



NEWS

of the LEPIDOPTERISTS' SOCIETY

No. 6 Nov./Dec. 1987

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MORE FROM BERKELEY

THE JOHN ADAMS COMSTOCK AWARD, 1987
The Man We Honor, John S. Garth

For more than 45 years, John S. Garth has been a principal researcher and important contributor on the butterfly fauna of western North America. His books, monographs and scientific papers on the butterflies of California and of our major western national parks are familiar to all American lepidopterists. In 1986, he co-authored a major new work entitled *California Butterflies*, published by the University of California Press, which has already stimulated additional wide public interest in our butterfly fauna and which should encourage many new students to take up the study of California butterflies. For these and many other accomplishments in lepidopterology, we honor Professor Garth today with the John Adams Comstock Award.

John Shrader Garth is that rarity of men: a native Californian. He was born in Los Angeles, California, on October 3, 1909, and graduated from Long Beach Polytechnic High School in 1927. He began his first butterfly collection at the age of nine, collecting in Bixby Park. His early interest in southern California Lepidoptera was fostered by contact at the Los Angeles County Museum of Natural History with John Adams Comstock and Lloyd M. Martin, who soon became life-long friends. He was also to meet many others of the early southern Californian lepidopterists through the monthly meetings and field trips of the very active Lorquin Entomological Society.

Following high school, John Garth entered the University of Southern California where he was to take his next three degrees: a Bachelor of Music degree in 1932, a M.S. degree in 1935, and a Ph.D. in Zoology in 1941. He also married Isla L. Detter on June 25, 1940, to whom he is still happily married and who is a frequent participant with John at the Pacific Slope Section meetings each year. Mixed in these academic years of study at U.S.C. were summer sessions at the Yosemite Field School (1933), Cornell University (1937), and the University of Pennsylvania (1940). The multifaceted foundations to Garth's lifelong series of accomplishments and expertise in a diversity of fields -- from music to entomology to crab systematics and biogeography -- were laid during these key years. In fact, it was John's outstanding ability in music that gave him his first great opportunity for travel and field research in the tropics.

In 1931, when Garth was a senior at U.S.C. and an instructor at the Long Beach Institute of Fine Arts, he was recommended by the Dean of the U.S.C. College of Music to go with Captain Allan Hancock of Los Angeles on a scientific expedition to the eastern Pacific. Garth was studying piano, and his interest in butterflies was

enough to satisfy Hancock who was looking for someone with a background in the natural sciences to play in his shipboard ensemble during the trip. By just such serendipity, events drew John Garth to his life's work and forged his lifelong association with Captain Hancock, a great philanthropist, musician, real estate developer, mariner, aviator, scientist, industrialist, farmer and founder of what became the United California Bank.

In the middle of the Depression, Garth left school at the age of 21 to embark on this three-month-long, 12,000-mile voyage with Hancock and his group of research scientists from major universities. The boat was the *Velero III*, a 195-foot motor cruiser which Hancock had outfitted for the first scientific expedition under his auspices. They sailed for the Galapagos Islands off the coast of western South America to study marine life and ocean currents, with some terrestrial field work on the insects as John's planned assignment. Hancock played the cello, and as part of this patron's expedition program, the musical ensemble played classical music each evening after the day's work. This initial voyage started the Hancock Pacific Expeditions, which were conducted annually from 1931 to 1941 aboard the *Velero III*. John's career as a marine biologist started with the first voyage and he assumed increasing shipboard responsibilities with each successive voyage.

In 1940 the Allan Hancock Foundation was established on the University of Southern California campus to serve as a repository for marine collections gathered from Mexico, Central and South America, and the Galapagos Islands, and Garth served successively as Research Associate, Curator of Crustacea (including other arthropods), Associate Professor of Biology, Professor of Biological Sciences, and Chief Curator of all the collections until his formal retirement in 1975. He continues as actively as ever as Professor Emeritus at U.S.C. He has published more than 50 scientific papers and monographs in entomology and crustacean biology, and is widely recognized as a pre-eminent world authority on crab taxonomy, distribution and ecology. In the course of his academic career, he has guided more than 40 graduate students towards advanced degrees, and is known as the key scientist who produced a whole generation of Ph.D.-level carcinologists.

Through the Hancock Pacific Expedition, John Garth was exposed very early to the riches of the tropics and their bewildering diversity of Lepidoptera and other organisms. He participated in expeditions to the Galapagos Islands in 1931-32, 1933, 1934, 1935, and 1938. He visited mainland Ecuador in 1934, Peru in 1935 and 1938, and the Caribbean islands of Aruba and Curacao (Dutch), Trinidad and Tobago (then British), and Colombia and Venezuela in 1939. Additionally, he visited Mexico, the Marshall Islands, India, Ceylon, and the Maldive Islands from the 1940's to the 1960's. He also travelled to many European museums, Australia, New Zealand,

Singapore, Malaysia, Thailand, Hong Kong, and Japan during the course of his scientific researches. With all this field work in exotic places, it is interesting indeed that John's first love of Lepidoptera has always been centered here in the western United States. But it was not easy to immediately start professional work on western Lepidoptera in those days, and though John published a series of important papers in the early 1930's on Yosemite National Park butterflies and the geographical race concept in Lepidoptera, he looked for additional entomological background in his usual thorough manner.

While John Garth majored in zoology at U.S.C., with a strong emphasis on marine invertebrates, his early interest in entomology had to be carried on as a minor. Unable to obtain graduate-level work in entomology at U.S.C. in the 1930's (entomology was represented on his Ph.D. committee at U.S.C. by John Adams Comstock from the Los Angeles County Museum across the street), Garth sought summer course work in the East, first at Cornell (1937) and later at Pennsylvania (1940). He also met E. O. Essig, a famous western entomologist, as a member of the Yosemite School of Field Natural History in 1933. During the Second World War, John was assigned to the Army Air Corps, where he served as lieutenant/captain at Boca Raton Army Air Base in Florida, with responsibility for mosquito control. Access to a military reconnaissance car allowed him to collect Lepidoptera extensively in Broward and Dade counties, although gasoline rationing permitted only two private collection trips (to Marco Island on the Florida west coast, and to Marathon in the Florida Keys). He also renewed his acquaintance with J. Harold Matteson in Miami, who showed John many of his choice collecting localities. Earlier during the Hancock cruises, Garth had occasion to visit Barro Colorado Island in Gatun Lake, Canal Zone, where he met many influential scientists of note from the American Museum of Natural History such as Frank M. Chapman (ornithologist and author of well-known books on the tropics), Frank E. Lutz (eastern entomologist and author of The Insect Book), James Schwartz (hymenopterist), and Irving Huntington (lepidopterist). Thus, while Garth was "on his own" as entomologist with the Hancock cruises, and at that time had had no formal work in entomology, this contact with professional entomologists at Barro Colorado (and with medical entomologists at Grogas Memorial Hospital in Balboa) proved helpful in answering questions that arose concerning tropical insects and entomology in general. Some of his first rain-forest collecting was done along the trails of Barro Colorado Island, and it was here that Garth collected his first iridescent blue Morpho amathonte.

In the summer of 1933, Garth attended the Yosemite School of Field Natural History with 19 other participants, and his instructors included notable scientists from Stanford, Berkeley, and the National Park Service, including Dr. Harold C. Bryant, co-founder of the school and at that time assistant director of the National Park Service. The School included a high-country trip across the Sierra Nevada and the first scientific survey of a remote area along Yosemite Creek. John's lepidopterological discoveries during this summer were published over the next several years in the Bulletin of the Southern California Academy of Sciences.

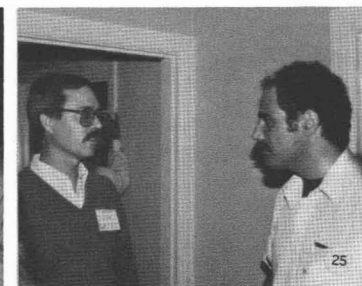
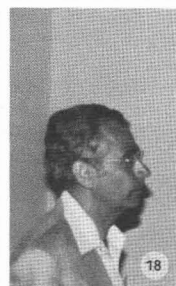
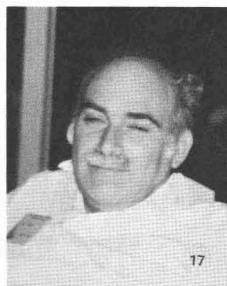
In the summer of 1935, Garth was appointed seasonal ranger-naturalist in Glacier National Park, Montana. Stationed at the former St. Mary's Lodge on

upper St. Mary's Lake, his duties included morning and afternoon walks, evening boat trips on the lake, and an evening nature talk each night at St. Mary's Lodge. This pace continued unabated seven days a week for six weeks straight before he was given a week off! He promptly used this time to drive to Great Falls, where Dr. C. C. Albright showed Garth his splendid collection of butterflies and took him to a number of his favorite collecting localities. Among these was King's Hill, where they collected Argynnis (now Speyeria) albrighti at the type locality. Late that season, Garth returned to Glacier Park and obtained many late-flying species of butterflies. An unforgettable memory as the Garths left Glacier Park after Labor Day was of swarms of Vanessa j-album alighting in every sunny patch along the highway near Lake McDonald. Following World War II, Garth was able to return to Glacier Park for vacations in 1949, 1950, and 1954. A Park Service ski cabin was made available, making it possible to explore vast areas of the park inaccessible to tourists, including the remote northwestern lakes, Bowman and Kintla. In 1970 and 1974, the Garths were joined for field work at Glacier by Jens W. Knudsen. John's greatest thrill came that last year when Knudsen and Garth hiked from Lower St. Mary's Lake to the summit of Cathedral Peaks, where they found Geneis melissa flying among mountain goats within two feet of the edge of a mile-high precipice. An illustrated booklet on the butterflies of Glacier National Park was projected, but N.P.S. administrative support waned at the time. Today, these unique collections from Glacier National Park are still to be found at the Allan Hancock Foundation, with representative series from early years in the Nature Workshop at West Glacier, Montana. One hopes that these fascinating surveys of the distribution and ecology of the butterfly fauna of Glacier National Park will be published by John Garth in another venue; his thorough research in the back country there would provide a unique historical perspective by which to judge future faunal changes.

In the middle of the years of his Glacier work, John Garth turned his attention to Arizona and the butterfly fauna of Grand Canyon National Park. His field work began in the Park on the Powell Plateau in 1946, and was strongly supported by his old friend Harold C. Bryant, now Superintendent of Grand Canyon National Park, as well as Louis Schellbach III, chief naturalist. A well-illustrated book entitled Butterflies of Grand Canyon National Park was published in 1950 and is still in print. It combines a scientifically detailed approach with a popular writing style that engages the interest of amateur naturalist and professional scientist alike.

John Garth's latest contribution, California Butterflies, was published in late 1986 with J. W. Tilden. It was an outgrowth of their joint monographic work on the Yosemite butterfly fauna in 1962, and Tilden's 1965 booklet on the butterflies of the San Francisco Bay region. The two authors were under contract separately to the University of California Press for popular works on the northern and southern California butterfly faunas at the time (1973) that Thomas C. Emmel and John Emmel published The Butterflies of Southern California with the Natural History Museum of Los Angeles County. The U. C. press proposed to Garth and Tilden that they combine forces on a new single book as Guide No. 51 in the California Natural History Guides series. The book illustrates most of the 235 recorded species by Garth and Tilden, usually with one northern California subspecies and one from southern California. Twenty full-color

CANDID PHOTOS FROM BERKELEY by Dave Winter. 1. Registrars Liz Randal and Poody Brown, 2. Dorothy Martin, Sandy Russell and Stan Nicolay, 3. Richard Brown, 4. Lee Miller, Stan Nicolay and Dorothy Martin in conversation, 5. Hey! Charlie (Covell), 6. Ron Leuschner, John Vernon and Bob Langston, 7. Hazel Tilden and Ron Hodges, 8. Jo Brewer chats with Frank Elia, 9. Dick Arnold and Boyce Drummond, 10. Richard Holland and Jo Brewer, 11. Karolis Bagdonas, 12. Paul Opler and Francie Chew in the garden at the wine and cheese party, 13. John and Isla Garth in the background; Dorothy Martin, Mrs. Don Lafontaine and tired child in foreground, 14. Kit Stanford, Julian Donahue and Gloria Harjes, 15. Don Davis, P. T. Dang, Vitor Becker and Jean-Francois Landry, 16. John Lane, 17. Uri Caspi, 18. Irv Finkelstein, 19. The crowd at the Barbeque picnic, 20. Art Shapiro, 21. Youngsters love corn on the cob, 22. Don Lafontaine talks to an unidentified participant while Bill Miller looks on, 23. Jerry Powell and Ray Stanford, 24. Ken Osborne and John Cooper talk to Jim Mori, 25. Greg Balmer and Bob Robbins.



CANDID CAMERA BERKELEY

Dave Winter,
Photographer

plates by David Mooney add to the impact of the text of this excellent introduction to the California butterfly fauna, a book that includes much novel information on the history of butterfly collecting in California that only someone of John Garth's great scholarship and meticulously accurate nature could gather.

John S. Garth has had a truly remarkable career, one that has spanned the period from the fabled early lepidopterists of California such as John Adams Comstock himself to the present-day young students who are themselves contributing so much each year to our knowledge of the western Lepidoptera. A man who intensively studied Lepidoptera before most of us here today were born, who travelled the West in old cars and trailers before the days of Interstate highways and fancy motels, and who continues to publish his findings and encourage younger workers in this his 78th year, John S. Garth has made an important and lasting impact on the study of western Lepidoptera. We therefore do honor to our Society as well as to this accomplished scientist by awarding to John S. Garth today the JOHN ADAMS COMSTOCK AWARD for 1987.

Thomas C. Emmel

PHOTO I.D. CORRECTION

It has been called to our attention that number 50 in the group photo on page 67 of NEWS #5, 1987 is Oakley Shields and not Fred Stehr.

SIERRA FIELD TRIP

Right after the conference in Berkeley, a group of us departed for a three day Sierra collecting trip led by Jim Mori and Ralph Wells. In the party were Jackie and Lee Miller, John Lane, Bill Miller, Dale Jenkins, Bill Preston, Irving Finkelstein, Ron Robertson, Vitor Becker, Uri Caspi, Ray Schryver, Pat Savage and myself.

Sunday evening we met at Jim Mori's for a Bar-B-Que with lots of good food. The next morning we formed a convoy and met part of our group in Jackson. With Ralph leading and Jim and I keeping everyone together with CB radios, we headed for Carson Pass. Most of the group made it to Frog Lake where a few Oeneis ivalda were taken. While some stayed in a motel in Walker that night, the rest of us camped out at Rock Creek. We were entertained by John Lane playing the banjo. John had driven his rental collecting car, a Lincoln Continental, out to our camp!

The next day was a combined collecting outing and Xerces count on Sonora Pass. Late that afternoon we tallied the count and some of the group headed home while the rest of us went back to Walker and Rock Creek.

Wednesday concluded the outing with collecting on the top of Ebbett's Pass. We posed for pictures then said goodbye to our friends, old and new, just before a rain and hail storm hit the area.

We had seen three beautiful California mountain passes and had gotten some great collecting (55 species on the Xerces count alone). My final thoughts were, "Well done Jim, Ya done good!"

Ray Coyle
Modesto, CA



CONCERNING THE ESTABLISHMENT OF THE TYPE LOCALITY FOR SPEYERIA ZERENE HIPPOLYTA (EDWARDS)

Because of national interest in conservation circles of the threatened extinction of the Oregon Silver-spot Butterfly Speyeria zerene hippolyta it seemed desirable

to report my early experience with this insect.

On July 28, 1937 my wife and I and small daughter parked our house trailer at the upper level of Oceanside, Tillamook County, Oregon, on an open space sometimes used by the Boy Scouts as a camp ground overlooking the ocean. Next morning there I saw quite a number of Speyeria flying and alighting on composite flowers. I collected some and thought they were close to S. zerene bremneri which previously I had taken on Mount Constitution, Orcas Island, Washington.

Next day I collected more of these fritillaries along a road leading from Oceanside toward Cape Meares Lighthouse about two miles north.

I gave a series of these specimens to Dr. Willis J. Gertsch, my former colleague in graduate work at the University of Minnesota who became curator of Insects and Spiders at the American Museum of Natural History in New York City. L. Paul Grey in a letter to me stated that a series of six males of Speyeria zerene hippolyta in the American Museum and two males in his collection have the data "Oceanside, Oregon, elev. 100 ft., July 29, 1937 (Macy)". Based on these specimens, Cyril dos Passos and Lionel Paul Grey in American Museum Novitates, No. 1370, 1947, designated Oregon and northern California, "hereby fixed as Oceanside, Tillamook County, Oregon", as the type locality for Speyeria zerene hippolyta.

Grey wrote me that I had sent him a specimen of hippolyta, "near bremneri", taken at East Creek, June 27, 1937, a locality in the Coast Mountains of Northeast Yamhill County adjacent to Tillamook County. Grey also has specimens of this butterfly which I had collected at Cape Meares Lighthouse, August 21, 1931.

In recent years the magnificent fir forest back of Oceanside has been logged off and many new summer homes have been built greatly changing the environment. Not only has hippolyta been absent there for years but other butterflies once common are nearly gone.

Ralph W. Macy, Professor Emeritus, Biology
Portland State University, Oregon

A NOTE FROM ZIMBABWE

I just thought the Society might be interested to hear that Danaus plexippus is now resident on the Indian Ocean island of Mauritius. I was holidaying there in March 1987 and saw 3 specimens, one of which I caught to confirm the identification and then released. A few years ago I found it commonly on both the East and West coasts of Australia, where it was apparently first seen in 1871, but I was still amazed to find it on Mauritius. As far as I know, it is not yet recorded from mainland Africa. Perhaps some Society members could throw some light on this. The locality in Mauritius was a place called Trou aux biches, on the north-west coast of the island, and there is a large Asclepiad shrub growing commonly in the area. Does one assume that this butterfly has arrived via Australia? I would be interested in receiving the comments of any interested Lep. Soc. members.

Robert Paré
Urunga South Farm
Box 183, Bindura, Zimbabwe

OUTBREAK OF CLOUDLESS SULFURS IN KANSAS

A spectacular outbreak of the Giant Cloudless Sulfur, Phoebis sennae eubule (Linnaeus) appeared on August 5, 1987, at a fishing camp owned by Mickey and Doris McDonald seven miles south of Fredonia, Kansas, in Wilson County. Thousands of individuals appeared in the area from August 5th to 19th. Dozens could be seen visiting a single cluster of Bull Thistle blooms. Others swarmed over the blooms of the yellow flowered Partridge Pea, Cassia fasciculata. A search for immatures on August 19th revealed only defoliated plants--no larvae or pupa even when some of the plants were unearthed.

The flight continued until August 19th at which time all individuals vanished--presumably departed to the

southeast. Collected examples revealed that all were freshly emerged. All collected examples proved to be the typical Kansas population recognized by the cold lemon yellow or chartreuse shade with immaculate (or nearly so) lower surfaces. This population has been named *drya* Fabricius. It may be noted that the local weather conditions in Fredonia, heavy summer rains, caused an unprecedented growth in the wild Partridge Pea. Vast acres of the plant covered whole fields, lakeshores and roadsides grown lush due to heavy monsoon rains that visited the region all summer. In contrast to the Fredonia outbreak, *P. eubule drya* was very scarce all summer in the Ottawa area, 75 miles NNE of Fredonia.

William H. Howe
Ottawa, Kansas

SOCIETY MEMBER ELECTED AS AIBS OFFICER

The American Institute of Biological Sciences has announced that Lep. Soc. member Paul Opler has been reelected to the office of Secretary/Treasurer of its Board of Directors. Opler is Chief of the Editorial Section, Office of Information Transfer of the U.S. Fish and Wildlife Service in the Department of the Interior. He also serves as Executive Director of the affiliated Association for Tropical Biology and edits the Bulletin of the Entomological Society of America. As chief of the Branch of Biological Support in the Office of Endangered Species, he developed the working foundations for the protection of biological diversity in this country and abroad. Congratulations Paul.

CANADIAN HONORS TO DR E.G. MUNROE

Dr. Eugene Munroe was honored recently by his peers by being made an Honorary Member of the Entomological Society of Canada. This distinction is reserved for a small number of entomologists who are deemed by their colleagues to have made significant contributions, not only to the science of Entomology, but for their leading roles in Society activities and liaison with the public. Dr. Munroe has assembled one of the leading collections of pyralid moths in the world and has published over 200 scientific papers during his career.

He has been widely recognized for his outstanding efforts. He has received the Queen's Silver Jubilee Medal, he is a Fellow of the Royal Society of Canada and a charter member of the Lepidopterists' Society. He is also an Honorary Life Member of the Lepidopterists' Society and the Ottawa Field-Naturalist's Club, and a Socio de Honor of the Hispano-Lasa-Americana de Lepidopterologia. He has been a visiting scientist at the British Museum (Natural History), the Leiden Museum, the Bishop Museum in Honolulu, the C.S.I.R.O. in Canberra, the Smithsonian Institution, and several other institutions in the United States. He is a member of numerous professional societies and was honored in 1982 by the Entomological Society of Canada when he was awarded the Gold Medal for outstanding achievement. Once again his efforts have been recognized by the Entomological Society of Canada.

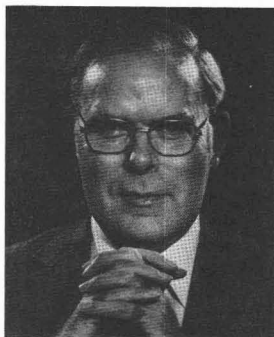


Photo by Karsh,
Ottawa

WORTH REPEATING

A letter arrived in the mail the other day from Stuart J. Ramos of Madrid, SPAIN. In it he observed "On reading the column 'Metamorphosis' in the Jan/Feb 1987 issue of the NEWS, it occurred to me that maybe old lepidopterists never die, they merely diapause."

WHERE HAVE THE GIANT SILKMOTHS GONE?

When we moved here from Cleveland, Ohio 27 years ago, cocoons of *Hyalophora cecropia*, *Antheraea polyphemus* and *Callosamia promethea* were plentiful in the winter. Sometimes there were some 40 or 50 *C. promethea* cocoons on one sassafras or wild cherry tree. Now there are none. What happened? For one thing, weed killers. The RR right-of-ways and roadsides were sprayed. Another thing, insect sprays used by the farmers. Then came the real estate developments, shopping malls and other construction projects which decimated the foodplants. And what about predators? Three years ago I released some 50 *H. cecropia* which emerged from reared cocoons. Not one cocoon could be found that winter. Two years ago I released some 100 *A. polyphemus* which emerged from reared cocoons. Again not one cocoon could be found in the area that winter.

This Spring I thought a little research would be in order. I had about a dozen *C. promethea* cocoons and was lucky enough to get a pair to mate. The female produced some 300 eggs in a paper bag (the usual method of getting ova). Half the eggs were placed in a nylon sleeve on sassafras and half in a nylon sleeve on wild cherry. I wanted them to get through the third or fourth instar before letting nature take its course. The ones on the sassafras grew much faster than the ones on the wild cherry. When the sleeve was removed from the sassafras, the birds soon discovered the larvae and soon devoured a large number. The yellow jackets stung and killed many others. Result - 7 cocoons from approximately 150 eggs. And some of those may be parasited. Not one cocoon was found on the wild cherry - all 150 larvae perished in one way or another.

At this rate, all the giant silkmotths will be gone forever. Looks like they belong on the endangered species list. Too bad such gorgeous and harmless creatures have to become extinct.

Ray W. Bracher

From The Editor's Desk

June Preston



There was so much of interest from the Berkeley Annual meeting for the last issue of the NEWS that it has spilled over into this issue. I do hope you will keep the timely items and tidbits coming my way as I start my 6th year as NEWS editor with the next issue. There are a few articles to carry over until then, for which I am thankful, but it is you, the members of the Society, who furnish most of the items to make this an interesting publication. The following letters arrived this past summer. As always, the opinions expressed therein are solely those of the authors and do not in any way reflect any policies of the Lepidopterists' Society.

Dear June:

It was good to see you at Berkeley! The following are responses to a couple of items in the July-August NEWS:

(1) Disappearing silk moths (Hansen). There is no evidence whatever presented in this piece that giant silk moths are in decline in the author's area or anywhere else. They may be, but the promiscuous invocation of "acid rain" and such alarm words does no good and does actual harm by giving credence by repetition. All of the phenomena described were observable near Philadelphia in the 1950s when I was rearing these species as a kid. There is no way to know from this communication whether they have gotten commoner, or worse, or more widespread. Nor is there any logical justification for the claim that washing the leaves is useful - at least not in the article itself! As for egg parasites and the like, Hansen and your readers should recall that parasites and

predators are part of nature too. They may not be as attractive to human eyes as large moths, but they are living creatures with a history of interaction with their hosts. We may perturb the situation enough to change that interaction; sometimes we introduce new enemies; but Hansen has not shown anything remotely like that. Incidentally, there is a nice piece on the apparent decline of the Cynthia Moth near Philadelphia in *Entomological News* 97: 41-51 (March-April 1986). Even that article is "soft," but it at least has some historical data base.

(2) The Association of Systematics Collections (730 Eleventh St. NW, Washington, DC 20001) has attempted to serve as a clearinghouse for legal information on collecting and trafficking in natural history materials, here and abroad. ASC has had a "hotline" for such information in the past, but I do not know if it is presently operating. The ASC's own phone number is (202) 347-2850 (regular business hours). Many nations have consulates in large cities around the country, but they are often very poorly informed and may give incorrect information by phone (which does not excuse your liability for violations!). Be careful. Also be aware that rules are different for tourists and professionals traveling in order to do research; the latter frequently require special visas and the filing of elaborate protocols with long lead times (six months or more), even for very short-term goals. It is also illegal to bring live material into the United States without an APHIS-PPQ permit from the U.S. Department of Agriculture. You should contact your state or county Dept. of Agriculture for information on how to file the required application, and the lead times involved. In some cases, Wildlife Import/Export permits may also be required from the Federal Fish and Wildlife Service, and proof of export permits from the country of origin may be necessary even if all U.S. paperwork has been done!

Cheers,
Arthur M. Shapiro
Zoology Dept., UC Davis

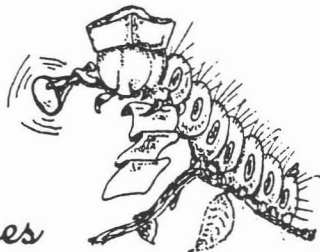
Dear June,

As a member of the Lepidopterists' Society I was very pleased to read in the May/June issue of the NEWS that you are taking an interest in the British butterfly house industry. The industry has the potential to be a great force for conservation and I have recently completed a report outlining some of the implications.

In all, the report has 20 recommendations. Some of these are to do with British law and British practices and may not be of particular interest to North Americans. However, I hope some of the more general points will have a bearing on North America, particularly since there can be little doubt that the butterfly house industry will be spreading rapidly over the next few years.

N. M. Collins
(A review of this report will appear in a subsequent issue. The report can be obtained by interested parties from N. M. Collins, International Union for Conservation of Nature and Natural Resources, 219c Huntingdon Road, Cambridge CB3 0DL, United Kingdom.-ED.)

Notices



NATURAL AREAS ASSOCIATION

In 1978 the Natural Areas Association was established as an outgrowth of the mounting interest in the movement to protect natural areas in North America. It is a nonprofit professional organization for individuals involved in identification, evaluation, management and

protection of natural areas. Membership includes resource professionals, scientists, naturalists, and interested individuals from the national, state, local and private sectors. It is governed by a 15 member board of directors elected by the general membership. The NAA does not own or maintain any natural areas nor does it promote a particular approach to natural area protection. Rather, it provides support and informational services to all who are concerned with the protection and long-term stewardship of the natural areas that remain in North America. The NAA publishes a quarterly journal, sponsors an annual conference and annual meeting for members, and promotes public understanding and appreciation of natural areas. Membership dues are \$15.00 annually and additional contributions are always welcome. For membership or further information, address correspondence to: Natural Areas Association, 320 South Third Street, Rockford, Illinois 61108 or phone (815) 964-6666.

SEASON SUMMARY REMINDER

Reports for the 1987 Field Season Summary are due to reach the Zone Coordinators (see pg 71, NEWS #5, 1987) no later than Jan 5, 1988. Get those reports in early to make it easier for us all!

AD RETRACTION

The Market Place of NEWS #5, 1987 carried a notice requesting contact with persons having done business of any nature with Chuck Kondor or his firm known as Entomological Clearing House of Hales Corners, Wisconsin. The ad was in the name of Bill Wright of Woodcliff Lake, New Jersey. This ad was NOT submitted by Bill Wright, who ceased collecting years ago and is in no way acquainted with Chuck Kondor. The ad was obviously sent by someone else and was meant to embarrass the Society, Bill Wright and Chuck Kondor. The Society is truly sorry that it was printed. The NEWS Editor has had NO complaints about the business practices of Chuck Kondor or Entomological Clearing House and hopes that members will not construe the aforementioned ad to reflect adversely on Entomological Clearing House.

POSITION AVAILABLE

Entomologist-Technician: Insect rearing and display maintenance position at Insect World exhibit. B.S. in Entomology required with insect rearing experience; broad background in entomology preferred with emphasis on butterflies. Position available Dec. 1987 or when suitable applicant is found. Send resume and copies of transcripts to Curator of Invertebrates, Insect World, Cincinnati Zoo, 3400 Vine St., Cincinnati, Ohio 45220.

BECKER LEPIDOPTERA COLLECTION AVAILABLE FOR STUDY

The BECKER collection contains over 150,000 specimens of neotropical moths. About two-thirds of the material has been collected in Brazil. The remaining originated from Central America, especially Costa Rica, and from the Virgin Islands and Puerto Rico. All the material is pinned and labeled. More than two-thirds are spread. It includes all families of moths, being strongest in Microlepidoptera. All the material is sorted by families, with the micros, Sphingidae, Bombycoidea, Zygaenoidea, Geometroidea and the Ctenuchinae curated to species-level. This material is accommodated in over 800 glass-topped drawers housed in a humidity controlled room.

Over 5,000 species are identified. Over 6,000 specimens accompanied me to London; one specimen of each species, representing all groups except the

Geometroidea, Saturniidae and Sphingidae. During the three years (1979-1981) spent at the British Museum (Natural History) working on my PhD thesis project, I had the opportunity to identify over 4,000 species, most of them by comparing my specimens against the types deposited there.

Obviously, it is impossible for me to study all the material in the collection myself. My main interest is to work with the Gelechioidea, especially the Oecophoridae. Therefore, I welcome everybody who is interested in the study of any of the other groups. This can be done in two ways: through loans and/or by coming to Brazil to examine the material (I have good facilities; museum, a good library and laboratory with a microscope, and can provide you with accommodation and food for the time you stay).

Collaboration is anticipated. As you will realize, this is one of the most important collections of neotropical moths in South America. Thus, it has become one of the main references for the accurate identification of moths for Brazilian and other South American entomologists. This service could be much improved with your help, which could be provided in different ways: 1. by your contribution to identify the material, not only the particular group you are studying now, but all the groups you know; 2. by exchanging identified duplicates for mine; 3. by supplying copies of your works to keep an updated bibliography on Lepidoptera. [My library includes over 5,000 titles on neotropical Lepidoptera, including such major works as Seitz (vols. 5, 6 and published parts of Noctuidae and Geometridae), Hampson's Lepidoptera Phalaenae, Rothschild & Jordan's Sphingidae and Papilio, Nye's Generic catalogues, D'Abrera's Butterflies and Sphingidae, Meyrick's and Clarke's Microlepidoptera, Walsingham's Biologia Centrali-Americana, Lemaire's Saturniidae, etc.]. Your contribution to keep this library current is extremely important to those of us working in South America because publications have become more and more expensive, and thus our libraries cannot purchase all the scientific journals and books being published. Your collaboration is important, needed and highly appreciated.

For more details please write at any time to Vitor Osmar Becker, Centro de Pesquisa Agropecuária dos Cerrados, P.O. Box 70-0023, 73300-Planaltina, DF - BRASIL

NEW TIME SCHEDULE FOR DUES NOTICES

The Treasurer this year is experimenting with a new time schedule for mailing out dues notices and ballots. In hopes of beating the Christmas rush and to allow members more time to return ballots and dues payments by their January 1 due date, these items will be mailed in late October rather than late November as has been the practice previously. Hopefully this earlier notice will also help to cut down on the number of dues payments received in arrears and ballots received too late to be tallied. Members in arrears cost the society both money and time. Don't be one of them.

DOES MARASMIA PATNALIS BRADLEY, A RICE LEAFFOLDER, EXIST IN YOUR COUNTRY?

The Entomology Department of the International Rice Research Institute (IRRI) would be very much interested to hear from professional and amateur lepidopterists/Entomologists round the world about the species of rice leaffolder which causes damage in their country and also its distribution.

In the past, the majority of scientists have reported Marasmia patnalis Bradley to be Cnaphalocrocis medinalis Guenée in their reports. Recently, we at IRRI have found, after extensive insect surveys in several rice fields, that M. patnalis dominates in abundance over C. medinalis. Similarly, insect collections in museums here have been misidentified and labelled as only C. medinalis

for all leaffolder species. This confusion is because of similar damage symptoms by all species of leaffolder larvae and also their adults show identical external appearances.

The purpose of this note is to receive more information on the occurrence of the leaffolder species from other regions where we do not know about its distribution and damage. This information will be of considerable value to rice entomologists in managing these leaffolders by identifying resistant rices, designing pheromone traps, identifying potential biocontrol agents and selecting the most desirable pest management tools.

Please send information and comments with adult specimens to: R. C. Joshi, Research fellow, Department of Entomology, International Rice Research Institute, P.O. Box 933, Manila, PHILIPPINES.

MEMOIRS EDITOR NEEDED

The Editorial Board of the Society is requesting the submission of names of nominees for the office of Memoirs Editor. All nominees must previously have agreed to serve if appointed. Send names, addresses and qualifications by Jan. 1, 1988 to Dr Charles V. Covell Jr., Dept of Biology, University of Louisville, Louisville, Kentucky 40292-0001, USA.

COLLECTING BUTTERFLIES (AND OTHER LEPIDOPTERA) IN JAMAICA

(Information Sheet of the Blue Mountain Field Station)

Jamaica, situated within the equatorial belt at 18° north, is one of the larger Antillean Islands, measuring about 150 miles by fifty miles. There are two major geological formations: the shales of the Blue Mountain range in the east, and the limestone plateaux of the central and western regions. There are also extensive alluvial areas in the south. A very wide range of rainfall, from 25-400 inches/year, results in a similarly wide range of habitats for collectors, particularly in the east of the island. There are extensive areas of cactus/thorn scrub (at Hellshire), dry lowland forest on limestone (at Cambridge Hill), low to mid-altitude rainforest (Rio Grande valley and John Crow Mountains) and extensive areas of montane forest over 5000 feet (Blue Mountain Range). Many of the low alluvial areas are in sugar cane while the mid-altitudes are in citrus and other fruits, with some pine plantations and coffee on the higher ground. There are also considerable areas of marsh and mangroves, and the north-east of the island has large numbers of unpolluted, high-gradient streams.

The butterflies of Jamaica are treated to a monograph of their own by F. M. Brown and B. Heinemann (1972; E. W. Classey, London). There are 120 species, including 20 endemics recorded. These include three swallowtails Graphium marcellinus, Papilio homerus and P. thersites; the nymphalids Mestra dorcas, Adelpha ablya, and Atlantea pantoni; the lycaenids Callophrys crethona, Heterosmaitia bourkei, Electrostrymon pan, Leptotes perkinsae and Hemiargus dominica. There is a comparatively large hesperiid fauna with Epargyreus antaeus, Astraptes jaira and Choranthus lilliae as endemics. Several of these species are not too difficult to obtain, for example P. thersites, while the common P. andreon is elsewhere found only in Cuba.

The Blue Mountain Field Station would be especially pleased to welcome Lepidopterists. My colleague Dr. Eric Garraway and myself are presently investigating the biology and distribution of Papilio homerus and have a projected study on the nymphalid butterfly Historis odius. Dr. J.R. Parnell who has investigated the biology and speciation of the genus Junonia also has associations with the station. For further information write to Dr. B.E. Freeman, Reader in Animal Ecology, Department of Zoology, University of the West Indies, Kingston 7, Jamaica.

Dr. Brian Freeman
Director

1986 TREASURER'S REPORT

1. Beginning Balance, 1986 (cash on hand)	\$44,698.65
Minus 1986 cash on hand	<u>(3,271.00)</u>
Adjusted Beginning Balance	41,427.65
2. INCOME for 1986*	
Member Dues	36,754.96
Institutional Subscriptions	4,240.00
Air Mail	863.00
Late Fees	239.00
Interest Earned	4,424.64
Undesignated Gift	325.26
Illustrations Fund Gift	100.72
Publication Fund	524.00
Sale of Back Issues	981.50
Page Charges	3,000.00
Mailing List Rental	1,200.33
New Life Members	600.00
Miscellaneous	<u>55.00</u>
Total	53,308.41
3. EXPENSES for 1986*	
NEWS publication	11,490.97
JOURNAL, VOL. 40 publication	29,567.69
Supplies	230.55
Printing	658.58
Postage	1,181.25
Back Issue Handling	706.94
Treasurer (incl. bank charges)	365.00
Secretary	431.88
Ass't Sec'y (programming --list maintenance, etc.)	705.26
Miscellaneous	<u>12.78</u>
Total	45,350.90
ENDING BALANCE	49,385.16
4. Allocation of 1986 Assets	
1987 Cash on Hand	2,294.00
Life Membership Reserves	17,629.52
Publication Fund	12,495.51
Illustration Fund	867.19
General Operating Fund	<u>16,098.94</u>
Total	49,385.16
5. Adjustments	
1984 & 1985 Incomes Rec'd 1986	3,043.61
1986 Bills to be Paid in 1987	21,588.98
1985 Bills Paid in 1986	(16,062.31)
1986 Cash Rec's in 1985	<u>(3,271.00)</u>
Total	5,299.28
Total Cash on Hand, End 1986	54,684.44

*Several categories have been changed for 1986

For comparison, the 1985 figures may be found in NEWS #5, 1986 on page 73.

Eric Metzler, Treasurer

FURTHER ADDITIONS TO DEALER LISTINGS

From a Society Member in New Zealand has come a recommendation for two additional booksellers who were not included in the listings in NEWS #4, 1987. Both of them are capable of handling correspondence in English. It is not known if they handle antiquarian literature as well as current books, however, but they should be added to Category 1.

Sciences Nat

2 rue Andre-Mellene, Venette, 60200 Compiègne, France

TTS Entomological Books

P.O. Box 11, Noborito, Kawasaki, Japan

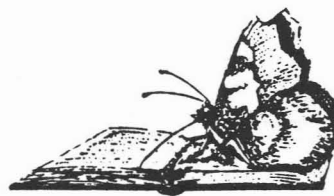
INSECT THIEF CONVICTED

In the May/June (#3) 1987 issue of the NEWS we reported that a visitor to the Entomology Section at the Natural History Museum in Los Angeles was arrested on 7 March 1987 for stealing insects and insect pins. We can now report that, at his arraignment on 1 Apr 1987, Chris Norman Powell, of El Segundo, California, pled guilty to misdemeanor theft and was sentenced to 24 months of summary probation and ordered to pay a fine of \$150; in addition, he was ordered to pay \$10 into a restitution fund and perform 100 hours of community service.

MONARCH ALERT!

Monarch butterfly migration studies in California have expanded this year to include summer tagging on the western breeding grounds, to help clarify the autumn migration to coastal overwintering sites. A number of volunteers east of the Rocky Mountains have also been involved in the tagging project. If you spot a Monarch with a white paper tag on the right forewing, please copy the number on the tag and, if possible, release the butterfly to continue its flight. Send the number, together with date and place of observation, to Chris Nagano, Natural History Museum, 900 Exposition Blvd., Los Angeles, CA 90007-4057, or telephone this information to him at (213) 744-3363.

Books



BOOK REVIEW

Butterflies of the Neotropical Region, Part III, Brassolidae, Acraeidae, & Nymphalidae (Partim), by Bernard D'Abrera, 1987. Hill House, Victoria, Australia; 139 pp. + 7 pp. front matter. Distributed by E. W. Classey, Ltd., Farringdon, Oxon., England. Price \$139.24 US (including shipping) [£87.50].

This is the third volume in D'Abrera's neotropical series, and is slightly less expensive at \$1.00 per page than some of his previous volumes, but it is also the thinnest. The color reproductions are excellent, but I must make the same criticism of this volume that I did of the first (NEWS, Jan/Feb 1982, p. 9); there are far too many portions of the pages that are blank. There is a Morphidae supplement (pp. 503-514) in which every other page is blank. On the fly leaf of the dust jacket, the author complains that he has been forced to "turn publisher" in order to keep the series going because the small volume of his books (press runs of approximately 1500) is not economical for large printing houses. In my opinion, the author should alter the page layouts in future volumes in order to utilize fully the space available. In the present volume, the reader is immediately struck by the vast expanses of white and grey.

This book begins immediately with the treatment of the Brassolidae without any prefatory material other than the title page, etc. Page numbering begins at 386 and ends at 525. There is an index and a five-page Addenda & Corrigenda for the previous two volumes in the series. Six plates comprise the Morphidae supplement. There is a brief one-page explanation of the supplement that also contains Addenda & Corrigenda to the Morphidae section of Part II. No bibliography is included.

In this volume, D'Abrera appears to have surveyed the current literature. The revisionary treatment by Jenkins of Hamadryas [1983. Bull. Allyn Mus. (81):1-146] is reflected in the nomenclature, although D'Abrera questions the validity of some of the subspecific names.

The Nymphalidae treatment includes the Argynniae, Melitaeinae (the 1981 revision of Higgins is followed here), Marpesiinae, Limenitidinae (in part). One wonders why the entire subfamily Limenitidinae was not included, unless the author has split it into several components.

For those who can afford it, this volume will probably prove useful. As in previous works by this author, the text is minimal.

Clifford D. Ferris
P.O. Box 3351 University Station
Laramie, WY 82071-3351

New Members



- BARNES, MATTHEW J. C.: Dept. of Zoology, University of the West Indies, P.O. Box 12, Mona, Kingston 7, JAMAICA, West Indies.
- BETTMAN, DAVID: 213 Huntington Drive, Chapel Hill, NC 27514.
- BRENNEMAN, MARGARET TAYLOR: 2418 North Mozart Street, Chicago, IL 60647.
- CAMPBELL, ANDREW: 2210 Happy Court, Bellingham, WA 98225.
- CLARK, DONALD R., Jr. (Dr.): Research Biologist, Patuxent Wildlife Research Center, Laurel, MD 20708.
- CORNELIUS, W. S.: P.O. Box 57, Albion, CA 95410-0057.
- EVANS, MARK H.: 217 Island Drive, Madison, WI 53706.
- HANEY, DONALD L.: P.O. Box 3474, Crestline, CA 92325-3474.
- HILTON, DONALD F. J. (Prof.): Dept. of Biological Sciences, Bishop's University, Lennoxville, Quebec J1M 1Z7, CANADA.
- MACK, RONALD G., Jr.: Entomology Department, Deering Hall, University of Maine, Orono, ME 04469.
- MCDONALD, BRIAN R.: 160 Guy Street, Elkins, WV 26241.
- OBERFOELL, JIM: Rural Route 02, Box 103, Bowman, ND 58623-9414.
- ODOR, JACK L.: 833 Wilson Avenue, Fort Morgan, CO 80701.
- PATTERSON, LOIS M.: 425 North Shore Drive, Parkville, MO 64151.
- SCHMIDT, CHRIS: 1428 23 Avenue, Box 11, Didsbury, Alberta T0M 0W0, CANADA.
- VERONESE, GIANCARLO: Viale Venezia 138, I-33100 Udine, ITALY [specialist in *Charaxes*].
- VICTORIA, JOSEPH A.: 53 South Broad Street, Pawcatuck, CT 06379.

Address Changes



- BACH, JEREMY: 4020 Columbine, Boise, ID 83704.
- BAGGETT, HOWARD D.: 309 SW 16th Avenue, #122, Gainesville, FL 32601.
- BRINK, PETER: 5025 D.J. Place, Auburn, CA 95603-9657; phone (916) 878-1489.
- FALL, RICHARD P.: BioQuip Products, Inc., 17803 La Salle Avenue, Gardena, CA 90248-3678; telephone (213) 324-0620.
- GILCHRIST, GEORGE W.: Department of Zoology (NJ-15), University of Washington, Seattle, WA 98195.
- HANSEN, KEN: 3348 Edgewood Road, Eureka, CA 95501-2755.
- JONES, DONNA: 4701 Lido Lane, Houston, TX 77092.
- KEMNER, JOHN: P.O. Box 226, Dripping Springs, TX 78620-0226.
- KENNEDY, CHANDLER J.: 16 Summerhill, Ballwin, MO 63011.
- MILLER, JACQUELINE Y. (Dr.): Change zip code to 34234.
- MILLER, LEE D. (Dr.): Change zip code to 34234.
- PEIGLER, RICHARD S. (Dr.): 13115 West Second Place, #1524, Lakewood, CO 80228.
- PLONCZYNSKI, MARIA: 227 Hartfield Street, Jackson, MS 39216.

RUBBERT, AL H.: 5401 Lennox Avenue, #60F, Bakersfield, CA 93309-1554.

STONE, STEVE: TWE, 12795 West Alameda Parkway, P.O. Box 25287, Lakewood, CO 80225-0287.

The Market Place

Buy • Sell • Exchange • Wants



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

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

ATTENTION: An ad with the return address of Bill Wright of Woodcliff Lake, New Jersey appeared in the Aug/Sept 1987 NEWS requesting contact with persons having done business with Chuck Kondor and his company, Entomological Clearing House (ECH) of Hales Corners, Wisconsin. This ad was NOT submitted by Bill Wright, who wishes the membership to be aware that he had no knowledge of the ad prior to its printing and that he had no reason for requesting such an ad as he was in no way acquainted with Chuck Kondor. The Society cannot vouch for the integrity of its advertisers, nor can it verify that all the ads were submitted by the persons whose names appear in the ads. This was apparently sent by someone using Bill Wright's name and address without permission, with the intention of embarrassing the Society, Bill Wright, and Chuck Kondor. It is hoped that members will not hesitate to do business with Chuck Kondor and ECH because of this bogus ad. The NEWS Editor has never received any complaints about ECH.

FOR SALE: Large or small quantities of pupae of *Papilio troilus*, *Graphium marcellus*, *Actias luna*, *Cressonia juglandis*, *Paonis myops*, *P. excaecatus*. Send S.A.S.E. for prices to Mr. Wm. Houtz, RD #4, Box 477, Pine Grove, Pennsylvania 17963.

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

FOR SALE OR EXCHANGE: Small numbers of pupae of *Sphinx chersis*, *Paonis excaecatus*, *C. angulifera*, *P. troilus*, *A. rubicunda*, *P. modesta*. Will exchange for other North American livestock. Also have papered lepidoptera in exchange for other North American lepidoptera, especially midwest and western. SASE please. Frank Bodnar, 1201 Ridge Rd, Apollo, PA 15613. Phone (412) 478-3824.

FOR SALE OR EXCHANGE FOR OTHER LIVESTOCK: *C. promethea* cocoons. I have over 400 of them and an as yet undetermined number of *P. troilus* pupae. Contact Kenneth R. Knight, 433 Brady N.W., Comstock Park, Michigan 49321 or phone (616) 784-6243.

FOR SALE OR EXCHANGE: Southeastern lepidoptera (papered) including *Papilio palamodes*, *P. troilus*, *Eurytides marcellus* and some Sphingids and others. WANTED: Live cocoons, ova or pupae of Saturniids and Sphingids. I will also have *H. cecropia* ova for sale this coming spring. For availability list send SASE to Michael Benton, 3 Todd Drive, Brunswick, Georgia 31520.

FOR SALE OR TRADE: 1. Higgins & Riley, A Field Guide to the Butterflies of Britain and Europe (1970) for \$8.95; 2. John G. Williams, A Field Guide to the Butterflies of Africa (1971) for \$8.95; 3. Ferguson, Lepidoptera of Nova Scotia (1954) for \$5.00; L. Miller, Revision of the Satyridae (1968) for \$5.00. All in good condition. Add \$2.00 for postage. Will also trade for Nearctic Nymphalidae or Bombycoidea (make offer). Thomas S. Williams, 2366 Rosemore Ave., Glenside, Pennsylvania 19038. Phone (215) TU4-3127.

FOR SALE OR EXCHANGE: Good selection of Arctic/Alpine Butterflies including Erebia occulta, E. lafontainei, Parnassius, Boloria distincta, etc. B. napaea halli & improba harryi from Wyoming. Also numerous other N. American species. All specimens A+ perfect and at reasonable prices. Will exchange for other N.A. species, esp. Lycaenidae & Satyridae; also desire Arctic/Alpine Europe and Asiatic species. Also have quantities of Oeneis polixenes yukonensis form "lafontainei". This is the common, dark, bog flying form of O. polixenes previously thought by some to be a separate species. Tom W. Kral, P.O. Box 349, Necedah, WI 54646.

FREE MEMBERSHIP: Order a copy of the new book The Butterflies of Indiana by Ernest Shull from The Ohio Lepidopterists for the regular price of \$25.00 (add \$2.50 for shipping and handling) and receive a ONE YEAR FREE MEMBERSHIP in The Ohio Lepidopterists. Send \$27.50 (check or money order) to: The Ohio Lepidopterists, 1241 Kildale Sq. N., Columbus, Ohio 43229. USA.

FOR SALE: Live pupae of Hemileuca electra, H. electra clio, H. burnsi, H. eglanderina (San Gabriel Mts, L.A. Co), H. nuttalli (Mono Co), Automeris pamina, Anisota osleri. Papered adults of above and other rarer SW U.S. Saturniidae. SASE for lists. F. P. Sala, 3830 Carnavon Way, Los Angeles, CA 90027. Phone (213) 664-6503.

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

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

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

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

FOR SALE OR EXCHANGE: Pupae of P. polixenes asterius and P. glaucus. Large numbers available. Contact Jaret C. Daniels, 12606 6½ Mile Rd., Caledonia, Wisconsin 53108.

FOR SALE: Seeds of Jimsonweed. Great foodplant for rearing M. sexta, M. quinquemaculata and A. cingulatus. CAUTION: Jimsonweed is poison! Send SASE for price. ALSO WANTED: Pupae or spring ova of Agrius cingulatus (Pink-spotted hawk) and Saturnia mendocino. Write to Randy Robinette, 4800 State Rt 5, Ashland, Kentucky 41101, USA.

FOR SALE: Cocoons of cecropia, polyphemus, promethea and luna. Some columbia cocoons available. Also literature on lepidoptera and how to rear them. Send SASE for price list to Dr. Gardiner E. Gregory, Star Route 79, Box 259, Orland, Maine 04472.

FOR SALE: Large cocoons of Graellsia isabellae ceballosi (spanish moon moth) from Jaen, Spain. Easy to breed on pinus. Perhaps also overwintering ova of different Calligula japonica subspecies. Please write for prices. Also will exchange for good papered Saturniidae (worldwide). ONLY FOR EXCHANGE: some papered Ubaena fuelleborniana and Athletes semialba from Central Tanzania. Stefan Naumann, Im Pfarrgarten 5, 8525 Uttenreuth, West Germany.

MEMBERS COMMERCIAL NOTICES.....

FLORA & FAUNA BOOKS, P.O. Box 15718, Gainesville, FL 32604, USA. Complete natural history book service. All prices on new books routinely discounted 5% or more. Current sale items: D'Abrera, Butterflies of South America (pap, 256p) (list=\$19.50), for \$16.95; Ferris/Brown, Butt. of Rocky Mts (pap, 462p) (list=\$17.95), for \$14.50; DeVries, Butterflies of Costa Rica (pap, 390p) (list=\$22.50), for \$16.95; Stehr, Immature Insects [incl. Lepid] (list=\$69.95), for \$58.95; Arnett, American Insects (850p), (list=\$84.95), for \$76.50. Postage and handling extra. Ask for catalogs: General, Biology, Botany, Zoology, Earth Sciences; or any title in print. Sale expires March 31, 1988.

MIGUEL SERRANO TROPICAL BUTTERFLIES, 6823 Rosemary Dr, Tampa, FL 33665, USA. Specializing in rare and bred material from Central and South America. Send for our extensive list of all families, especially Papilionidae and Ithomiidae.

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

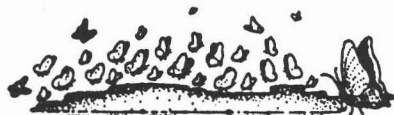
APOLLO BOOKS, LUNDBYVEJ 36, DK-5700 SVENDBORG, DENMARK. The Lepidopterists' bookseller. DIE BOMBYCES UND SPHINGES DER WESTPALAEARKTIS. By de Freina & Witt. Recently published. 29 x 21 cm. 708 pages. 50 colour plates of a very high quality showing 1793 specimens. 369 text figs. 330 distrib. maps. Bound.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

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

S.K. ONG, Box 2, Simpeitou, Taiwan 112-99, Republic of China. FOR SALE: Live Butterfly pupae, incl. Kallima inachus (Dead-leaf butterfly), Larval food plants for Papilios, Troides, Pieridae, Nymphalidae, Lycaenidae, Satyridae, plus Bonsai (potted mini-trees). Inquiries cordially invited.

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

TRANSWORLD BUTTERFLY COMPANY (LS), Apartado 6951, San José, COSTA RICA Central America. NEW WINTER CATALOG incl new material from South America, Indonesia, China, Europe. Specialists in Parnassius, Morpho, Papilionidae of the world. State interests when writing. COLLECT IN COSTA RICA: New 1988 program now available. Send \$1 for catalog, or \$6 for years' catalogs & newsletters sent monthly by airmail.



Forthcoming Meetings

PACIFIC SLOPE SECTION MEETING

The Pacific Slope Section of the Lepidopterists' Society will hold its annual meeting the weekend of July 8-10, 1988 at the Colorado Outdoor Education Center near Florissant, Colorado. All Society members west of the Great Plains will receive information about the meeting. Others interested in attending should contact Boyce Drummond, Pikes Peak Research Station, Florissant, Colorado 80816, USA.

THE LEPIDOPTERISTS' SOCIETY

39th Annual Meeting
The Carnegie Museum of Natural History
4400 Forbes Avenue, Pittsburgh PA 15213
Thursday, July 14 to Sunday, July 17, 1988

The Section of Invertebrate Zoology at The Carnegie will host the 39th annual meeting of the Society in Pittsburgh in the middle of July, one week after the International Congress of Entomology in Vancouver, B.C. Some of the events featured at the meeting will be:

- Open house at The Carnegie's insect collection in the Section of Invertebrate Zoology with special display of the Holland collection and the Avinoff Parnassius collection

- Symposium on the reproductive biology of Lepidoptera
- Field trips to collecting areas in western Pennsylvania and West Virginia (day and night!)
- Cultural and entertainment opportunities in Pittsburgh: music, theatre, art, sports, sight-seeing, and more
- Annual banquet and awards presentation
- Symposium on the historical biogeography of Lepidoptera
- Exposition of techniques for specimen preparation and preservation in Lepidoptera

ACCOMMODATIONS

The Litchfield Towers, student residence halls at The University of Pittsburgh, will have rooms (single or double occupancy) available for Society members and their families. These are simple accommodations with community bathrooms, about \$14/single, \$20/double, per day, for a period beginning before the meetings and extending beyond, for those interested in working at The Carnegie. Litchfield Towers are within one block of the meeting rooms at The University of Pittsburgh, and one block from The Carnegie. Breakfast, lunch, and dinner are available for \$2, \$3, and \$4.50 respectively in the residence hall cafeteria.

Hotels and motels are also located near the museum but are more expensive (>\$40 per day). There are no campgrounds or recreational vehicle parks nearby, but there are several within a one hour drive.

Information on all accommodations will be included in the registration packets, as well as ideas for dining, recreation, entertainment and just relaxing!

REGISTRATION

If you have any interest in attending the meeting, then complete the following questionnaire IMMEDIATELY. When your completed form is received you will be sent a registration packet that contains information on registration, accommodations, submission of titles for contributed papers, deadline dates, and more. The registration packets will be mailed in early February. Please respond promptly, as this will increase our efficiency in planning for activities and accommodations.

IMPORTANT - There will not be a general mailing of registration forms or call for papers. To obtain these, complete and return the following query.

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Name: _____

Address: _____ City: _____

State/Province: _____ Country: _____ Zip Code: _____

Number of persons in your party who will register _____

Number of persons in your party who will need accommodations _____

Where will you stay? _____ Residence Hall; _____ Motel/Hotel; _____ Other _____

How will you travel to meeting? _____ Your vehicle; _____ By plane; _____ Other _____

Will you present a paper at the meeting? _____

Would you participate in a one-day field trip after the meeting? _____

Which of the following field activities interest you most?

Collect moths _____ Collect butterflies _____ Photography _____

Other (please describe) _____

Comments: _____

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Mail to: John E. Rawlins, Section of Invertebrate Zoology, Carnegie Museum of Natural History,
4400 Forbes Avenue, Pittsburgh, PA 15213 U.S.A. Phone (412) 622-3259

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

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INFORMATION ABOUT THE SOCIETY.....

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

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

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

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

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

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

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

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

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

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