

of the LEPIDOPTERISTS' SOCIETY

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INTERACTIONS BETWEEN SESIIDS AND PHEROMONES

I was fortunate enough that I was able to spend hundreds of hours observing the more common sesiids, especially how they react to synthetic pheromone, both when the pheromone was in various traps, and also when the attractant was attached to branches, poles, fences, etc. My observations were quite consistent as to the way different species behave.

First of all, each species seems to prefer different pheromone heights relative to the ground. Albuna fraxini (Engelh.) males seem to prefer ground level to approximately 1 ft. heights; whereas <u>Synanthedon exitiosa</u> (<u>Say</u>) and <u>Podosesia syringae</u> (<u>Harr.</u>) prefer heights between 3 to 6 ft.,

with a few attracted to lower heights. Another observation is that despite putting up identical traps all in the same type of environment and only 6 ft. apart, the sesiids will prefer one trap over the others. If you replace their "favorite" trap with another identical trap, they will still go back to the same location.

The speeds at which sesiids fly must be exceedingly high—they seem only to slow down to inspect the pheromone. I tried repeatedly to watch them fly to and away from the pheromone. I tried very hard to see where they were coming from and to where they went. Once they were past about 5 ft. away from the pheromone, they seemed to "disappear" into thin air. I do not think the human eye can track them, which makes them essentially "invisible." Their flight speed is just too rapid. The fact that they are small does not help. It would seem that in addition to their mimicry, they have the ability to fly exceedingly fast, which complements their protective mechanisms. This also makes it difficult for collectors to get them; we cannot catch what we cannot see. Without attractant slowing them down, sesiids could fly right past you and I do not think you would even be able to see them.

Not all of the species that I saw behaved the same way when near synthetic pheromone; in addition there are differences as to how long they stay at the pheromone, and differences in how easily they get caught in a trap. Podosesia syringae, Synanthedon exitiosa, and Synanthedon pictipes fly directly to the pheromone, and are easily trapped. Paranthrene pellucida seems to first take time to investigate the pheromone from about 1 or 2 ft. away; pellucida are not easily trapped. Albuna fraxini may only get close to the attractant (approx. 3 to 6 ft.). It likes to fly around entangled surrounding weeds where it is difficult to see, and may not get closer than within a few feet of the vicinity of the pheromone. When using traps it would appear that the relative abundance of species caught in a trap does not necessarily represent their relative numbers in that

There are also differences as to how long a sesiid species will stay "mesmerized" at the pheromone. Synanthedon rileyana males stay only a few seconds; S. exitiosa may stay for minutes. In addition, rileyana is extremely wary so that anybody approaching it will cause it to leave the pheromone, whereas exitiosa will follow you around if you're carrying pheromone.

Some species appear to only come to pheromone if it is attached to vegetation; they will not approach it if it is on a pole or in some other open environment. All of the sesiid species that I observed arrive time-wise according to what looks very similar to a "bell-shaped" normal curve of number of sesiids versus time. For example, in the case of Podosesia syringae, at first there are only a few sesiids, then more, until a short-lived peak (approx. 0.5 hr. long) is reached; after which, their numbers gradually decrease back to zero.

In conclusion, it appears that the powerful pheromones do not alone control capture rates. Quite a few other factors significantly influence capturing of sesiids, making them difficult to collect even with pheromones.

> Dr. John Holoyda Chicago, Illinois

KENTUCKY LEPIDOPTERISTS 1989 ANNUAL MEETING

About 40 members, their families and friends, gathered on the evening of November 10th, 1989 at the Covell's in Louisville for the annual open house, and the next day in the Life Sciences Building at the University of Louisville for the 16th annual meeting.

This meeting was special in several ways: it marked the 15th anniversary of the Society of Kentucky Lepidopterists, the election of Christa Anderson as our first woman president and the presentation of some special awards. After the usual morning of examining collections, getting specimens identified, and visiting among friends, the business meeting was called to order by President George Balogh. The minutes of the 1988 meeting were read and Reports were made by the officers with the approved. Treasurer (Covell) reporting expenditures of \$649.85 in 1989 and a current balance of \$124.71. Field Trip Coordinator Loran Gibson noted the July 4th butterfly count trip for the Xerces Society and several visits to Red River Gorge and Bullitt Co. prairie remnants in 1989. Discussion ensued regarding problems planning trips. Richard Henderson volunteered to operate a "Field Trip Hotline." Anyone planning a field trip and wishing company, or wishing to join someone else's field trip, can call him at (502) 426-8799. Covell tentatively offered a trip to Bullitt Co. for early April, but plans will be forthcoming after the season "shows its colors" a bit better. Annual elections were held and the following became officers for 1990:



Eric Metzler amuses (from left to right) June Preston, Reed Watkins and James Adams



Kentucky Lepidopterists' Meeting University of Louisville, November 1989



Bill Black in left background. Don Wright and George Balogh look over some specimens.



Christa Anderson, new Kentucky Leps President



Covell presents a Special Award to Kiwanis Nat'l Science Fair winner Mark Monroe



Featured Speaker Don Harvey



Youngsters picking papered U. of Louisville duplicates for their own collections.



Don Harvey, June Preston and James Adams at the Covell's during their Open House.



James Adams and Don Harvey



Loran Gibson and Leroy Koehn in earnest conversation



George Balogh, some of the youngsters and Charlie Covell



Loran D. Gibson receiving a special research award from Covell in recognition of his many unique KY records



Jessica Hutti, Tom Carr, Charlie Covell and Christa Anderson at the Door Prize Drawing

KENTUCKY LEPS ANNUAL MEETING

President: Christa Anderson Secretary-Treasurer: Charles Covell

Editor: Barry Nichols

Field Trip Coordinator: Richard Henderson

Next came a special award from the Cornett Endowment Fund to Loran D. Gibson, honoring the many contributions of records, especially new and unique Kentucky

records, that he has logged over the years.

During the old business, the President read information regarding the inclusion in the Zoological Record of taxonomic matter in newsletters such as that of the Kentucky Lepidopterists. The newsletters are already being sent to BIOSIS for extraction of any useful data, but it is not meant to represent a public record for important permanent scientific data. The President also mentioned that the American Association of Zoological Nomenclature had asked the Society to become a paying member. No action was taken on this however.

Charlie Covell said he would check with Steve Loftin in Tennessee regarding the possibility of having T-shirts

made with the Kentucky Lepidopterists logo.

June Preston announced the push to make the Monarch the National Insect, and urged everyone to write to their Senators and Congressmen in support of House Resolution 411 which would make this a reality. She also announced the forthcoming birth of the Idalia Society of Mid-American Lepidopterists. We in the Society of Kentucky

Lepidopterists wish them well.

After the conclusion of business, Mark Sawyer Monroe of Ballard High School, a National Science Fair award winner with his project "A Possible New Species of the Genus Erynnis," gave a talk on his project. At the conclusion of his presentation he was presented with a special plaque recognizing his achievement. It was a good time for such a presentation, as this meeting was unique in that we had about eight young members present, including 5 Boy Scouts with their Scoutmaster Bill Black, from Paducah, Kentucky.

Next came the main event — a talk illustrated with slides by Dr. Don Harvey of the U.S. National Museum in Washington, DC. He did his Ph.D. research on the taxonomy and life history of neotropical metalmarks (Riodinidae), and he told about some of the fascinating relationships between metalmarks and ants, as well as other interesting habits of several genera. The production of sounds by myrmecophilous metalmark larvae was especially interesting. The talk was

Other contributed talks followed, including: "A Colony of Gulf Fritillaries in Paducah, KY" by Bill Black; "Hybridization of Limenitis archippus x L. arthemis astyanax in Hickman Co., KY, 1980 and 1989" by Charlie Covell; and "A

New Light Trap Design" by Les Ferge.

Leroy Koehn presented information on the activities of The Southern Lepidopterists and Eric Metzler announced activities for the January 1990 meeting of The Ohio Lepidopterists. The meeting ended with the traditional door prize drawing, and there were enough prizes so that everyone received something. Also, for the first time, boxes of common or second-quality papered specimens from The University of Louisville Biology Departments' selection of duplicates were made available so that the youngsters in attendance could look through them and select specimens for their own collections. About half of the group gathered at Masterson's Restaurant for the Dutch Treat dinner following the meeting.

The Society of Kentucky Lepidopterists invites interested parties to become members. You need not live in or close to Kentucky to do so. Dues are \$5.00 per year. New members are welcome at any time. Write to Dr. Charles V. Covell, Jr., Dept. of Biology, University of Louisville,

Louisville, Kentucky 40292-0001.

Charles V. Covell, Jr.

MONARCH BUTTERFLIES OFFSHORE IN THE GULF OF MEXICO

On the 17th and 18th of October, every year for the past 18-19 years, monarch butterflies in immense numbers alight on and rest on an off-shore oil production platform out in the Gulf of Mexico. Mrs. Hylma Gordon of Hattiesburg,

Mississippi told me about this on January 12, 1989 when I was speaking about lepidoptera at a meeting of the Pine Woods Chapter of the National Audubon Society in Hattiesburg. She later gave me more details in a letter dated 31 Jan 1989. In her words: "The experience on the rig was certainly an unforgettable one to see the cloud coming from all around in a mass that settled on every available space from the top of the derrick to the floors. Everything was covered to the depth of several layers. There were butterflies on top of butterflies. The deck hands were busy with wash-down hoses and had to keep it up to be able to handle the gear while drilling. Some of the older hands said it was a yearly occurrence in the area. We were about 150 miles S. of Cameron, LA. One of the men who had worked in the area for 18-19 years said they came through on the 17th-18th of October. They thought the butterflies were using the rig to rest on and fly around in the daytime and come back each night to rest for three nights. The idea that they were different groups on the same flight route had not occurred to me until you mentioned it.'



A point about 150 miles south of Cameron, LA is pretty much on a straight line flight path from New Orleans to Michoacan, Mexico.

Bryant Mather Clinton, Mississippi

MORE BUTTERFILES IN THE NEWS

The Kentucky Legislature has named the Viceroy as the Kentucky State Butterfly. In March, Governor Wallace Wilkinson signed it into law.



All of the following definitions are given in the Glossary, pg. 203-209, of the book The Lives of Butterflies by Matthew M. Douglas, denoted by (MMD); or in the Glossary, pg. 361-366, of Butterflies of the Rocky Mountain States by Clifford D. Ferris and F. Martin Brown, denoted by (F&B).

Aedeagus — The penis of the male. (MMD) Alleles Alternate forms of a gene. (MMD) Allotype — A paratype of the opposite sex as the holotype; a term no longer included in the I.C.Z.N. list of acceptable types. (F&B)

 Specialized scent scales found in male Androconia

butterflies. (F&B)

Apiculus - The threadlike extension of the antennal club found in the Hesperiidae. (F&B)

Coprophilous - Referring to butterfly adults that use excrement as a food resource. (MMD)

Crypsis — Referring to the ability of an organism to conceal or camouflage itself through color, pattern, or body

structures. (MMD) Diapause — A state of "suspended animation" in which metabolic functions are greatly reduced; allows for synchronization of growth with food availability and adult emergence; controlled by various environmental factors including photoperiod, temperature, and humidity; if there is no diapause, a species is said to be continuously brooded. (F&B)

Edaphic - Pertaining to the soil, as an edaphic subspecies of butterfly (one that is defined or limited by soil type

rather than by climate or other factor). (F&B) Fulvous - Tawny; dark yellow to dark yellow-orange. (F&B) Hair pencil — A brush-like structure that dispenses pheromones in male butterflies. (MMD)

- Rolled leaf secured by silken threads in Hibernaculum which a butterfly larva passes the winter. (F&B)

Holotype — A specimen selected by the author of a speciesgroup name to be the "name bearer" of that name; the "court of last resort" for that name. (F&B)

Homeothermic — Referring to the ability of an organism to regulate its body temperature within a relatively narrow

range through physiological means. (MMD)

- A specimen subsequently designated from a series of equivalent type specimens (syntypes) to bear the final nomenclatorial responsibility for a speciesgroup name. (F&B)

Monophagy - A kind of host plant selection in which females of a given species confine their oviposition to a

very narrow range of plants. (MMD)

- Referring to the "ant-loving" behavior Myrmecophilous of certain lycaenid species. (MMD)

Neotype - A specimen subsequently designated to serve as nomenclatorially responsible for a species-group name when the original type specimen has been lost or destroyed; such a designation must be done under certain prescribed rules (I.C.Z.N.) and may not be done as a matter of course or convenience. (F&B)

Ochraceous - Pale yellowish color with other overtones; naturally derived from iron ore pigments. (F&B)

Oligophagous — Referring to species that choose and can develop on several different groups of host plants. (MMD)

- Internal parasites that kill the host during Parasitoids

the course of their development. (MMD)

Paratype — A specimen with other than holotype, but part of the original series from which a species-group name was described. (F&B)

 Having many different forms or morphs. Polymorphic (MMD)

Polyphagous — Referring to species that can complete their development on many hosts belonging to diverse plant families. (MMD)

— A polymorphism determined by seasonal Polyphenism changes in ambient conditions such as photoperiod or relative humidity, and not reflecting genetic differences among the phenotypes. (MMD)

Polytopic — Occurring in disjunct populations. (F&B)

Phenology — The appearance and disappearance of a species

throughout the course of a year. (MMD)

Phenotype — A form or morph that is the result of a combination of genetic and environmental factors. (F&B) Photoperlod — Period of daily illumination. (F&B)

Sphragis — A structure secreted onto the ventral part of the posterior abdomen of the female during copulation. (MMD)

Stigma — The "brand" or mark formed by specialized scales (androconia) on the male dorsal forewing of many skippers in the subfamily Hesperiinae. (F&B)

Syntype — Every specimen in a type-series in which no holotype has been designated. (F&B)

Topotype - A specimen taken at the type locality for a species-group name. (F&B)

- Number of annual generations ("broods"); Voltinism univoltine, bivoltine, multivoltine; determined by generation time and diapause status, in turn determined by a variety of genetic and environmental factors. (F&B)



After NEWS #2 had gone to the printer and I began planning for numbers 3 and 4, I thought it would be nice to make both of them 8 page issues. I wanted to clear my desk before my husband and I would take off for a summer of collecting and attending Lep. Soc. meetings. However, the mathematics of working in a framework of multiples of 4, minus the back page and minus 1/4 of the front page, finally caught up with me. I found I had too much material that should be in #3 for the 63/4 pages available, so I opted to print a 12 page #3. That left me with far too little for an 8 page #4, so I began to worry about what to use to fill up all those empty pages. I had decided to run a skimpy 4 page issue when, just 1 day past the deadline, the mail brought me enough to change my mind. I have at least managed to clear my desk of all pertinent material for a change, so will hope that more contributions for publication will continue to arrive during the summer months. The deadline for the next issue is August 15th.

This issue marks the first appearance of the Lepidopterists' Lexicon column. I hope this column will prove to be useful as well as informative, and that it will appear periodically, although only irregularly. Anyone who wishes definitions of lepidopterological words should send a list of those words to the NEWS editor. It makes no difference if you have only one word for which you want a definition or a dozen of them, as we will try to

accommodate everyone.

The following letter arrived a few days ago and the author's concerns deserve to be printed. As always, the opinions expressed are solely those of the author and do not in any way reflect any policies of the Lepidopterists' Society.

Dear Editor:

I would like to comment on an item entitled "Monarchs in the News" that appeared on pages 36 and 37 in the Miscellany section of the Mar/Apr (No. 2) 1990 NEWS. I read with initial interest about the Monarch tagged in Colorado and resighted in southern California. However, my interest turned to horror when you reported that Mr. Cherubini had driven to San Diego to "add this prize to his collection." Regardless of whether or not this is exactly what happened I am very concerned about the potential effect of this account on butterfly enthusiasts that encounter marked butterflies in the field.

The critical question is this. Was it necessary or appropriate to collect this tagged monarch? The rationale given in the note was that the animal was collected to provide "documentary proof that some monarchs do migrate from Colorado to southern California." This rationale reflects a shallow understanding of mark-release-resighting studies and may suggest to Society members and others that collecting tagged monarchs is a good idea. Contrary to the implication of the "documentary proof" argument, the contribution this animal could make to our understanding of the biology of this species did not end when it was resighted in San Diego. Left to live, its presence might have been observed in and among aggregations in the San Diego area adding to our understanding of the frequency and length of movements among aggregations. Its departure date might have been observed and recorded. At the extreme, there is always the admittedly remote possibility that it would have been resighted at some point along its spring migration.

In sum, to regard tagged monarchs or any marked

butterfly as a "prize" to be collected, killed, and pinned is wrong. I often mark butterflies in my research on butterfly mating behavior to determine minimum lifespans, movement patterns, and other features that require, with much time and effort, the repeated resightings of the marked butterflies. The idea that there might be collectors who think it appropriate to collect marked, living individuals gives me chills. The Society might consider adding a statement discouraging the collection of marked butterflies to its Collecting Policy statement. In the meantime, should one be fortunate enough to see a marked monarch or other butterfly, gently net the animal, if necessary, and record all pertinent information off the tag. Photograph the animal and its tag, if possible. Then, give the animal the reward it so richly deserves for its contribution to science, LET THE BEAST GO!

Ronald L. Rutowski Professor of Zoology Arizona State University





SOCIETY PROMOTIONAL BROCHURES AND POSTERS

The Society's beautiful 11x14" promotional color poster has been printed and is being distributed. We wish to make our promotional brochure and membership application more broadly available to the public, in an effort to increase membership. Nature and science centers, and natural history museums, frequently have book or gift shops. These are sites we should like to target.

If you are familiar with such a center or museum in your area, I should appreciate having you send me its name and address, and if possible, the name of a contact person. We shall then be able to send each a copy of the new poster to draw attention to the Society, and a supply of brochures which can be handed out to visitors specifically requesting them. We shall also send them a list of books on lepidoptera, high-lighted for their areas, which they may wish to stock and sell for their own advantage.

Our earlier notices have brought many responses, and we need many more. This is an opportunity for you to help

the Society grow.

Dave Winter, Secretary 257 Common Street Dedham, MA 02026-4020, USA

PROGRESS IN DESIGNATING MONARCH BUTTERFLY AS THE NATIONAL INSECT

A joint resolution, H. J. Res 411, has been introduced in congress by Congressman Leon Panetta of Santa Cruz, California, designating the monarch butterfly as the national insect. Members of the Society who are in agreement with this promotion should write to their congressmen and senators immediately urging them to support this resolution, and in fact to become co-sponsors of it. We need to act now, before Congress adjourns for the year. For further information, contact Douglas W. S. Sutherland, Chairman, National Insect Subcommittee, Entomological Society of America, 9301 Annapolis Rd., Lanham, Maryland 20706-3115 or phone (703) 557-2224, days, or (301) 345-6119, evenings.

TRIPS TO REMOTE AREAS OF ECUADOR

An Ecuadorian biology teacher living in Quito is willing to take small groups of naturalists to remote locations in the Ecuadorian Amazon between August 6 and September 30. For more information, write to: Phillip E. Koenig, 1330 Paddock Drive, Florissant, MO 63033-2239, U.S.A.

BUTTERFLY EXPLORERS 1990 FIELD TRIPS

Since 1985, Guy F. Vindevoghel, a member of the Société Entomologique de France and of The Malaysian Nature Society has been organizing entomological field trips to the tropics. In 1990, trips to BORNEO from 13 to 30 July, AMAZONIAN PERU from 10 to 28 August, ECUADOR from 7 to 25 September and to MALAWI (formerly Nyassaland) from 31 December 1990 to 23 January 1991 have been planned. These trips originate from PARIS, FRANCE and the informational brochures are in French. Anyone interested should contact Guy F. Vindevoghel, 7 rue de l'Alboni, 75016 PARIS, FRANCE. Telephone 46 57 11 17, poste 381 between 10 and 12 am or 2 and 5 pm, or 42 24 09 61 after 8 pm.

NEWS FROM BERMUDA FOR COIN COLLECTORS

Bermuda's 1989 Commemorative Coin features the Monarch Butterfly (the most widely recognized insect in the western hemisphere). Just as the rest of the world is experiencing a decline in the numbers of this species, Bermuda's monarchs are threatened also. The milkweed plants on which they depend for their caterpillars' food have virtually disappeared. In 1988 the Bermuda Department of Agriculture and Fisheries initiated the Monarch Conservation Project. Seven hundred monarchs were marked with small adhesive wing tags to enable the gathering of information on their distribution and movements. Along with this, an educational program was started to encourage the growing of attractive milkweed varieties as ornamental plants. The Project has been enthusiastically received and the monarch butterfly's future in Bermuda looks much brighter. These commemorative coins can be obtained from the Bermuda Monetary Authority, Hamilton HM12, Bermuda, Attention Mrs. A-laina Trott, Currency Bureau Officer or phone (809) 295-5278. A price list and order form is available.

NOTICE OF INTENT TO AMEND THE CONSTITUTION

This communication will serve as the required 90-day notice of intent (pending approval of the Executive Council at its Annual Meeting, 14 June 1990) to propose amendment of the Constitution of the Lepidopterists' Society, Article VI, Section 5, to define the duties of the Assistant Secretary with regard to maintenance of the Membership Data-base.

If approved, the wording of the proposed amendment will be published in a subsequent edition of the NEWS, and the question will be placed on the November 1990 ballot for a vote by the membership.

William D. Winter, Secretary

JUST A REMINDER

This being an even numbered year, there will be only 5 regular issues of the NEWS, since NEWS #6 will be the biennial membership directory. If you have any notices or ads that need to be published in 1990, it is very important that they reach the NEWS Editor by the published deadline for the NEWS #5, Sept/Oct 1990 issue, which is August 15. Any requests for ads to run twice will result in the second printing of the ad in the NEWS #1, Jan/Feb 1991 issue. A few days grace is normally given to Canadian, South American and overseas advertisers since mail delivery is not always dependable, but even so there have been occasions when items have been sent to the wrong party and so reach the NEWS Editor too late for publication. The editor's name and address appear on both the front and back pages of all regular issues.

Also, don't forget, that if you wish any changes to be made in your directory listings, that this information should be sent directly to the Assistant Secretary, Julian Donahue (address on back cover of all NEWS issues). The deadline for this information is October 11, 1990. Your listings include, besides name, address and phone numbers (if you wish these numbers published), your areas of interest or specialization and whether you buy, sell, collect or exchange specimens.

SOME COMPUTER DISKS NOW ACCEPTABLE

The typist for the NEWS has a very sophisticated system, and uses two different machines depending on whether we are producing the Season Summary 10" wide column (which is photo reduced in the printing process) or the normal 43/4" wide column (which is also photo reduced in the printing process) for all the rest of the NEWS items. Her machines can communicate with each other so that it is possible to use ASCII files for one and transfer the information to the other. The Season Summary is done on an IBM compatible PC using 51/4" double density (360K) disks and WordStar 5.0 software. It is printed in Courier type (typewriter elite) with 12 pt leading to give final copy with 6 lines per inch. The rest of the NEWS items are done on the Macintosh on 31/2" (800K) disks with MS Word 3.0 software and placed into Pagemaker to get 11 pt type on 12 pt leading in Helvetica or Geneva fonts, again giving 6 lines per inch.

If you wish to send material for NEWS items or Season Summary Reports, they can be sent as WordStar 5.0 and ASCII files on 51/4" double density (360K) disks. Otherwise send 31/2" (800K) Macintosh disks created using MS Word 3.0 software. Disks will be returned if you so desire.



MEMOIR #3 AVAILABLE

In 1982, the Society published the Miller & Brown A Catalogue/ Checklist of the Butterflies of America North of Mexico as Memoir #2. In 1989 an update of this publication, edited by Clifford D. Ferris, was published by the Society as Memoir #3. Dr. Ferris was chairman of a 5 person committee appointed in 1983 to review Memoir #2 and the results of this committee's findings comprise the Supplement to A Catalogue/ Checklist of the Butterflies of America North of Mexico, or Memoir #3. This 110 page volume is printed in the same size and format as Memoir #2 but is available only in paperback. It contains: (1) general notes on family group names and some literature citations; (2) corrections, emendations, general notes and additions to Memoir #2; and (3) a rudimentary, updated checklist of North American butterflies. It is up-to-date through Vol. 43(1), 1989 of the JOURNAL of the Lepidopterists' Society.

The price, post paid (surface mail) is \$10.00 US per copy, with a 40% discount to Society Members, or \$6.00 US per copy. For First Class postage or Air Post to Canada, add \$1.50 US to the price. For Air Post outside North America, add \$3.00 US to the cost. Keep your checklists up-to-date.

Members: \$6.00 US Surface Mail

\$7.50 US First Class or Air Post to Canada

\$9.00 US Air Post outside North America

Non Members: \$10.00 US Surface Mail

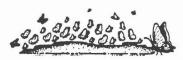
\$11.50 US First Class or Air Post to Canada \$13.00 US Air Post outside North America

Send your order and your check in US dollars to Charles V. Covell Jr, Dept. of Biology, University of Louisville, Louisville, Kentucky 40292 USA.

NEW BOOKS FOR SALE

Butterflies of the South East Asian Islands (To be completed in 6 volumes - 4 volumes currently available). Prices at current exchange rates (as of April 19) are: Vol. 1 Papilionidae - \$164.00; Vol. 2 Pieridae and Danaidae -\$230.00; Vol. 3 Satyridae and Libytheidae - \$184.00; Vol. 4 Nymphalidae (part 1) - \$256.00. Postage and Bank draft charges are extra. For a book review of the set, see the JOURNAL Vol. 44 (2) 1990.

I have an agreement with the author for discounts off the above prices with quantity purchases as follows: 10 to 50 = 20%; 50 to 250 = 30%; 250 to 500 = 40%; above 500 = 50% discount. Currently, about 20 people have expressed interest. I do this as a favor and receive no profit. If interested please write to: Wayne H. Whaley, 1234 North 50 East, Orem, Utah 84057.



Forthcoming Meetings

1990 PACIFIC SLOPE MEETING

The 1990 meeting of the Pacific Slope Section of the Lepidopterists' Society will be held at the Malheur Field Station near Burns, Oregon from Friday afternoon, August 3 until the evening of Sunday, August 5, following an all day field trip. Good collecting for this field trip is anticipated in the adjacent Alvord Desert and Steens Mountains. station facilities will be available for occupancy until noon of August 6 for those wishing to stay over. Western members of the Society will be contacted. Others interested in attending should contact Dr. David McCorkle, Biology Dept., Western Oregon State College, Monmouth, Oregon 97361 or phone (503) 838-8478 for more information.

SOUTHERN LEPIDOPTERISTS' SOCIETY FALL MEETING

The Southern Lepidopterists' Society will hold its fall field meeting at the Archbold Biological Station near Lake Placid, Florida the weekend of October 12, 13 and 14, 1990. For more information about the meeting or about the Southern Lepidopterists' Society, contact Leroy C. Koehn, 2946 NW 91st Ave., Coral Springs, FL 33065. Telephone (305) 344-3873.

XERCES SOCIETY 17TH ANNUAL MEETING

The 17th Annual Meeting of the Xerces Society will be held from August 24 to 26, 1990 at the Cabot Science Center, Harvard University, Cambridge, Massachusetts. The agenda includes the business meeting, the presentation of papers and field trips. The keynote speaker will be Dr. E. O. Wilson, Xerces Society president. For further information or to send abstracts of papers for consideration, contact the Xerces Society, 10 SW Ash Street, Portland, Oregon 97204. The deadline for abstracts is July 31, 1990.

New Members





BRINKMAN, BART: 130 East Geddes Avenue, Littleton, CO 80122.

CONLAN, CHRISTOPHER: 1630 Milan Avenue, South Pasadena, CA 91030-4823.

CULP, LEWIS M.: 2286 Vestridge Street, North Port, FL 34287.

DIXON, M. KEITH: 5093 Bengal Drive, San Jose, CA 95111-3904.

GAIMARI, ELIZABETH: 1308 "C" Street, Elmont, NY 11003. HENRICKSEN, RICHARD K.: 10534 North Davis Road, Stockton, CA 95209-4303.

KAUTZER, ANTHONY: 8250 Klondike Drive, Marshfield, WI 54449.

KONS, HUGO, JR.: 719 West Summer Street, Appleton, WI 54914.

McCONVILLE, JIM, SR.: 540 West 46th Street, Chicago, IL 60609.

McNALLY, PHIL: 126 Salice Way, Campbell, CA 95008-2816. MULLER, ROBERT R.: 17 Sailors Lane, Devon, CT 06460.

RAJ, J. JOSEPH: 16, Twenty Fourth East Cross, Gandhinagar P.O., Vellore 632006, Tamilnadu, SOUTH INDIA.

SMITH, D. SPENCER (Prof.): Hope Entomological Collections, University Museum, Parks Road, Oxford OX1 3PW, ENGLAND.

VAN DOREN, MICHAEL: 505 South Gray, Webster Groves, MO 63119.

WIDAGDO: Jalan Pahlawan No. 35, Padang Panjang 27116, West Sumatra, INDONESIA.

Address Changes (



CATALANI, HARRY K.: 4227 Chamoune Avenue, #213, San Diego, CA 92115-4865.

CLAYTON, RODERICK K. (Prof.): 4176 Inglewood Boulevard, #9, Los Angeles, CA 90066-5250.

EDMUND, A. GORDON (Dr.): 4228 Bardot Road, Port Charlotte, FL 33953.

HANSEN, TOR: P.O. Box 775, North Truro, MA 02652-0775. IRWIN, RODERICK R.: Rural Route 03, Streator, IL 61364. LLOYD, BRIAN: 3525 Heritage Drive, York, PA 17402. MARTINEZ, GEORGE EUGENIO: 2121 SW 22nd Avenue, Miami,

FL 33145.

VORDENBERG, ROBERT: 203 North Ibis Drive, #T, Boynton Beach, FL 33435.

The Market Place





Items submitted for inclusion in this section are dealt with in the manner set forth on page 10 of the Jan/Feb 1990 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 forseeable 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 in an ad stands for 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.

RARE BOOKS for sale: "Butterflies of California." J. A. Comstock (newly bound embossed edition), "The Butterfly Book," W. J. Holland (the late 1931 edition with 29 additional plates), "Butterflies of the World," H. L. Lewis (new), "The Moths of America North of Mexico," fascicle 13.1 c, Pyraloidea, Eugene Munroe (paper). Best offers will take. All offers responded to. R. E. Wells, 303-B Hoffman St, Jackson, California 95642 U.S.A. Phone (209) 223-1170.

ATTENTION, THOSE INTERESTED IN REARING, PHOTOGRAPHY OF LIVING STAGES OF LEPIDOPTERA, LIFE CYCLES, CRYPSIS & MIMICRY, HABITAT DOCUMENTATION, PHENOLOGY, OR ADULT/LARVAL BEHAVIOR: A new book is now FOR SALE entitled PORTRAITS OF SOUTH AUSTRALIAN GEOMETRID MOTHS (see Covell's recent review in NEWS #5, 1989, pp. 72-73). M. S. Moulds, founder of the Australian Entomological Magazine, recently had the following to say about this book: "... I have no doubt that this is the most significant single work ever to appear on Australian moths. It must become one of the classics of Australian entomological literature." The limited 1st edition (500 copies) is already more than half sold; second edition unlikely. Send a 9" x 4" SASE if in the USA and I will forward a 5-page summary detailing the contents of this book. If not in the USA, just write. Noel McFarland, P.O. Box 1404, Sierra Vista, AZ 85636.

FOR SALE: Pupae of Papilio machaon gorganus. Available in June and again in November. Good Healthy stock. J. P. Kazenbroot, Beethovengaarde 77, 5344 CD Oss, HOLLAND.

FOR SALE: Atrophaneura dasarada, Atrophaneura varuna, Papilio janaka and Meandrusa gvas. All these specimens are from India. For information please contact Vincent Thomas Fornieri, 1308 "C" Street, Elmont, New York 11003-3814 U.S.A. My phone number is (516) 488-7726. Calls will be taken between 5pm and 9pm, Eastern time, Monday through Saturday.

FOR SALE: Light traps for use with 12 volt batteries, 120 volt AC, or both. Portable and lightweight with 8, 15, or 22 WATT bulbs. Beetle screen and rain drain features. Excellent design and construction. For more information and prices, contact Leroy C. Koehn, 2946 N.W. 91st Ave., Coral Springs, FL 33065. Telephone (305) 344-3873.

AVAILABLE FROM AUTHOR: Peterson Field Guide series, A Field Guide to the Moths of Eastern North America (1984), with errata sheet. Paperback, \$12 postpaid in US and Canada, \$15 outside; Casebound, \$17 postpaid in US and Canada, \$20 outside. Charles V. Covell Jr., Biology Dept., University of Louisville, Louisville KY 40209, USA.

WANTED: To get specimens of some of the rarer or hard-toget USA <u>Hesperiidae</u>. Interested in all USA genera. Specimens need not be 1-A. Full data necessary. I would like to know what surplus specimens you have, and what you would want for them. John Holoyda, 5407 N. Oketo

Ave., Chicago, Illinois 60656.

WANTED TO PHOTOGRAPH FOR A BOOK: Live ova/larvae/ pupae of Leps. from other areas. Most wanted: Papilios, Parnassius, Pierids, Nymphalidae: (Fritillaries, esp. S. diana and idalia, Anaea sp., Marpesia petreus, Admirals, A. bredowii, Hypol missippus, Anartia jatrophae, Angle wings, Eunica), Lycaenids, Hel. julia, Sphinxes, Thysanis zenobia, Ascal. odorata, Saturnids and more, live Brown Recluse Spider, and interesting insects, etc. I'll buy, trade or send slides as available. Send your lists. I'll send mine. David Liebman, 981 S. Quail Street, Norfolk, Virginia 23513. Phone (804) 853-4722.

MEMBERS' COMMERCIAL NOTICES

TRANSWORLD BUTTERFLY COMPANY, Apartado 6951, 1000L San Jose, COSTA RICA (Tel +506-284768, FAX +506-281573). Serving Lepidopterists around the globe since 1976. LATEST 12-PAGE CATALOG includes Neotropical, African, Palearctic and Indo-Australian butterflies. Papilionidae, Morphidae, Brassolidae, Nymphalidae, Lycaenidae etc. Books and more. WE OPERATE PERSONALIZED NATURALIST AND ENTOMOLOGIST TOUR PROGRAMS. Latest catalog \$1, or for year's monthly lists via airmail send \$6.

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From: The Lepidopterists' Society Address Correction Requested: Allen Press P.O. Box 368 Lawrence, KS 66044

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DEADLINES: Material for the Jan/Feb issue should reach the NEWS EDITOR by <u>Dec 1</u> of the previous year, and that for the Mar/Apr Issue by <u>Feb 15</u>, for the May/June issue by <u>Apr 1</u> and for the July/Aug issue by <u>May 1</u>, the Sept/Oct issue by <u>Aug 15</u> and the Nov/Dec issue by <u>Oct 15</u>. Reports for the SEASON SUMMARY must reach the ZONE COORDINATORS listed on the front cover no later than the <u>5th of January</u>. NEWS EDITOR is June Preston, 832 Sunset Dr, Lawrence, Kansas 66044-2373, USA. Phone (913) 843-6212. RIPPLES EDITOR is Jo Brewer, 257 Common St, Dedham, Massachusetts 02026-4020, USA.

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, Fay H. Karpuleon, 1521 Blanchard, Mishawaka, Indiana 46544, USA, phone (219) 258-4893, 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 \$500. 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 90007-4057, USA.

Information on Membership and other aspects of the Society must be obtained from the SECRETARY, Dr. William D. Winter, Jr., 257 Common Street, Dedham, Massachusetts 02026-4020, USA. Home phone (617) 326-6053.

Requests for Missed Issues (i.e. those not delivered although dues have been paid on time) should be sent to the TREASURER, Fay H. Karpuleon, 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. Boyce Drummond, EDITOR, JOURNAL of the Lepidopterists' Society, Natural Perspectives, P.O. Box 9061, Woodland Park, Colorado 80866-9061, USA. Phone (719) 687-6596. See the inside back cover of a recent issue of the JOURNAL for editorial policies.

AVAILABLE PUBLICATIONS OF THE SOCIETY...... Order from the PUBLICATIONS COORDINATOR, Ron Leuschner, 1900 John St., Manhattan Beach, CA 90266-2608 USA.

CATALOGUE/CHECKLIST OF THE BUTTERFLIES OF AMERICA NORTH OF MEXICO (Memoir #2), Lee D. Miller and F. Martin Brown: includes references to original descriptions and location of type specimens. Members and subscribers, \$12 cloth, \$7 paper; non-members, \$19 cloth, \$10.50 paper, postpaid.

SUPPLEMENT TO THE CATALOGUE/CHECKLIST OF THE BUTTERFLIES OF AMERICA NORTH OF MEXICO (Memoir #3), Clifford D. Ferris, editor. General notes, plus corrections and additions to the original Memoir #2. Members and subscribers: \$6.00 postpaid; \$7.50 first class in USA or \$9.00 airmail abroad. Non-members: \$10.00 postpaid; \$11.50 first class in USA or air post to Canada.

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, \$8; non-members, \$12, postpaid.

1988 MEMBERSHIP DIRECTORY (current to November 1988. Biennial directory of members and their addresses, with geographic and interest indices. Not available for commercial use. (NEWS #6 for 1988). \$5.00 postpaid.

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



of the LEPIDOPTERISTS' SOCIETY

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U.S.A.

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- 9. Andy Beck
- 13. Boyce Drummond

MILWAUKEE 1990

The population of Milwaukee increased by more than 100 as members gathered on Thursday, 14 June 1990, for the 41st Annual Meeting of The Lepidopterists' Society. They came from 26 states and the District of Columbia plus from Taiwan, Panama and Australia. Many brought their families with them too. The Milwaukee Public Museum was host, and the lepidoptera collections were open for examination, as were the outstanding public exhibits.

At the Executive Council Meeting on Thursday we were saddened to learn of the sudden death, a few weeks before, of Joyce Karpuleon, wife of our new Treasurer, Fay Karpuleon. Fay, accompanied by his son Marc, was able to attend the first portions of the meeting, but left early to attend to personal matters.

The traditional Thursday evening reception was held in the Carpenter Tower, a Marquette University facility where many of the attendees enjoyed excellent and inexpensive housing. Several hours were passed in meeting new and old friends and exchanging interval histories.

The formal meetings, in the lecture hall of the museum, were opened with a welcome by Museum Director Barry Rosen. Then followed a symposium on Caterpillar Biology, with Lincoln Brower presiding. Subjects included chemical defense, energy costs of moving about and feeding at different temperatures, color polymorphism, foraging behavior, etc. The surface has barely been scratched in this field of study.

An unusually clear group picture was taken on the steps of the museum during the noon break. Some peach borer pheromone in your writer's shirt pocket attracted numerous city-bred Sesiids, <u>Albuna fraxini</u>, to the gathering, much to the consternation of those not accustomed to wasp-moths.

The afternoon session, chaired by Lee Miller, covered such varied subjects as fine microscopic structures, cocoon construction, taxonomic revisions, and the biology of hooktip moths. The session ended with Boyce Drummond, JOURNAL Editor, describing the process of converting one's scientific observations into a publishable paper. It is straight-forward, non-mysterious, you can do it

straight-forward, non-mysterious: you can do it.

Friday evening opened with a flawless (fly-less) picnic on the impeccably-kept campus of Marquette. It was a pleasant diversion to see cottontails hopping about the greensward (in most cities it would have been rats). At the annual slide show later, Art Shapiro shared with us observations on botany and pseudoanthropology from the pendant tip of South America. Francisco Delgado, of the University of Panama, depicted in detail some of the ecological perils facing his country. Charlie Covell reviewed pictorial history of previous meetings going back several decades: some of our austere members were kids, once! And least but not last was a shot from California (where else?)

of a monarch butterfly with a head bearing an uncanny resemblance to John Lane. An aberrant, no doubt, or could this be the long-feared super-subspecies, <u>Danaus plexippus lanei</u> (Barf.)?

A small group of bright-eyed and broad-minded members arose at 6 a.m. Saturday to appraise the local avifauna, otherwise known as checking out the competition. Has anyone ever calculated how many noctuid and geometrid larvae are sacrificed to build one warbler?

Saturday morning's session dealt with Lepidoptera Biology of the Upper Midwest and was run by Mo Nielsen. Topics included buckmoths of the Great Lakes region, controlled burning in relation to the life cycles of prairie skippers, unravelling Erythroecia and Stiria life-histories in Ohio, prairie associated or dependent leps in Wisconsin and in the Chicago region, and biological comparisons of Great Lakes region swallowtails with the same species from other regions.

Jacqueline Y. Miller presented her Presidential Address, "The Age of Discovery: Lepidoptera in the West Indies." Her discussion of the varied island populations and their relation to and derivation from the continental fauna, as influenced by geology, geography, and the desecrations of man, indicated that this age of discovery is still in its early instars.

Subjects in the Saturday afternoon session, under the aegis of Austin Platt, ranged from butterfly gardening to acquired toxicity in ithomiine butterflies, from the effects of wear on mandibles of notodontia larvae to population studies of Florida monarchs. The high point of this session was the report by the Bagdonas Flying Circus master that over one third of the grizzly bears in the Yellowstone ecosystem spend their summers above timberline subsisting primarily on noctuid moths, which they garner from roosting aggregations beneath loose talus rocks. To think that the noble grizzly would be dependent on the humble miller moth!

The Saturday evening social hour was held in the shadow of the museum's rain forest exhibit. Deane Bowers shared a sack of unscheduled hors d'oeuvres in the form of mapani worms (dried saturniid larvae) from South Africa. They tasted rather like crackers. One could live without them.

Following a tasty and satisfying banquet in Uihlein Hall, President Miller presented the Karl Jordan Medal to Ebbe S. Nielsen, of the Australian National Insect Collection in Canberra. Dr. Nielsen made a potentially deadly subject, "Towards a Phylogeny for the Lepidoptera," lively, enlightening, and even entertaining! He is to be congratulated both for his work and for his presentation.

Charlie Covell m-c'd the 20th annual door prize drawing with his usual finesse. Suspense ran high to see who would make off with the many beautiful and valuable offerings. Art Shapiro went home in a butterfly T-shirt, his first win in 20 years, and your secretary garnered a cyanide jar (do you think they are trying to tell me something?). Our unbounded thanks go to all the generous donors of the prizes.

The final brief scientific session, chaired by John Rollins on Sunday morning, dealt with biogeography of sphingids, satyridae, neotropical theclines, and southern

Andean pierids.

The annual business meeting wound up the formal activities for the year. Some members departed directly for their homes, while others detoured to inspect butterfly gardens in the area, and to go north to the University of Wisconsin field station in Saukville for an overnight stay. Chief attraction there was the Cedarburg bog ecosystem: pitcher plants harbored larvae of the pitcher plant moth, and buckmoth larvae were feeding on willow and bogbean. Overnight moth collecting was very productive.

Credit for the outstanding success of the meeting goes to coordinators Sue Borkin and Allen Young, along with their numerous ancillaries, who had labored for two years to create this event. And particular thanks go to Ray Sullivan, Sue's father, who managed the projector (and countless other details) in a nearly flawless manner, enabling the scientific sessions to preceed more smoothly than any

within memory.

In summary, the broad range of titles presented during the meeting offered items of interest to all facets of our Society, from field-roaming amateur to cloistered taxonomist. This, together with the opportunities to socialize and renew acquaintances, and to become familiar with territory which may be new to us, makes the trip to the Annual Meeting an extremely rewarding experience. We look forward to seeing you in Tucson, Arizona, next August.

Dave Winter



1990 ANNUAL BUSINESS MEETING MINUTES

President Jackie Miller called the Annual Business Meeting of The Lepidopterists' Society to order at 10:42 a.m., 17 June 1990, in the lecture hall of the Milwaukee Public Museum. Approximately 50 members were present.

She first reported on the activities of the Back Issues Committee, that Floyd & June Preston had done a massive job of moving the entire stock from its previous storage place at Allen Press, in Lawrence, Kansas, inventorying it, and sending a maximum of 100 copies of each issue to the Los Angeles County Museum for storage. Eighteen of 20 complete sets of the JOURNAL remain for sale through BioQuip. The details of putting the retained material in order for access and shipment have been accomplished by

Publications Coordinator Ron Leuschner.
Retired Treasurer Jim Tuttle reported on the 1989 balance sheet: beginning balance (rounded) \$93,000, receipts 57,000, expenditures 45,000, and ending balance 105,000. This balance was made up of Life Membership Reserves \$25,000, Publication Fund 14,000, Color Illustration Fund 1,500, and Operating Fund 64,000. Jim has

left the Society in good financial health.

Secretary Dave Winter reported on the "arrears letter" sent to all members dropped for non-payment of dues for 1989. Recovered memberships for 1989-1990 exceeded \$875, with many members thanking us for the reminder. He also reported on the "Poster Project." Color posters, printed in April, have been distributed to over fifty museums and science centers in an effort to secure new members. Further input from the membership was requested, to identify other centers to contact.

Plans for future meetings were announced: Steve

Prchal will coordinate the 1-4 August 1991 meeting in Tucson to be co-hosted by Sonoran Arthropod Studies, Inc., Center of Insect Science and the Department of Entomology of the University of Arizona. The date was chosen to coincide with the new moon and the start of the rainy season, the time of greatest moth emergence in the area.

The 1992 meeting will be held 25-28 June in East Lansing, Michigan under the direction of Fred Stehr and Mo Nielsen, and co-hosted by the Department of Entomology, Michigan State University, and the Michigan Entomological

Society.

In 1993, on 8-11 July, Paul Opler will manage the meeting in Fort Collins, Colorado, with Dr. Tom Holzer, Chairman of the Colorado State University Entomology Department as co-host.

NEWS Editor June Preston called for contributions of more articles and black/white photographs for the NEWS, on

collecting, rearing, general field observations, etc.

JOURNAL Editor Boyce Drummond reported that the first JOURNAL issue to contain color had been mailed 5 June, and that the Society's subsidy has been raised to 50% of the \$800 page cost (details are available from the Editor). He also needs more line drawings for JOURNAL covers, and b/w or color photographs for the "Feature Photographs" section.
MEMOIRS Editor William Miller reported that a

manuscript on worldwide Saturniid larval foodplants has

been provisionally accepted.

The Committee on Endowments and Awards, chaired by Ben Ziegler, has produced a revised policy on guidelines for awards, and has approved the criteria for the Harry K. Clench award. These both will be reported in the NEWS. Members with suggestions re awards should contact the chairman.

Charlie Covell's Techniques Manual will be designed in two parts: I. Beginning Techniques. II. Finer Techniques. Authors for some sections have already been defined.

Generation time is expected to be three years.

A Society T-shirt, blue or yellow with the Society logo in black, will be ushered forth by Charlie before the year's end.

A new Committee on Public Relations, co-chaired by Sue Borkin and Jackie Miller, will explore the role of the Society in supplying reliable information on lepidoptera to the general public and to conservation organizations.

The President read a list of the members whose deaths had been made known to us since the last Annual Meeting, and a moment of silence was observed.

The Nominating Committee was announced: Deane

Bowers, Lee Miller, and Ron Hodges, chairman.

It was noted that new editors will be needed for both the JOURNAL and the NEWS for January, 1992.

Assistant Secretary Julian Donahue voiced special thanks to Jim Tuttle for his work as treasurer, and in particular for his meticulous attention to detail in maintaining the accuracy of the membership list.

President Miller named Dale Habeck to the Executive Council to replace Floyd Preston, who is now a Vice

President.

After extending generous thanks to all her supporting officers, Jackie handed over the gavel and antennae of office to incoming President Ron Leuschner, who remarked that he had attended his first meeting in 1951, at the Field Museum in Chicago.

The meeting was adjourned at 11:30 a.m.

Respectfully submitted,

Save Winter

CANDID PHOTO IDENTIFICATIONS. Photographers: Dave Winter for numbers 1, 2, 3, 4. Charlie Covell for all the rest. Unless otherwise noted, identifications are from left to right. 1. Dennis Schlicht and Robert Dana; 2. Steve Cary (back to camera), Raymond Neck and Art Shapiro; 3. Jo Brewer and Deane Bowers; 4. Dan Petr; 5. John Rawlings; 6. Brian Scholtens and Deane Bowers; 7. Francisco Delgado and Dale Habeck; 8. Linda Fink with Lincoln Bower; 9. Richard Merkhoffer, Paul Milner and Francisco Delgado; 10. Stephen Parshall, Bob Platt and Susan Borkin; 11. Julian Donahue, Jim Brock and Carol Ferge; 12. Eric Metzler; 13. The mob gathering for the group photo; 14. Boyce Drummond and Ebbe Nielsen; 15. Walter Zanol and John and Sarah Burns; 16. Part of the picnic crowd; 17. Kathy Wildman, Bill Miller and Allen Young; 18. More of the picnic crowd; 19. George Godfrey, Art Shapiro and Ron Hodges in foreground; 20. Phil Koenig, Don Wright and the Baloughs at the front table; 21. Ben Landing, Ben Ziegler, June Preston, Ron Hodges in background and Mo Nielsen.



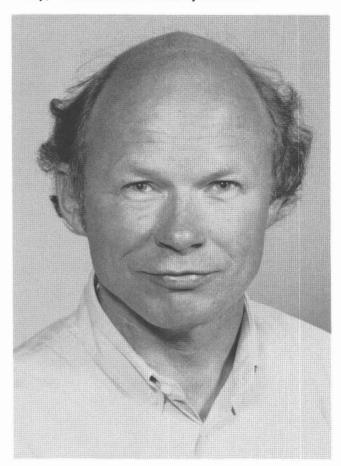
CANDID CAMERA MILWAUKEE



MORE MILWAUKEE CANDID PHOTOS

KARL JORDAN MEDAL AWARD 1990

This year's award goes to Ebbe Schmidt Nielsen, who was born in Boes, Dover, Denmark, on June 7, 1950. He was educated at University of Århus 1971-74 and University of Copenhagen, 1974-80. M.Sc. in Entomology 1976 (insect migration and systematics of Lepidoptera and Neuroptera) and Ph.D. in 1980 (systematics and phylogeny of Incurvariina under the supervision of Dr. Niels P. Kristensen). As a research student, he had valued visits to Dr. Klaus Sattler, Natural History Museum, London, and Dr. Don. R. Davis, Smithsonian Institution. He is a member of and has held office in a number of professional societies, including: Honorary Member, Finnish Lepidopterological Society; Honorary Member, Sociedad Entomologica Argentina; Fellow and Council Member, Willi Hennig Society; inaugural member and chairperson (committee on Taxonomy, Systematics, and Nomenclature, 1976-82), Societas Europaea Lepidopterologica; Vice-president 1986-88, Lepidopterists' Society; Association of Pacific Systematists.



Dr. Nielsen was associated first with the Natural History Museum, Århus, Denmark, 1969-74, and then with the Entomological Department of the Zoological Museum, Copenhagen, 1974-82, as assistant of Lepidoptera and postdoctoral fellow 1980-82. In 1982, he joined the Australian National Insect Collection (ANIC), CSIRO Division

of Entomology, Canberra, as research scientist and Unit Leader for Lepidoptera. In 1986, he was appointed Convenor of the Division's Taxonomy Discipline Panel and in 1990 Section Head of the ANIC. Dr. Nielsen currently serves as editor of Monographs on Australian Lepidoptera, Lepidoptera Editor of Entomologica Scandinavica (1979-pres.) and Fauna Entomological Scandinavica (1979-82) and Taxonomic Editor of the revised Insects of Australia.

Field work has always been a high priority for Dr. Nielsen. While in Copenhagen, he led two expeditions to southern Argentina and Chile. Since moving to Australia, he has revisited Chile and been on major field trips in many parts of Australia. With more than 70 publications (including 6 books and monographs) to date, Dr. Nielsen is recognized for his excellent works on the systematics, morphology, and phylogeny of the Lepidoptera with particular reference to the 'primitive' Lepidoptera. He has contributed particularly to our understanding of Heterobathmiidae, Neopseustidae, Lophocoronidae, Hepialoidea, Incurvarioidea and Palaephatidae and the morphology, general biology and phylogeny of the lower Lepidoptera. Other primary research interests include: (1) biodiversity of Lepidoptera and the use of Lepidoptera as bioindicators; (2) database/checklist/illustrated catalogues of Australian Lepidoptera; and (3) modern systematic methods and cost-effective ways of handling insect taxonomy. Many of these projects are undertaken in collaboration with colleagues both nationally and internationally.

RESOLUTIONS 1990

With apologies to John Burns, Jo Brewer, and all the other accomplished poets in attendance:

In June, nineteen hundred and ninety
Lepidopterists came from all over the country,
from Australia and Taiwan,
even Baraboo, Wisconsin,

all migrated here to Milwaukee. For months at the Milwaukee Museum, toiling unsung and unseen, Young and Borkin made plans, and with many volunteers' hands, prepared for the upcoming meeting.

As attendees started arriving,
whether by plane, taxi, bus, or just driving,
you could just bet,
all the details were set,
with everyone's anticipation rising.
An evening reception made it quite clear,
old friends and new were all here,

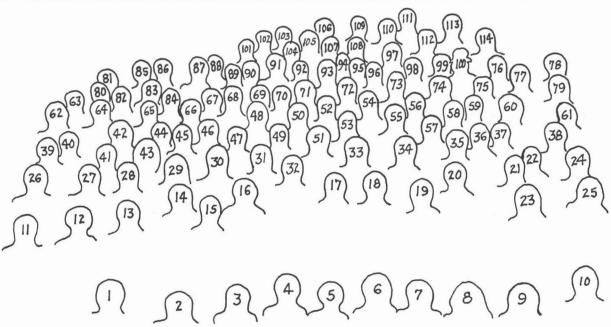
with good food and conversation, amid amiable socialization, all generously lubricated with beer.

Come morning the coffee was ready, for the unclear, unawake and unsteady. Once in the auditorium we were made all-the-morium welcome to the Museum and the City.

Then came the main attraction, after all, our principal distraction; the charts, figures, slides and data with which each strived to elucidate a technique, hypothesis or observation.

CANDID PHOTO IDENTIFICATIONS. Photographer: Charlie Covell. All identifications are from left to right unless otherwise noted. 22. Sen Yeong-Chium, Chen W. Young, C. S. Lin; 23. Ebbe Nielsen and George Godfrey; 24. Stephanie McKown, Jane Ruffin, Kärolis Bagdonas; 25. Lincoln Brower chairs a session; 26. Mo Nielsen and David Iftner; 27. Ron and Elaine Hodges, Charlotte and Doug Ferguson and Dan Petr; 28. Jackie Miller, Ebbe Nielsen and Lee Miller; 29. Bob Borth and friend with Jim Brock; 30. Jackie Miller presetns the Jordan Medal to Ebbe Nielsen; 31. Floyd and June Preston; 32. Ray Sullivan; 33. Steve Mueller, Peg and Jim Tuttle; 34. Ebbe Nielsen presents his banquet address; 35. Charlie Covell; 36. Allen Young makes some announcements; 37. Jo Brewer and Dave Winter; 38. Adrienne Venables, John Lane and Bill Miller; 39. Clockwise from the left, David Ritland, Ernest Williams, David DeSwarte, Steve Prchal (with back to camera); 40. Robert Lederhouse; 41. Society Secretary Dave Winter; 42. Jim Tuttle gives the Treasurer's Report; 43. Ron Leuschner bends down so Jackie Miller can give him his presidential antennae; 44. New President, Ron Leuschner, dismisses the meeting.





GROUP PHOTO IDENTIFICATIONS: 1. Susan Borkin, 2. Mary Ann Daman, 3. Dawn Dockter, 4. Judy Pooler, 5. Jo Brewer, 6. Stephanie McKown, 7. Elizabeth Klafter, 8. Kathy Wildman, 9. Clara J. Bye, 10. Ben Landing, 11. Danny Burk, 12. Florence Ferge, 13. Deborah Matthews Lott, 14. Carol Ferge, 15. June Preston, 16. Katherine T. Sieker, 17. Ron Hodges, 18. Elaine Hodges, 19. Waldemar Kmentt, 20. Eric H. Metzler, 21. David C. Iftner, 22. Adrienne Venables, 23. Jim Wiker, 24. Matt Mergener, 25. Maria Plonczynski, 26. Rick Rozycki, 27. Raymond J. Sullivan, 28. Terry Lott, 29. Cathy Bleser, 30. Mark D. Schmidt, 31. Les Ferge, 32. Dave Winter, 33. George L. Godfrey, 34. Brian Scholtens, 35. Don Wright, 36. Charlie Covell, 37. Gertrud Zoeller, 38. Francisco Delgado, 39. David Matusik, 40. Chen W. Young, 41. Jim P. Brock, 42. Nancy Stamp, 43. Pat Fojut, 44. John Burns, 45. Art Shapiro, 46. Sarah Burns, 47. Dennis Schlicht, 48. John Fleckenstein, 49. Phillip E. Koenig, 50. Steve J. Mueller, 51. Ron Flaspohler, 52. Peg Tuttle, 53. Chip Codella, 54. Raymond Neck, 55. Greg Lintereur, 56. Alan Masters, 57. Ernest Williams, 58. Gregory B. Swanson, 59. Marion Lopina, 60. Arlene Kaufman, 61. Steve Prchal, 62. Giovanni Onore, 63. Kevin Kons, 64. John Rawlins, 65. Jaret C. Daniels, 66. Boyce A. Drummond, 67. Ann Malecki, 68. Dan Petr, 69. Jill Neidhoefer Doedens, 70. Jim Tuttle, 71. Jane Ruffin, 72. Lee D. Miller, 73. Jacqueline Y. Miller, 74. David Ritland, 75. Deane Bowers, 76. Steve Cary, 77. Douglas C. Ferguson, 78. Hugo Kons, Jr., 79. Fay Karpuleon, 80. Sharon Kons, 81. Kurt Johnson, 82. Tim Casey, 83. Linda Fink, 84. James Malecki, 85. Ebbe S. Nielsen, 86. Austin Platt, 87. George J. Balogh, 88. Allen M. Young, 89. Robert Dana, 90. Lincoln P. Brower, 91. Bill Miller, 92. James R. Neidhoefer, 93. Mary Alexis Pfutzenreuter, 94. Stephen Parshall, 95. George F. Holbach, 96. Richard M. Merkhofer, 97. Ron Leuschner, 98. David DeSwarte, 99. Jim Parkinson, 100. "Mo" Nielsen, 101. Bob Wuttken, 102. Walter Zanol, 103. Ann Milner, 104. Floyd Preston, 105. Kärolis Bagdonas, 106. C. S. Linn, 107. Dale Habeck, 108. Ben Ziegler, 109. Sen Yeong-Chium, 110. Bob Borth, 111. Tom Barina, 112. John Lane, 113. Julian P. Donahue, 114. Paul Milner.

The papers were all stimulating, whether scenery, statistics, or hybrid mating; from Gondwanaland to Patagonia, to Taiwan, to southern Florida, with abundant depictions of genitalia.

But I admit my verses digress, for having thus far failed to express our resolve to give thanks to the numerous ranks

who worked to contrive this success.

We thank the Museum, our host,
for making our enjoyment the most,
with a welcome most generous
and courtesies endless

we owe them a complimentary toast. Further, be it resolved, to extend to all those involved, our heartfelt expression of thanks and appreciation,

for a memorable time for us all.

To Allen, who kept us in line, reminding us when it was time, he made us feel welcome to the Museum and the collection,

all the while being in three places at one time! Sue Borkin and Ray Sullivan (her father), both worked like probably no other, from morning to nights,

from coffee to slides, they sheparded our flock like a brother.

To Susan and Allen and their crew, to the staff and volunteers, too, to the sponsors and fieldtrip leaders, program organizers and speakers—our thanks, it wouldn't have happened without you.

As time turns the Society wheel, a new executive board comes to heel, but to board-members past let's take time at last

to express our appreciation real;
For a job well-done in our stead,
they've worked many hours past bedtime spent on the details
from policy to journal resales,

they've served with their hearts, seats and head. To whit: retiring executive council members-at-large Dale Jenkins, Floyd Preston, John Rawlins and Jo Brewer; retiring vice-presidents Richard Holland, Niels Kristensen, and Don LaFontaine; retiring treasurer (of 3 years) Jim Tuttle and retiring president Jackie Miller.

So:
We'll long remember Milwaukee with good cheer,
and the wonderful meeting we've had here.
As we all go our separate ways,
recalling these pleasant days,
we'll all look forward to Tucson next year.

Resolutions Committee

John Lane

PACIFIC SLOPE MEETING, 1990

Over 35 members, many with their families, gathered over the weekend of August 3-6 at the Malheur Field Station, Harney Co., Oregon, for a well planned, interesting 37th Annual Meeting. Eight states (including Hawaii) were represented and Uri Caspi came with his young son from Israel to join in the activities. Dave McCorkle and Paul Hammond, assisted by Susan Anderson, Bob Pyle, John Hinchliff and Barry Sullivan did a fantastic job of putting together a well thought out and varied program for the weekend. There was an informal slide show following registration and dinner on Friday night and numerous black lights were visible around the Field Station after dark despite a fairly bright moon.

Saturday was devoted to both morning and afternoon technical paper sessions with the following papers being presented: "Status of the Northwest Lepidoptera Survey," Robert M. Pyle, Gray's River, Washington; "Protandry in Parnassius phoebus in the Olympic Mountains," Robert E.

Kirk, Seattle, Washington; "Larval color patterns in the genus Speyeria," Paul Č. Hammond, Philomath, Oregon; "An illustrated synopsis of the phycitine pyralid moths of California," Julian P. Donahue, Los Angeles, California; "From classic to cladistic: Systematics and biogeography of the genus <u>Choaspes</u> Moore," Hideyuki Chiba, Honolulu, Hawaii; "<u>Kodiosoma</u> (Arctiidae) in Utah," Robert C. Mower, Orem, Utah; "The burrowing sod webworms of California (Tineidae: Acrolophinae: Acrolophus)," Julian P. Donahue, Los Angeles, California; and "Butterflies of Steens Mountain," John Hinchliff, Portland, Oregon. A discussion of western moth projects and a short business meeting, in which it was decided to meet jointly with the National group in Tucson, Arizona in 1991, preceded the leisure time activity hour. Beers from over 20 different small breweries were available for sampling. Following a sumptuous dinner featuring a cake with a butterfly decoration, the John Adams Comstock Award was presented to Hide Chiba for his student paper while the man we honored was Alexander Barrett Klots. A spellbinding lesson on the Natural History of the Pacific Northwest was then presented by Jim Anderson of Bend, Oregon. His young daughter highlighted the evening when she emerged from her brown pupal case to flit away as a beautiful Papilio. The collection of color slides that further illustrated the talk held our interest until time for the door prize drawing.

Sunday was devoted to an all day field trip to Steens Mountain where the butterflies and moths were fairly abundant. Some members had even gone out to the mountain Saturday night to set up their black lights. We worked our way up the mountain, finding different species flying in different altitude zones. Dave McCorkle discovered a Colias pelidne colony on the ledges below the east rim of the mountain, a real find and modern day evidence that some very old records are not in error. The nearest pelidne colony is about 200 miles away. Sunday evening, after dinner, a videotape of the history of the Frenchglen and Steens Mtn area provided additional entertainment for those who had not already departed for home. Both before and after the meeting there was also opportunity for collecting in and around the Field Station and the weather cooperated beautifully.

THE JOHN ADAMS COMSTOCK AWARD, 1990 THE MAN WE HONOR, ALEXANDER BARRETT KLOTS

The John Adams Comstock Award is presented by the Pacific Slope Section of the Lepidopterists' Society to the best student paper given at its Annual Meeting. Each year, the award honors a different lepidopterist who has made a significant contribution to the study of Lepidoptera in the

The works of Alexander Barrett Klots have sparked, and for some ignited, a passion for butterflies and moths among generations of naturalists. His published works include a wealth of popular books and articles, young adult natural history literature, and over 60 peer-reviewed scientific papers, including benchmark contributions on pierid and crambid systematics, lepidopteran genitalia, and biogeography of the alpine and arctic butterfly faunas of North America. To many, he is best known for his Peterson Field Guide on eastern butterflies, which perhaps more than any other book to date, has made North American lepidopterology accessible to the amateur, young student, and professional alike. Both a charter and honorary life member of the Lepidopterists' Society, he served as its president in 1957 and vice president in 1974.

president in 1957 and vice president in 1974.

Alexander B. Klots, known to us as Bill (an unpretentious name coined by his father), was born in New York City in December 1903, to Ephraim Klots, a highly respected and successful physician in the city, and to Helen Giles Klots, the daughter of a British lord. His upbringing was very formal and, at times, rather stifling. His interest in the outdoors was apparent from early on, as whenever he could, he would slip off to spend countless hours hiking, hunting, fishing, and collecting insects.

His interest in butterflies was solidified at the age of nine when he began visiting the American Museum of Natural History. It was there that the curator of Lepidoptera, Frank Watson, encouraged and fostered Bill's studies of butterflies, and where Bill would meet his lifelong friend F. Martin Brown. As an undergraduate, he attended Dartmouth and Yale Universities, but completed his B.S. at Cornell where he studied with William T. Forbes. He stayed on with Forbes for both his M.S. and Ph.D. to work on pierid systematics.

Graduating in 1931, at the depth of the depression, Bill took a job with Ward's Natural Science Establishment for three years, and began teaching as an associate professor at nearby Rochester University. In 1934, he accepted a position in the biology department at the City College of New York, where he taught biology, entomology, field zoology, and the then new science of ecology. Throughout his tenure at CCNY, Bill maintained an office at the American Museum, where he was a research associate and continued his studies of lepidopteran systematics.

Bill retired in 1965 and began intensive work on the North American Crambinae (Pyralidae) fauna, a study which, because of ill-health, was incomplete at the time of his death in April 1989. Nevertheless, this work led to four taxonomic papers on the subfamily, including his last publication, the Crambinae section of the 1983 Check List of the Lepidoptera of America North of Mexico. Bill continued to collect during his retirement and remains among the few in our Society who avidly collected species of all lepidopteran families, from the tiniest Nepticulidae to the Saturniidae and Rhopalocera.

As a boy, Bill was very active in scouting and especially loved hiking, climbing, and fishing. Like so many lepidopterists, he must have had a dominant allele for "hunting and gathering," for if he wasn't out netting butterflies, he was just as apt to be bird hunting with his father or to be found organizing his stamp and coin collections. Falconry was his favorite avocation during his years at CCNY. Many weekends he traveled south to Assateague Island to trap peregrines, merlins, and kestrels, with pigeons wrapped in adhesive twine as bait. At times, he would even bury himself in the stand, holding on to the pigeon's legs, waiting for a falcon to strike! His love for falcons was shared by his wife Elsie and their two children, Ephraim and Louise, who helped him keep and train a number of peregrines and kestrels. Roger Troy Peterson describes Bill as a "first-class falconer" and says he often went along on Bill's trips to learn his techniques and to take photographs.

Bill published over a 60-year period, his first publication appearing when he was but 19 years old. His contributions are exceptionally diverse and include writings on entomology, botany, ecology, herpetology, falconry, and mountaineering. His most influential works were popular books and articles; among these were 18 books (not counting translations and subsequent editions), pieces on butterflies and moths for four encyclopedias, and numerous layman's features in Family Circle, Natural History, and other magazines. He published approximately 63 papers in peerreviewed journals: 18 on pierids, 10 life history papers, 10 faunal papers, 7 on crambids, and 18 others addressing a variety of subjects.

Bill was one of the first entomologists to experiment with color and flash macrophotography. From 1940 to 1960, he was among the most published of insect photographers, his photos routinely appearing in books, magazines, encyclopedias, and newspapers, worldwide. His section in the Field Guide to the Butterflies (which first appeared in 1951) on butterfly conservation was the first significant mention of the need for invertebrate conservation in the United States and was no doubt influential in the appearance and success of the Xerces Society. Bill was an early advocate of the use of genitalia in butterfly systematics, and was among the first to show that female terminalia also offered numerous characters of phylogenetic importance. His contribution on the morphology and nomenclature of lepidopteran genitalia in Tuxen (1956) remains a highly cited publication.

While commissioned as a Captain in World War II, he was assigned to the Sanitary Corps of the Medical Department to serve as a Medical and Malaria Control Officer. He was among the first to experiment with DDT and study its efficacy in controlling malaria and yellow fever. (It was in this capacity that Klots met Sgt. Roger Troy

Peterson, who would later ask Bill to prepare a field guide and accompany Bill on his falconry trips.) At first, Bill was very cavalier about DDT and often sent packages stuffed with the powder to colleagues through the mail. After the war, his position of advocacy was completely reversed to one of extreme opposition by Rachel Carson's Silent Spring. The great irony was that perhaps the most severely impacted animal was the peregrine falcon, the bird Bill had come to respect and love above all others.

Bill's major influence on the study of western Lepidoptera probably derives from his many books and his contributions on Colias and Boloria to Ehrlich and Ehrlich's (1961) How to Know the Butterflies and to Howe's (1976) The Butterflies of North America. His love for the West was fostered by Benny Hyde, an amateur lepidopterist who met Bill and F. Martin Brown at the American Museum. While still a New Jersey resident, "Uncle Benny" took Bill and Martin on collecting trips to the pine barrens and elsewhere; later, after he moved to New Mexico, Bill and Martin would stay with Uncle Benny during summer months to collect around Albuquerque. Bill went west at every opportunity, and in 1923-24, took up residence at Jackson Hole, Wyoming, where he even entertained the idea of starting a dude ranch. He spent parts of at least 15 summers in the West collecting in all of the Rocky Mountain states except Montana. His publications treating western Lepidoptera demonstrate a decided preference for collecting Colias, Boloria, and other Hudsonian and alpine taxa.

His influence on me came at an early age, more than 20 years before I would meet him in person, a year before his death and then weakened by years of struggle with emphysema. Even then he was still a giant to me. I think of him often, not as an old man, but as tireless collector, slogging knee-deep across some bog, swatting *Colias*, *Boloria* and crambids.

I shall remember Bill for many things: in part for his proud and dignified demeanor; for his dry sense of humor, where puns were stacked upon puns; for his colorfully eccentric attire that paired suits with moccasins or a favorite old woolen army cap; but most of all for what he gave me as a young naturalist—knowledge and a passion to study entomology—through his field guide and other writings. More than any other North American biologist, his works have popularized lepidopterology and have served to catalyze and fuel the interests of legions of young entomologists.

David L. Wagner University of Connecticut

IDALIA SOCIETY QUITE ACTIVE

The 1990 Summer Field Trip of the Idalia Society of Mid-American Lepidopterists was held Saturday and Sunday, June 2 and 3 at Noblett Lake Campground in Mark Twain National Forest, Douglas Co., Missouri. In spite of a "wet weather" forecast, only one brief mid-day shower on Saturday marred the otherwise perfect collecting weather. About 15 species of butterflies and numerous moths (especially saturniids) were collected. Sam Webber of Cabool hostessed the group following the collecting activities.

On Saturday, July 21, 30 members braved thunderstorms with occasional slivers of sunlight, and for some a 5 to 6 hour drive, to attend the Summer Picnic at Burr Oak Woods Nature Center, Blue Springs, Missouri. The Center Naturalist, Donna Burris cooked the hot dogs and drove with them down to the shelter house where the members were so busy conversing that no one thought to look up. That is, no one but the group's avid leader, Richard Heitzman, who "sounded the alarm" and began, with collecting jar in hand, to retrieve many wonderful Catocala specimens from under the eaves of the shelter. Linda Ellis from the Missouri Native Plant society was a guest. On Sunday, July 22, the day following the picnic, the Idalia Society Members accompanied the Audubon Society on a Nature Hike through the Burr Oak Woods Nature Center. About 50 people enjoyed having the birds and butterflies identified on their walk through this wonderful Missouri Dept. of Conservation Area.

The Society is anticipating the close of their first

year of existence at the meeting on September 8 at Swope Park in Kansas City when Dr. Jim Murowchick will present the program on "Seeing China through the eyes of a lepidopterist and geologist." Jim lived in China this past summer on a National Science Federation Grant. There will also be activities for the young people in the group.

The Idalia Society membership is open to all persons interested in lepidoptera. Dues are only \$5.00 per calendar year for families or \$3.00 per calendar year for students. For more information, write to Eleanor Casebolt, 5600 East

Gregory, Kansas City, Missouri 64132.



The Preston's Portable Pad and Lepidopterology Lab sits in the driveway again after a full summer of collecting, from West Texas to Ottawa, Canada and then to the Annual Meeting in Milwaukee before heading for the West Coast and eventually the Pacific Slope meeting in Oregon. Following the Wisconsin meeting we were joined for 6 weeks by a young French lepidoptera enthusiast, Benoit Mery, who had written to Society Secretary Dave Winter to inquire about United States collecting safaris. Dave had sent us Benoit's letter and we in turn wrote to offer him a collecting jaunt through the Dakotas, Colorado, Utah, Nevada, California and Washington, including visits with several other society members along the way. We had generally good collecting and Benoit returned to France on August 1 with 141 different U.S. butterfly species and subspecies from the 7 states where he had collected, including such rarities as L. cuprea snowi. P. oreas silenus and E. magdelena. He also spent some nights blacklighting for sphingids and other large moths, with a modicum of success in some areas. His blacklight attracted hundreds of sphingids in the South Dakota Black Hills, but at a reservoir near Oakdale in California the light attracted only hundreds of Mayflies and a frog, but not a single moth. Benoit is interested in rearing both moths and butterflies and sent ova from a number of sphingids to his cohorts in France. He also obtained ova of some Colias, Papilios and Parnassians. He was a pleasant and knowledgeable companion and very quick at learning to identify the U.S. species that were caught. We learned a great deal from him in our lepidopterological meanderings, since he was well versed in the foodplants and habitats of the European counterparts of many of the species that we were collecting. It was, all in all, a very rewarding summer.

I returned home to find a huge pile of mail and began immediately to work at getting NEWS #5 ready for the printer. Following are some letters that arrived during the summer. Perhaps some of you can answer the questions

asked or benefit from the writers' experiences.

Dear Editor,

This summer I came to the rather sad end of five years of promethea moth rearing. I am writing to share my observations with you in the hopes that you may print this in the NEWS and someone who understands the why of what happened will write and share their knowledge and

experience with me.

In 1985 I had my very first opportunity (after thirty years!) to rear local promethea moths as I encountered a female from which I obtained some eggs. I resolved to continue to rear successive generations as long as possible. given the artificial environment I was using. From each brood I would keep one female and set her out to call in a wild male. All my reared males were marked before release to ensure that the called male was not one of mine. I would keep 8-10 eggs of this pairing and rear them on wild cherry, indoors in a rearing case (constant average temp of 74-80 degrees). In the winter I would put the cocoons in a plastic container in the vegetable bin of my refrigerator. Usually I would spray them once a week with water. Given the differing schools on this practice, this winter I did not (I would, however, spritz them once-in-a-while once I had

taken them out and put them in the emergence cage). Generally the moths proved to be single brooded in this environment. Always, if an individual made it to the cocoon stage, it would successfully eclose, and, additionally, I lost very few caterpillars.

However, last year, only half of my brood emerged. I cut open one of the cocoons at that time and found that the pupa within still was active. So I kept those cocoons and overwintered them again. Additionally, I reared my usual single brood.

This year proved to be the end of the project. Not one emerged. After a suitable waiting time, I opened the cocoons to see if I could figure out what had happened.

All of the cocoons from 1988 which had overwintered twice, were dead. The pupae were hard and rigid, but intact and not shriveled or deformed in any way. The moths from the 1989 brood were also all dead, but from the grisly fate of having eclosed from the pupal shell only to be unable to leave the cocoon!

I'm interested in knowing if I did something wrong or if this is a rather normal phenomenon when rearing successive broods in a controlled environment. Also, gypsy moth spraying has begun in my area, going back to 1988, and so I'm wondering if somehow I might have gotten any contaminated leaves that might cause this....

I would appreciate hearing from anyone who can give me some advice and insight as to what occurred and if I can

prevent it in the future. Thank you!

Monica Miller Bethel Park, PA

Dear June.

I've lost letters in the mail while corresponding with overseas breeders. This is a nuisance. One of my correspondents tells me it is common practice and recommends transfer of payment directly from my bank account to hers in the Philippines, with no risk involved. This is a good idea and I would recommend it to other butterfly and moth suppliers. The money gets there by wire with your name attached so if the order is lost, the cash isn't. Also send duplicate letters simultaneously, but be sure to mention this so they don't wait around for 2 cash transfers to arrive. My correspondent is Beatriz Malangis, Cawit Boac, Marinduque 4900 Philippines. Her English is fair and her typewriter is probably 1930 vintage. If any members write to her, please give her my regards. Sincerely,

> Bill Cornelius Albion, California

[Ed. note: Prior arrangements should be made for this type of bank transfer since the bank name and account number must be divulged by the party accepting funds in this manner.]

Dear Editor,

I have been raising lepidoptera for over 30 years as a hobby, and tended to shy away from the commercial silk moth because, from all I have read, rearing them would be a full time project. Everyone that I know who has reared them has done so in open trays. I have found that, around my home, leaves left out in the open become totally dried up and impossible for anything to eat. So, when I did get several pairings of this species, I put the ova in my unheated garage. I was told by other breeders that they would not survive the winter, but they did. I took some of them inside the house and reared them in an old 10 gallon aquarium tank, switching tanks when I changed the food plant. They did poorly, as too much condensation took place and the larvae would drown in it as they seemed to be attracted to this moisture. A month later, when those I was rearing indoors were nearly full grown, I went back to my garage and found the rest of the larvae appeared to be still alive but in a dormant condition. I sleeved them on a mulberry tree. They thrived and some are spinning cocoons now. I had to change the sleeve 3 times. I believe that I can raise more and healthier silk moths in this way than in any other way. I think that my strain may even be capable of surviving in a semi-wild state. The only reason they wouldn't survive in the wild is that they would not be able to move from one tree to another unless the limbs actually touched each other. As for

camouflage, they may appear as a white bird dropping. The females always drop all their ova in one area, so they would get so thick in a short time that they would eat themselves out of food very rapidly and then starve. I have reared many species and these seem to be the easiest of all to rear. Does anyone know if I have a new and healthier strain?

Ken Knight Comstock Park, Michigan





CONFIRMATION THAT AMBLYSCIRTES ALTERNATA OCCURS IN OKLAHOMA

A possible Oklahoma state record of Amblyscirtes alternata (Grote and Robinson) was reported in The NEWS of the Lepidopterists' Society No. 2, March/April issue, 1990.

This report was based on a male Amblyscirtes collected near Noble, Oklahoma, on July 3, 1980. It appeared to match the description of alternata more closely than sympatric Amblyscirtes belli Freeman. I also reported a possible female specimen taken at the same locality a few days later. Neither had been examined by a specialist.

Both specimens have since been examined closely by H. A. Freeman. He confirmed the male is an alternata; the female is a belli. This confirms that alternata occurs in Oklahoma.

Neither Freeman nor Paul Opler (personal communication with both) know of other records of alternata from Oklahoma, nor is that state listed in published distributional data as previously mentioned. The Oklahoma specimen is presently retained in my personal collection.

> Ken Davenport Bakersfield, California

JUST A REMINDER

Don't forget, that if you wish any changes to be made in your directory listings, that this information should be sent directly to the Assistant Secretary, Julian Donahue (address on back cover of all NEWS issues). The deadline for this information is October 11, 1990. Your listings include, besides name, address and phone numbers (if you wish these numbers published), your areas of interest or specialization and whether you buy, sell, collect or exchange specimens. In addition to this usual information, members who are on an electronic mail system may wish to include their electronic mail (e-mail) addresses.

TRIPS TO REMOTE AREAS OF ECUADOR

An Ecuadorian biology teacher living in Quito is willing to take small groups of naturalists to remote locations in the Ecuadorian Amazon for two weeks starting December 22, 1990. For more information, write to: Phillip E. Koenig, 1330 Paddock Drive, Florissant, MO 63033-2239, U.S.A.

SEASON SUMMARY, INSTRUCTIONS TO CONTRIBUTORS

Format: type double-spaced, one side of paper only: please list, rather than writing a 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 Ferris, Supplement to A Catalogue/ Checklist of the Butterflies of America North of Mexico (Lep. Soc. Memoir No. 3, 1989) 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 1991 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

- FAR NORTH (Eastern Siberia, Alaska, Yukon, NWT, Greenland): Ken PHILLIP, Inst. of Arctic Biology, Univ. of Alaska, Fairbanks, AK 99701 USA.
- 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.

 ROCKY MOUNTAINS (Alta, MT, WY, UT, CO, NM): Ray
- 4.
- STANFORD, 720 Fairfax St., Denver, CO 80220 USA.

 PLAINS (Sask., Man., ND, SD, NE, KS): Ron A. ROYER,
 Division of Science, Minot State University, Minot, 5. ND 58701 USA.
- SOUTH CENTRAL (OK, TX, AR, LA): Ed KNUDSON, 804 Woodstock, Bellaire, TX 77401 USA. 6.
- ONTARIO/ QUEBEC: Ross LAYBERRY, 6124 Carp Road, RR #2, Kinburn, Ontario, K0A 2H0, CANADA.

 MIDWEST (MN, WI, MI, IA, MO, IL, IN, OH, KY, WV): Les 7.
- 8. FERGE, 7119 Hubbard Ave., Middleton, WI 53562 USA.
- SOUTHEAST (TN, MS, AL, VA, NC, SC, GA, FL, Bermuda):
 Andy BECK, NDVECC, Box 43, Naval Air Station, Jacksonville, FL 32212 USA.
- NORTHEAST (NF, Labr., Maritimes, New England, NY, PA, NJ, MD, DE, DC): Dave WINTER, 257 Common St., Dedham, MA 02026 USA.
- 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, Natural Perspectives, P.O. Box 9061, Woodland Park, CO 80866 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.

DONATIONS OF JOURNAL OF RESEARCH ON THE LEPIDOPTERA

Donations of back issues to soft currency institutions is progressing slowly. Our offer to donate about 40 all but complete sets of back volumes of the <u>Journal of Research on the Lepidoptera</u> to institutions of higher learning, research stations, and museums in countries that do not have dollar resources has moved along through the generosity of several individuals and one organization. Our offer is contingent on donations of \$50.00 per set to cover the cost of overseas surface mailing. The intent is to make the material available where it is most needed and to look to the more fortunate to make the investment so the less fortunate can receive the intellectual benefits of the JRL.

We would like to hear your recommendations for appropriate institutions to gift JRL sets to as mailing resources become available. Thus far we have sent sets to five institutions on three continents.

Please contact the Lepidoptera Research Foundation, 9620 Heather Road, Beverly Hills, CA 90210, USA.

PROGRESS IN DESIGNATING MONARCH BUTTERFLY AS THE NATIONAL INSECT

A joint resolution, H. J. Res 411, has been introduced in congress by Congressman Leon Panetta of Santa Cruz, California, designating the monarch butterfly as the national insect. Members of the Society who are in agreement with this promotion should write to their congressmen and senators immediately urging them to support this resolution, and in fact to become co-sponsors of it. We need to act now, before Congress adjourns for the year. For further information, contact Douglas W. S. Sutherland, Chairman, National Insect Subcommittee, Entomological Society of America, 9301 Annapolis Rd., Lanham, Maryland 20706-3115 or phone (703) 557-2224, days, or (301) 345-6119, evenings.

MUSEUM RESOURCES AVAILABLE

I wish to let readers know of a new museum resource available in the Southeast USA. With much help from contributors, Furman University has assembled a modest but well organized collection of North American butterflies. By the time this is published, over 300 species and many subspecies will be available for study. All are fully documented and this information is entered into a versatile database management system. The collection is more representative of species from eastern USA, Great Lakes region, upper Great Basin, Rocky Mountains, California, and Ontario. Although Furman is a private university, the collection was built to be used: I will be happy to provide access to any interested lepidopterists. And, of course, I will gratefully entertain offers of contribution and trades. John A. Snyder, Professor of Biology, Department of Biology, Furman University, Greenville, SC 29613.

MORE COLOR ILLUSTRATIONS IN THE JOURNAL

The response of the membership to the two pages of color photographs that appeared in the most recent issue of the JOURNAL (volume 44:1, 1990) has been overwhelmingly positive. The Executive Council of the Society has endorsed the use of more color in the JOURNAL by authorizing the editor to lower the page charges for appropriate color illustrations. Thus, I encourage all prospective authors to consider illustrating their papers with color photographs and am pleased to announce that Society subsidy of appropriate color illustrations has been increased to 50%. This means that an author's cost is \$400 per page (out of a total cost of about \$800). For an instruction sheet that describes submission requirements and other matters pertaining to color illustrations, write or call the editor: Boyce A. Drummond, Editor, JOURNAL of the Lepidopterists' Society, P.O. Box 9061, Woodland Park, CO 80866-9061, phone (719) 687-6596

TEMPORARY POSITION DESIRED IN USA

I have been requested to help a 40 year old Eastern European entomologist, currently living in Czechoslovakia, holder of a Ph.D. in biology, with extensive editorial, curatorial and research experience, to locate temporary employment (6-12 month duration) in any capacity in the United States. Preferable in the Entomological department of a museum or other entomological setting. Modest salary requirements. For more information, in the United States please contact: George O. Krizek, M.D., 2111 Bancroft Place, N.W., Washington, DC 20008. Telephone (202) 234-2401.

ICZN

The following opinion was published on June 29, 1990 in Vol. 47, Part 2 of the <u>Bulletin of Zoological Nomenclature</u>. Opinion

Papilio carthami Hübner, [1813] and <u>Syrichthus</u> serratulae major Staudinger, 1879 (currently both in <u>Pyrgus</u>; Insecta, Lepidoptera): the specific names <u>carthami</u> and <u>major</u> conserved.

1989 TREASURER'S REPORT

1.	Beginning Balance	\$93,375.52
2.	INCOME for 1989	
	Member Dues Institutional Subscriptions Air Mail Late Fees Interest Earned Undesignated Gift Color Illustrations Fund Gift Publications Fund Gift Sale of Memoirs/Commemoratives Sale of Back Issues Page Charges, Vol. 41 120.00 Vol. 42 985.00 Vol. 43 2.605.65 Mailing List Rental New Life Members "Bill" Tilden Memorial Fund Miscellaneous Income	32,293.06 4,520.00 870.00 138.00 6,756.54 335.00 330.00 66.00 1,851.48 2,707.50 3,710.65 1,264.53 1,000.00 650.00 21.00 56,513.76
3.	EXPENSES for 1989	
	NEWS (#6, 1988; #1-#5, 1989) JOURNAL [Vol 43(1-3)] Printing Postage Back Issue Handling Treasurer Secretary Assistant Secretary JOURNAL Editor NEWS Editor Bank Service Charges Memoir #3 Miscellaneous Expenses Total ENDING BALANCE	12,654.50 22,079.25 341.82 1,509.63 736.09 174.87 790.83 88.25 1,750.93 1,398.90 304.50 3,052.00 198.00 45,079.57
4.	Distribution of Cash Assets	
	Petty Cash Fund Checking Account @4.5% CD: 12 mos @8.55% CD: 12 mos @10.05%	100.00 59,709.71 20,000.00 25.000.00

For comparison, the 1988 figures may be found in NEWS #5, 1989 on page 69.

James Tuttle, Treasurer

Total

104,809.71

ATTENTION ARTISTS AND PHOTOGRAPHERS: WE STILL WANT YOUR DRAWINGS AND PHOTOGRAPHS

Don't forget that the JOURNAL is an excellent outlet for your artistic expression. COVER ILLUSTRATIONS and FEATURE PHOTOGRAPHS are two recently established submission categories that provide an opportunity for you to publish your drawings and photographs (black and white or color) in an international publication devoted to Lepidoptera. Submissions in both categories may deal with any aspect of Lepidoptera study but must be accompanied by brief captions that include scientific names.

COVER ILLUSTRATIONS now change with each issue of the JOURNAL. Recent covers serve as good examples, but the range of potential subject matter is much greater than the adults or larvae usually depicted. Submissions should be no larger than letter size (21 by 28 cm), with the caption for the inside front cover on a separate sheet. Drawings are usually more suitable than photographs because drawings better withstand the coarse reproduction necessitated by the textured surface of the JOURNAL's cover stock. Submitted drawings or crisp photographs will be selected for artistry, novelty, and general appeal. There is no limit to the number of submissions per person. No author page charges are assessed for cover illustrations.

FEATURE PHOTOGRAPHS have been published in the first three issues of Volume 43 (1989) of the JOURNAL and in an expanded format in the first issue of Volume 44 (1990), which included both black and white and color illustrations. Submissions in this category might show unusual behaviors, unusual habitats, type localities, specimens in nature illustrating identifying marks, unusual collecting conditions or techniques, or other subjects. Photographic submissions should be mounted on white cardboard no larger than letter size, with a brief caption on a separate sheet. The caption should include details of the photographic equipment and exposure used as well as information on the subject portrayed. Feature photographs must be suitable for reduction to either a half or full JOURNAL page (8.5 cm high by 11 cm wide, or 17 cm high by 11 cm wide, caption included). Submissions will be selected for photographic quality, scientific merit, and general appeal. Regular page charges will apply to accepted feature photographs. Color photographs are welcome, with author page charges for a full page currently running about \$800. As with black and white photographs, color feature photographs must be submitted as mounted color prints, not as transparencies (for submission details, contact the editor).

Submissions in both of these artistic categories should be sent to the JOURNAL Editor: Boyce A. Drummond, Natural Perspectives, P.O. Box 9061, Woodland Park, CO 80866-9061



NEW PUBLICATION PLANNED

THE BUTTERFLIES OF BAJA CALIFORNIA by John Brown, Herman Real and David Faulkner is in preparation for publication. The book will be laminate paper bound, 8 x 11 inch format of about 150 pages, including 8 color plates illustrating all 178 species, approximately life size. Dot maps for each species are given as part of each description. An in depth discussion of biogeography with comments on conservation is included. The book will be published Jan. 1, 1991 given sufficient advance sale. \$24.00 regular price, Advance sale to members of the Lepidoptera Research Foundation \$20.00 including P/P. Payment must be made prior to October 1, 1990. In the event the book is not published, payment will be promptly refunded. To order, contact The Lepidoptera Research Foundation, 9620 Heather Rd, Beverly Hills, California 90210 USA or phone (213) 274-

BOOKS FOR SALE

I am selling a complete library of books and journals (over 300 volumes) dealing with butterflies and moths from the United States and other countries, especially Africa. The books, old and new, are in very good condition. For a complete listing, send a self addressed stamped business sized (#10) envelope (SASE) with 45¢ postage to: Eric H. Metzler, 1241 Kindale Sq. N., Columbus, Ohio 43229-1306. Inquiries (with SASE) about individual items are welcome.

RECENTLY PUBLISHED BOOKS

- Brusca, Richard C. & Gary J. Brusca. 1990. Invertebrates. (Illustrations by Nancy J. Haver). Sinauer Associates, Inc., Sunderland, Massachusetts 01375. 922 pages. \$44.00.
- Common, I. F. B. 1990. Moths of Australia. Melbourne University Press, P.O. Box 278, Carlton South, Victoria, Australia 3053. 544 pp., 32 color plates. \$125 (Australian). Distributed by Apollo Books, Lundbyvej 36, DK 5700 Svendborg, Denmark.
- Kudrna, Otakar (Ed.), 1990. Butterflies of Europe, Vol. 2. Introduction to Lepidopterology. AULA-Verlag GmbH, Postfach 1366, D-6200 Wiesbaden, Federal Republic of Germany. (length and price not yet known)
- Larsen, Torben B. 1990. <u>The Butterflies of Egypt</u>. The American University in Cairo Press (Egypt); available elsewhere from Apollo Books, Lundbyvej 36, DL-5700 Svendborg, Denmark. 112 pp., 8 color plates. DK 240 + postage.
- Neunzig, H. H. 1990. Pyraloidea, Pyralidae (part) in Dominick, R. B. et al., The Moths of America North of Mexico. fascicle 15.3. E. W. Classey and the Wedge Entomological Research Foundation (% National Museum of Natural History, MRC-127, Washington, DC 20560). 165 pp., 5 color plates. \$55.00 + \$2.00 S&H.
- Peigler, Richard S. 1989. A Revision of the Indo-Australian genus Attacus. Lepidoptera Research Foundation, 9620 Heather Road, Beverly Hills, California 90210. Softcover, 167 pp., 4 color plates. \$30.00 postpaid.
- Pinratana, Amnuay & Rudolf E. J. Lampe. 1990. <u>Moths of Thailand</u>, <u>Volume 1: Saturniidae</u>. Brothers of St. Gabriel, St. Gabriel's College, Bangkok 10300, Thailand. 47 pp., 44 color plates. \$22 U.S. (postpaid).

BOOK REVIEW

Behavior-Modifying Chemicals for Insect Management (Application of Pheromones and Other Attractants), Edited by Richard L. Ridgeway, Robert M. Silverstein and May N. Inscoe. 1990. Marcel Dekker, Inc., Cimarron Road, Monticello, NY 12701. xvi plus 761 pp. Many charts, diagrams, graphs. Hard cover, 61/4 x 91/4 in., ISBNO-8247-8156-2, \$195.00 (U.S. and Canada) or \$234.00 (all other countries).

The 7 parts and 39 articles provide comprehensive coverage of the subject of pheromones for insect control. No new work is presented here, but this is indeed a basic reference on studies and efforts to date, collected in one

compact volume.

This book begins with a review of research and development principles for behavior-modifying chemicals, their chemistry and delivery systems. Case studies follow of current and potential use against various types of insect pests of field, forest, and stored products. Regulatory matters are discussed, including registration procedures in the United States. The concluding part has commercial development descriptions, availability of chemicals, and future potentials. Each article has its own extensive bibliography. An appendix lists commercial suppliers needed for pheromone research or production.

Ron Leuschner



WANTED: Information on the population boom of the Red Admiral (<u>Vanessa atalanta</u>) in 1990. Interested in dates, places, observations on hosts, survival, parasitization, etc. Arthur M. Shapiro, Dept. of Zoology, U.C. Davis, Davis, CA 95616.

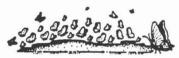
WANTED: INFORMATION ON ALBERTA BUTTERFLIES. For the past 10 years I have been actively engaged in an ongoing documentation of Alberta butterflies and skippers that was originally begun by C. D. Bird in the 1970's. Detailed distribution maps have been prepared and are updated

annually. Phenological analysis is underway.

To make the story as complete as possible I am soliciting information on Alberta butterflies from non-resident collectors and museum curators that may have Alberta material lurking in their collections. Minimum required information is species, collectors, date and location. Information on abundance, behavior, habitat, etc. is desirable. Please be as specific as possible about locations because the distribution maps are based on the 6 mile by 6 mile Alberta Township Survey grid.

The information resulting from this project is normally made available to researchers on request. If you want all or part of your information to be kept confidential, please indicate so when sending the information. Please send information to Norbert Kondla, 6415 95 Avenue,

Edmonton, Alberta T6B 1A6, Canada.



Forthcoming Meetings

LEPIDOPTERISTS' SOCIETY 42ND ANNUAL MEETING AUGUST 1-4, 1991, TUCSON, ARIZONA

Mark your calendars now and plan to attend the 1991 Lepidopterists' Society 42nd Annual Meeting in Tucson, Arizona. Our hosts will be Sonoran Arthropod Studies, Inc. and the University of Arizona's Department of Entomology.

Madera, Garden and Guadalupe Canyons are but a few of the well known "hot spots" in the island biogeography of the Sonoran Desert in southeastern Arizona. Pre- and postconference trips to these and other rich areas, plus exciting

symposia on their lepidoptera are being planned.

The meetings will be held at the Quality Inn University where rooms have been reserved for us at very reasonable rates. Registration forms and more information on the Meeting will appear in the January NEWS but mark your calendar now for a super meeting in one of the most exciting areas in the United States: the Sonoran Desert.

For more information contact Steve Prchal, c/o SASI, P.O. Box 5624, Tucson, AZ 85703. Phone (602) 883-3945.

2ND INTERNATIONAL WORKSHOP ON LOWER LEPIDOPTERA

The 2nd International Workshop on Lower Lepidoptera will be held 22-25 March 1991 in Canberra, Australia. The program will include a series of review papers and short research reports. Contributions will include taxonomy, phylogeny and classification, biogeography, morphology and anatomy, ultrastructure, molecular taxonomy, general biology, palaeontology and systematic methodology. The meeting will take place at the CSIRO Division of Entomology which also houses the Australian National Insect Collection. An account of the first meeting in this series is given in

Antenna 14(2): 84-85 (1990) by N. P. Kristensen. The registration fee will be approx. A\$100 and reasonably priced

accommodations will be provided.

Canberra is Australia's national capital. It is a centre for biological research and the city is known as a garden city, situated near pioneer towns, vast forests and mountains. Further afield are small pockets of temperate rainforest and the Pacific coast. Anyone wishing to receive further information and to offer contributions to this meeting, should write to: Ebbe S. Nielsen, CSIRO Entomology, GPO Box 1700, Canberra ACT 2601, Australia; telephone (06) 246 4258; fax (06) 246 4264.

THIRD PEDAGOGICAL EXHIBITION AND INTERNATIONAL TRADE FAIR OF PARIS, 1990

The Third Pedagogical Exhibition and International Trade Fair of Paris will be held late this fall at the Marie of Paris, 14th district (townhouse), 26 Mouton Duvernet Street, Paris, FRANCE. The Pedagogical Exhibition includes 90 boards and is reserved on Thursday, November 29 and Friday, November 30 for schools and teachers, with free admission. The International Trade Fair will have both foreign and French exhibitors and will feature sales and exchanges from 10 a.m. until 7 p.m. on Saturday, December 1 and Sunday, December 2. Entrance fee is 25 F with children under 12 years old admitted free. For further information, list of hotels, exhibition hall plan, etc., contact: FRANCE ENTOMOLOGIE, 18 Sente des Châtaigniers, F.92380 Garches, FRANCE.

New Members





AIELLO, ANNETTE: Smithsonian Tropical Research Institute, APO Miami, FL 34002-0011.

ALAN, KEITH: 226 East Elmwood Avenue, #P, Burbank, CA 91502-1512.

ALBRIGHT, CHARLOTTE: 8217 19th N.E., Seattle, WA 98115. AMIDON, D. CURTIS: 21 Skyview Lane, Lititz, PA 17543. ANDERSON, SUSAN: P.O. Box 5702, Bend, OR 97708.

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BRADSHAW, PAUL R., Jr.: Rural Route 05, Box 519-C, Springdale, AR 72764.

CASEY, TIMOTHY M. (Prof.): Dept. of Entomology & Economic

CASEY, TIMOTHY M. (Prof.): Dept. of Entomology & Economic Zoology, Cook College, Rutgers University, New Brunswick, NJ 08903.

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CZECHOSLOVAKIA.

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44708.

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HOGAN, SHAWN E.: 7748 6th Avenue, Kenosha, WI 53140. HOKE, EARL L.: 883 84th Street, S.E., Byron Center, MI 49315. HSIUNG, C.-C. (Dr.): Lyman Entomological Museum & Research

Laboratory, Macdonald College, 21,111 Lakeshore Road, Ste. Anne de Bellevue, Quebec H9X 1CO, CANADA.

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LENT, RICHARD A.: P.O. Box 621, Islip, NY 11751. LEVY, L.R. (Dr.): Semaren-Parc Floral, 405 Promenade des Anglais, 06200 Nice, FRANCE.

LOCKWOOD, MICHAEL GREGORY: 1616 Rio Virta Road, #4, Houma, LA 70363.

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PIZZUTI, KATHARINE: 255 South Aveida Caballeros, #211, Palm Springs, CA 92262-6749.

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WILLIAMS, JASON: 3168 Wheelock Drive, Racine, WI 53405.

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RICE, THOMAS J.: 1231 Pearce, Wichita, KS 67203. RICE, VIRGINIA: 2324 Brahms Drive, Dayton, OH 45449.

ROMEYN, RICHARD L.: W5306 Emerald Court, LaCrosse, WI 54601.

SCHARNBERG, JAMES F.: 73 Bodine Road, Malvern, PA 19355. SCHARNBERG, ERIC C.: 73 Bodine Road, Malvern, PA 19355. SEABOLT, TOM: 325 Raymond Avenue NE, #2, St. Cloud, MN 56304.

SMIDANSKY, ERIC D.: 2192 North Oak Lane, State College, PA 16803.

SMITH, MICHAEL J.: 7428 Holworthy Way, Sacramento, CA 95842-4165.

SPENCER, LORI: 207 Danes West, Central University of Iowa, Pella, IA 50219.

CORRECTION: In list of New Members in 1990 NEWS 3: 54, correct the spelling of Keven Reed's first name.

The Market Place





Items submitted for inclusion in this section are dealt with in the manner set forth on page 10 of the Jan/Feb 1990 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 forseeable 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 in an ad stands for self addressed stamped envelope.

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

WANTED: Papered specimens of the following-Hemileuca and other Saturniids, Parnassius of the world, Speyeria and Oeneis, and also Beetles. Cash or exchange. Elmer L. Griepentrog, Elsie Rt., Box 740, Seaside, Oregon 97138.

- FOR EXCHANGE OR SALE: I expect to obtain from the Grande Comore (Comoro Islands) a few <u>Graphium levasorri</u>, <u>P. dardanus humbloti</u>, and <u>P. aristophontes</u>. I also expect some mixed small butterflies and beetles. Want-lists for these items solicited, but for non-papilio species I require photocopies of pictures of the species you require. M.A. Cranston, P.O. Box 432, Seekonk, Mass. 02771
- WANTED TO PHOTO FOR BOOK: Live ova/larvae/pupae of Leps. from other areas. Most wanted: Papilios, Parnassius, Pierids, Nymphalidae: (Fritillaries esp. S. diana and idalia, Anaea sp., Marpesia petreus, Admirals, A. bredowii, Hypol. missippus, Anartia jatrophae, Angle wings, Eunica), Lycaenids, Hel. julia, Sphingids, Thysanis zenobia, Ascal. odorata, Saturniids and more, live Brown Recluse Spider, and interesting insects, etc. I'll buy. trade, or send slides as available. Send your lists. I'll send mine. David Liebman, 981 S. Quail Street, Norfolk, Virginia 23513. Phone (804) 853-4722.

WANTED: Communication with persons who have attempted to cold store live pupae and ova for long terms. My purpose is to accumulate large numbers of livestock for later sale when I might have enough to make a large sale. What species adapt to long term storage? Contact

Kenneth R. Knight, 433 Brady N.W., Comstock Park, Michigan 49321 or phone (616) 784-6243.
FOR SALE: Bernard D'Abrera's Butterflies of the World: Australian Region (1st ed., spine slightly loose) \$250; Afrotropical Region \$250; Oriental Region (I, II, III) \$400/set; Neotropical Region (I, II) \$100 ea. All in excellent condition unless noted otherwise; dj; all prices include postage. James M. Loughlin, Carnegie Museum of Natural History, Pittsburgh, PA 15213. Telephone (412) 622-3255.

WANTED: I wish to purchase living pupae of the following species and have some contacts to subtropical Saturniidae such as A. mittrei for those who are interested. I want H. cecropia, H. euryalus, H. columbia, H. gloveri, H. rubru, A. luna, A. selene, C. promethea, C. angulafera, C. regalis, E imperialis, E magnifica, S. cynthia walkeri, Brahmaea wallichi and any of the Rothchildia family of America. James G. McKeithan, Jr., 922 Homlock Ave, Wilmington, North Carolina 28403.

FOR SALE: Atrophaneura dasarada and Atrophaneura latreillei. All the specimens are from India. information contact Vincent Thomas Fornieri, 1308 "C Street, Elmont, New York 11003. My phone number is (516) 488-7726. Please call between 7pm and 9pm,

Eastern time, Monday through Saturday.

WANTED: A copy of Dornfeld's 1980 book on the butterflies of Oregon. Please contact: Bob Robbins, Entomology, NHB Stop 127, Smithsonian Institution, Washington, DC 20560

USA, telephone (202) 357-2353.

OFFER EUROPEAN SPECIES FOR SALE OR EXCHANGE: Sphingidae— <u>Deilephila elpenor</u>, <u>Mimas tiliae</u>; Lymantridae— <u>Lymantria dispar</u>, <u>Dasychira pudibunda</u>, Orgyia antiqua; Arctiidae— Tyria jacobaeae, Diacrisia sannio, Spilosoma luteum; Nymphalidae- Vanessa atalanta, Araschnia levana, Inachis io, Polygonia c-album, Aglais urticae, and others. All live material only. Send SASE to: Drs. W. De Rover, Kampheidelaan 19, 2300 Turnhout, BELGIUM.

WANTED TO BUY: Specimens of, or livestock of Sphinx moths, especially USA including but not limited to Abbot's, Nessus, Big Poplar, Achemon, Pandorus, and all clearwing species. Also BOOKS with color plates of Sphinx and silk moths of the world. Paul Bradshaw, Rt. 5,

Box 519C, Springdale, AR 72764.

AVAILABLE FROM AUTHOR: Peterson Field Guide series, A Field Guide to the Moths of Eastern North America (1984), with errata sheet. Paperback, \$12 postpaid in US and Canada, \$15 outside; Casebound, \$17 postpaid in US and Canada, \$20 outside. Charles V. Covell Jr., Biology Dept., University of Louisville, Louisville KY 40209, USA.

WANTED: To get specimens of some of the rarer or hard-toget USA <u>Hesperiidae</u>. Interested in all USA genera. Specimens need not be 1-A. Full data necessary. I would like to know what surplus specimens you have, and what you would want for them. John Holoyda, 5407 N. Oketo

Ave., Chicago, Illinois 60656.

FOR SALE: Pupae of H. cecropia, A. luna, S. cynthia, E. imperialis, C. regalis, and others. Send a SASE to Jeff Frey, 364 Oaklyn Rd., Lebanon, PA 17042, or phone (717) 272-6597.

FOR SALE: Cocoons of A. luna, A. io, C. promethea and probably A. pernyi. Papered adults also available. SASE for prices to: Larry J. Kopp, R.D. 1, Box 30, Klingerstown, PA 17941.

MEMBERS' COMMERCIAL NOTICES

THOMAS GREAGER, R.D. #6, Box 56-B, Greensburg, PA 15601, USA. FOR SALE: WORLDWIDE BUTTERFLIES in all families. Also some moths, beetles, and other insects. Finest quality specimens with complete data. Satisfaction quaranteed. Good prices. ALSO FOR SALE: INSECT PINS-Imperial, Elephant, and Stainless Steel in all sizes. United States residents send SASE to begin free price list subscription. Foreign residents send US\$5.00 for a one year price list subscription.

J. M. CHAVEZ, 1015 No. El Centro Ave., Hollywood, Calif. 90038. Finest quality lepidoptera specializing in South American species, with full collecting data; for collections, educational, art. Good prices. List \$1.00. ALSO WANTED: Contacts with serious dealers from BRAZIL, BOLIVIA, ECUADOR, COLOMBIA and CENTRAL AMERICA. I am interested in all families of butterflies.

MARIO ROJAS VILLEGAS, Apartado 119, Tingo Maria, PERU. Butterflies from Tingo Maria (Huallaga Central) and Cuzco (Madre de Dios). We sell in April, May and June. We also welcome visitors wishing to make collecting trips into the Jungles of Rondos, Inti, and Huallaga Central. The collecting seasons are April, May, June (good) and November, December. Butterflies FOR SALE are papered and in A-1 condition with reduced prices for large, mixed Many Morpho, Agrias, Prepona, Caligo, Papilio, Graphium and general assortments of Nymphalidae and Satyridae are available. Write for more information on species and prices, and costs of field trips.

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MIGUEL SERRANO, TROPICAL BUTTERFLIES OF AMERICA, 6823 Rosemary Drive, Tampa, Florida 33625, USA. Rare and beautiful butterflies from Central and South America including bred Papilio, Anaea, etc. Many Morpho, Brassolidae, Agrias and some Indonesian material as

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DEADLINES: Material for the Jan/Feb issue should reach the NEWS EDITOR by <u>Dec</u> 1 of the previous year, and that for the Mar/Apr Issue by <u>Feb 15</u>, for the May/June issue by <u>Apr 1</u> and for the July/Aug issue by <u>May 1</u>, the Sept/Oct issue by <u>Aug 15</u> and the Nov/Dec issue by <u>Oct 15</u>. Reports for the SEASON SUMMARY must reach the ZONE COORDINATORS listed on the front cover no later than the <u>5th of January</u>. NEWS EDITOR is June Preston, 832 Sunset Dr, Lawrence, Kansas 66044-2373, USA. Phone (913) 843-6212. RIPPLES EDITOR is Jo Brewer, 257 Common St, Dedham, Massachusetts 02026-4020, USA.

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, Fay H. Karpuleon, 1521 Blanchard, Mishawaka, Indiana 46544, USA, phone (219) 258-4893, 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 \$500. 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 90007-4057, USA.

Information on Membership and other aspects of the Society must be obtained from the SECRETARY, Dr. William D. Winter, Jr., 257 Common Street, Dedham, Massachusetts 02026-4020, USA. Home phone (617) 326-6053.

Requests for Missed Issues (i.e. those not delivered although dues have been paid on time) should be sent to the TREASURER, Fay H. Karpuleon, 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. Boyce Drummond, EDITOR, JOURNAL of the Lepidopterists' Society, Natural Perspectives, P.O. Box 9061, Woodland Park, Colorado 80866-9061, USA. Phone (719) 687-6596. See the inside back cover of a recent issue of the JOURNAL for editorial policies.

AVAILABLE PUBLICATIONS OF THE SOCIETY...... Order from the PUBLICATIONS COORDINATOR, Ron Leuschner, 1900 John St., Manhattan Beach, CA 90266-2608 USA.

CATALOGUE/CHECKLIST OF THE BUTTERFLIES OF AMERICA NORTH OF MEXICO (Memoir #2), Lee D. Miller and F. Martin Brown: includes references to original descriptions and location of type specimens. Members and subscribers, \$12 cloth, \$7 paper; non-members, \$19 cloth, \$10.50 paper, postpaid.

SUPPLEMENT TO THE CATALOGUE/CHECKLIST OF THE BUTTERFLIES OF AMERICA NORTH OF MEXICO (Memoir #3), Clifford D. Ferris, editor. General notes, plus corrections and additions to the original Memoir #2. Members and subscribers: \$6.00 postpaid; \$7.50 first class in USA or \$9.00 airmail abroad. Non-members: \$10.00 postpaid; \$11.50 first class in USA or air post to Canada.

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, \$8; non-members, \$12, postpaid.

1988 MEMBERSHIP DIRECTORY (current to November 1988. Biennial directory of members and their addresses, with geographic and interest indices. Not available for commercial use. (NEWS #6 for 1988). \$5.00 postpaid.

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