 48089.

EXCHANGE: Butterflies & moths from North & South America for Satyridae & Pieridae from Europe & Asia. R. Rahn, 3205 W. Rochelle Rd., Irving, TX 75062, USA. ALSO FOR SALE: Entomological cabinet with glass-topped drawers; Also open-top Cornell-size drawers for storage. SASE for details.

WANTED: d'Abrera, Birdwing Butterflies of the World; d'Abrera, Butterflies of the Australian Region (1st Edition & Vol 1 of World, 2nd Edition). Will buy or exchange. Offering for Exchange: le Moul't & Real, Les Morphos d'Amerique du Sud et Centrale, 2 volume Set, Soft. James L. Phipps, 6640 Akers Mill Rd, No 34A3, Atlanta, GA 30339.

EAGERLY SOUGHT - Small, attractive (not strictly functional) cages in which to showcase my most beautiful home-reared butterflies and moths. Homemade or commercial -- either is o.k. I'm looking to buy in quantity so please send cage photo and/or description to Jo-Ann Langseth, 12 Thirteenth Avenue, Warwick, RI 02886.

WANTED: Pupae of Saturniidae, Sphingidae, Papilionidae. Ova of Arctiidae, Saturniidae and Catocala. Worldwide interests. Will buy or exchange for good paleartic material. Jürgen Krüger, Danziger Str. 14, 4020 Mettmann, West Germany.

FOR SALE: Reared pairs of Papilio bairdii fm brucei, Boloria selene nebraskensis and Thessalia fulvia. Wild caught pairs of Speyeria idalia and ♂♂ of Thessalia fulvia. All specimens from Nebraska and in A1 condition with full data. Also from Nebraska, pupae of Papilio multicaudatus with full data. If interested, please send SASE to Jim Reiser, 1511 David Drive, Lincoln NE 68504 or phone (402) 467-1457.

WANTED: Eggs of Citheronia regalis, Pachysphinx modesta, Attacus atlas, Cosinosecera hercules and Argema mittrei. Contact Mark Glickfeld, 5305 Quail Run, Ft. Worth, Texas 76107.

FOR SALE: Available in Fall 1986, small or large numbers of Papilio polyxenes and Papilio troilus. All bred and raised in protected environment. George C. Leslie, Jr., P.O. Box 494, 26 Bedford St., Waltham, MA 02254.

WANTED: To buy or exchange, pupae or cocoons of uncommon North American, Mexican, Middle American and South American Saturniidae moths (e.g. Hyalophora sp., Citheronia splendens, C. sepulchralis, Automeris randa, Automeris zephyria, A. cecrops, A. polyphemus oculea, Rothschildia forbesi, A. montezuma, A. godmani, A. metzli, A. janus) and all neotropical species of Rothschildia, Citheronia, Eacles, Arsenura, Copiopteryx etc. ALSO WANTED: pupae of Celerio lineata and Papilio multicaudatus. Available for exchange are pupae and cocoons of rare African, Asian and European Saturniidae (Imbrasia, Gonimbrasia, Attacus, Graellsia isabellae etc.). All detailed offers with available quantity and price are welcomed. Helmut Probst, Augsburg Str.7, D-8939 Tuerkheim, West Germany.

EMPLOYMENT WANTED: I would like to contact any collectors who are going on trips to South America, Peru or other tropical regions who need a full time assistant. Willing to stay as long as necessary. Work for free but transportation and lodging to be paid by collector. Seven years experience. Very serious. Can leave at any time. Contact Larry Wells, P.O. Box 408, DeBary, Florida 32713. Phone (904) 774-2644.

BOOK WANTED: Rothschild and Jordan, 1903. "A revision of the lepidopterous family Sphingidae." Novitates Zoologicae 2. Linda Fink, Department of Zoology, University of Florida, Gainesville, FL 32611. Work phone (904) 392-1107.

WANTED: Excellent to new condition copy of An Arizona Flora, 1960 (revised edition with supplement), Kearney, Thomas H. et al. University of California Press, Berkeley, Calif. Steve Stone, 18102 East Oxford Drive, Aurora, Colorado 80013.

FOR SALE: Professional Custom Made Portable Light traps, any conceivable wattage. Bus. size SASE for details. V. A. Brou, 137 Jack Loyd Rd. Abita Springs, La. 70420 Phone (504) 892-8732.

FOR TRADE: Cocoons of H. columbia or H. gloveri x H. cecropia hybrids for North American sphinx moths or butterflies. Send lists of available material to Hal Donly, 63 Lionel Heights Cres, Don Mills, Ontario, Canada, M3A 1L8.

FOR SALE: Lack of space and the expense of storage necessitates specialization, resulting in the sale of approximately 6,000 unwanted papered butterflies plus a few moths. Most are with full data and are in excellent condition. Unidentified and unsorted with a very fair proportion of medium/large species including Papilios and Nymphalids. Collected by myself in Nepal, India, Kenya, Hong Kong, Malaya, South America, Belize, Panama, UK, Germany, Alps, Spain, Gibraltar, Morocco, Cyprus, Corsica etc etc. Suitable for collector. Unwilling to split. OFFERS to W J Tennent BEM FRES, 1 Middlewood Close, Fylingthorpe, Whitby, N Yorkshire, England.

MEMBERS' COMMERCIAL NOTICES

TRANSWORLD BUTTERFLY COMPANY (LS), Apartado 6951, San Jose, COSTA RICA, Cent. America. NEW FALL CATALOG! - Illustrated, expanded catalog. Species from South and Central America, Africa, Indonesia, Europe etc. Specialists in Morpho, and Parnassius subspecies (special listing on request). Prompt delivery, top quality. Send \$1 for catalog, or \$6 for monthly lists/catalogs for 1-year.

INSECTS, div. Combined Scientific, P.O. Box 1446, Ft. Davis, Texas, USA, 79734. Phone; (915) 426-3851. Please write for your free copy of our new 212 page Insect catalog. It contains almost 7,000 items in 470 families from every major geographical region of the world. Note; we are interested in purchasing many and various insect specimens.

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.

TOP DRAWER ENTOMOLOGICAL STORAGE EQUIPMENT COMPANY, 6524 Stoneman Drive, North Highlands, CA. 95660 USA. phone: (916) 344-1626. MANUFACTURERS OF CALIFORNIA ACADEMY AND CORNELL INSECT STORAGE DRAWERS. Superior quality. Very competitive prices - quantity discounts. Other sizes and/or custom modifications considered for quantity orders. Excellent references. Will soon be completing contract for over 3000 drawers with the Los Angeles County Museum. Now taking orders for delivery beginning in mid November. Write or phone for price list and description. We can't think of any reason why anyone who has seen our drawers and compared our prices would buy from anyone else.

KEECHOE GOOI, 70 Jalan Foo Win Yin, Canning Garden, 31400 IPOH, Malaysia. Malaysian butterflies, Coleoptera, Phasmida, Exotic insects, livestock, etc. For 1986 catalog, send US \$2 (cash) for air postage and printing.

KEN THORNE. P.O. Box 684, Lambeth, Ontario N0L 1S0 CANADA Telephone (519) 652-6696. Fine quality lepidoptera and coleoptera from around the world. Many hard to get species. Specializing in world Papilio, Morpho and North American Arctic species, but have most families. I have items for the specialist and generalist. Send \$1.00 for lists to pay postage.

H. W. WONG M/S DECO ENTERPRISE, P.O. Box 155, Taiping, Malaysia. FREE CATALOGS for Malaysian Butterflies, Beetles, and other insects. Offering Choice specimens.

JOEL MILLER, P.O. Box 504, West Side station, Worcester, Mass 01602, U.S.A. FOR SALE: Butterflies from Indonesian Islands. Specializing in Bali butterflies. Also butterflies from Sumatra, Sulawesi, Buru, Ceram, Bachan, Irian Jaya, Waigeo and other islands. Papilios and Delias my specialty. All quality specimens are papered with data. Send SASE for 1986 price list.

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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, Eric Metzler, 1241 Kildale Square North, Columbus, OH 43229, USA, 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 Cleaveland 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, Eric Metzler, 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.

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