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of the LEPIDOPTERISTS' SOCIETY

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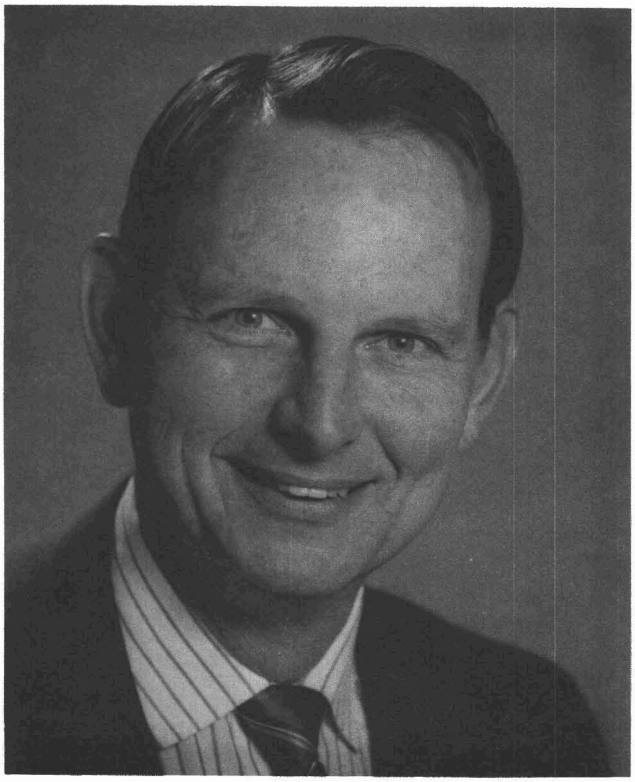
Presidential Profile

Like so many of us, Julian P. Donahue, the Society's current President, traces his lepidopterological roots to a butterfly collection he made as a child in his home state of Texas. When he moved to New Hampshire at the age of 12 his focus shifted to Explorer Scouts, hunting, fishing, and trapping. He earned spending money by working part time with Wally Morse and J.G. Conklin at the University of New Hampshire, culturing insects and their hostplants for pesticide trials, but his major sources of income were rabbit and earthworm ranching, selling home-grown produce at a roadside stand, muskrat trapping, and working for a neighboring farmer during haying season. His early interest in natural resources was nurtured by a formal conservation camp operated by the Society for the Protection of new Hampshire Forests, and at the age of 16 he spent an entire summer serving as a tour guide for this organization's Lost River Reservation in the White Mountains of New Hampshire.



At the age of 17 Donahue was again, reluctantly, on the move; this time it was to begin a lifetime of traveling that would have him completely circle the globe twice by the time he was 22. His father, a professor of agronomy at the University of New Hampshire, had been appointed to the Agency for International Development (AID) in India, and took most of the family with him. Julian was soon enrolled at the American Kodaikanal School in the Palni Hills of South India, where his early interest in Lepidoptera was instantaneously, and prophetically, rekindled through contact with fellow students who were avid butterfly collectors. He soon found himself spending every holiday and weekend in the field, seeking and collecting as many of the hundreds of species of butterflies as he could find, spurred on by the descriptions in Wynter-Blyth's Butterflies of the Indian Region, or making a pilgrimage to consult with resident lepidopterist Father Emilio Ugarte at Sacred Heart College in nearby Shembaganur.

After graduating from high school in India, he spent a summer as a firefighter in Olympic National Park (Washington State) on his way to Michigan State University, where he enrolled in Resource Development (soil and water conservation). At MSU he "worked up" his Indian Lepidoptera collection during a series of independent study projects under Roland L. Fischer in the Entomology Museum, developing a particular interest in drably-colored groups (Hesperiidae & Satyridae) where genitalic dissection could resolve the identity of a specimen more satisfactorily then hours spent comparing vague and inadequate descriptions of color patterns (perhaps this is a natural and fortuitous result of his being partially color-blind).

During his junior year in college, just after becoming the indoor rifle champion of the Big-10 Universities, Donahue seized an opportunity afforded by the Ford foundation, his father's new employer, to travel free to visit his parents in New Delhi, India. En route he collected butterflies in the Philippines, Java, and Ceylon (now Sri Lanka), and spent the next 16 months traveling throughout India (mostly alone, by third-class train), during which time he collected 16,000 butterflies and 5,000 moths in 13 of the then 15 Indian states, in addition to over 100 bird and mammal specimens (he was an avid field ornithologist, adding five species to the Delhi state bird list).

He continued at Michigan State to write his master's thesis on the butterflies of Delhi, India (somehow finding time to become the founding Editor of The Michigan Entomologist, now The Great Lakes Entomologist), then enrolled in the Ph.D. program at the same institution, this time to work on the taxonomy of arctiid moths under Fred Stehr. When Lloyd Martin retired as curator of Lepidoptera at the Natural History Museum of Los Angeles County (LACM), the Museum was anxious to fill the vacancy as quickly as possible, or face the possibility of losing it altogether during a recurring frenzy of governmental budget cutting. Anxious to escape the bitter Michigan winters he had endured for far too long, and equally anxious to work in a major museum in a more salubrious southwestern climate, Donahue left Michigan State A.B.D. (all but dissertation) to assume the position of curator of

Lepidoptera in Los Angeles, a position he has held since the middle of 1970.

Burdened with the same misconception of a "county" museum that most easterners share, Donahue was pleasantly surprised to find that this county museum, which he had never seen before accepting the job, was far more than a local museum that could boast little more than a stuffed owl or a cannon on the lawn. Here, indeed, was the largest extant collection of Lepidoptera of the Southwest; in some groups, such as heliothidine noctuids, the collection is the largest in the world.

The collection that Donahue inherited, however, was a "McDunnough Checkist" collection — anything south of the U.S. border was buried somewhere in a Schmitt box simply labeled "exotic." Under his curatorship the LACM Lepidoptera collection quickly became a worldwide collection, with a particularly significant emphasis on the Neotropical Region, south of the "McDunnough Line." His geographic area of specialty and interest shifted from Asia to the Neotropics, kindled by his first field trip to Mexico as a graduate student ornithologist and entomologist on a Michigan State University Museum expedition under Rollin H. Baker.

Besides inheriting a major collection in Los Angeles, Donahue also inherited an institutional legacy: his predecessor had been married to the Museum Librarian for some 30 years. Kathy Smith started working at the Museum as a librarian just 13 days after Julian was hired. A year and a half later they were married. Kathy went on to become the head librarian at the Museum; by the time she left the Museum in 1987 to take another position, the Donahues had managed to extend the Museum's lepidopterist-librarian marital relationship for a total of 50 years.

Since coming to Los Angeles Donahue has been on numerous trips to collect specimens for the Museum, with emphasis on the Neotropics. Usually accompanied by his wife Kathy, he has collected in Kenya, Mexico and Costa Rica (frequently to each), and Ecuador. Closer to home, he has specialized in surveying the moths of the Mojave and Colorado Deserts of California. His graduation to moths has been nearly complete, although he still prefers to work on obscure unicolorous groups such as carpenter moths (Cossidae) and phycitine Pyralidae. Anomalously, and perhaps as a consequence of an early interest in butterflies, he is also very interested in the taxonomy of the Neotropical Arctiidae (including Ctenuchinae and Pericopinae), some of the most brightly colored yet taxonomically chaotic moths in the world.

Donahue joined the Society in 1961, while he was in India, which led to no end of requests for the gaudy and rare species he seldom encountered. Since then he has held numerous positions in the Society, including Member-at-Large of the Executive Council (1971-73, 1987-88), member of the Editorial Board of the Journal (1971-75), Secretary for nine years (1977-85), Assistant Secretary (1986 to present), and Society Librarian (1978 to present). He has served as Program Chairman and/or Local Arrangements Chairman for three national meetings (1969, 1974, and 1981, the latter our first meeting in Mexico) and five Pacific Slope Section meetings (1978, 1983, 1984, 1985, 1986, the latter the first meeting in Arizona). Tired of maintaining card files and spending a month every two years to manually type the Membership Directory, he computerized the Society's membership database in 1982, resulting in saving not only his time but saving the Society thousands of dollars in mailing list maintenance fees.

Donahue is a member of numerous entomological and conservation organizations, and has authored over 70 popular and scientific articles.

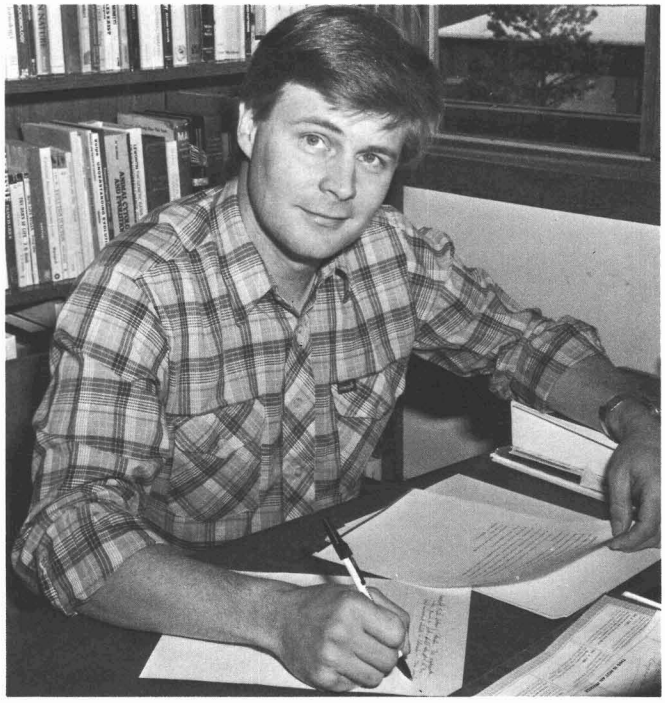
THANKS TO THE SOCIETY'S RETIRING EDITORS

The end of 1988 marked the end of Dr. Bill Miller's editorship of the JOURNAL. During these past 3 years, he has managed to get the JOURNAL's printing schedule back on track and also to maintain the high standards of his predecessors. Our THANKS go to Bill in a big way for a job well done.

Dr. Charles V. Covell, Jr. has also retired as Memoirs Editor. He has now left the Editorial Board after many, many years of service. Our THANKS to Charlie for all that he has done for the Society's publications in the past and Best Wishes for his projected Techniques Manual in the future. His place as Memoirs Editor will be ably filled by Bill Miller, but we will miss Charlie's expertise and guidance in the years ahead.

NEW JOURNAL EDITOR

Dr. Boyce A. Drummond is the new editor of the JOURNAL OF THE LEPIDOPTERISTS' SOCIETY, beginning January 1, 1989. Boyce is the Director of Pikes Peak Research Station near Florissant, Colorado, and is an Adjunct Assistant Professor of Ecology at the University of Florida, Gainesville. For the past five years he has team taught summer workshops on the biology of butterflies and moths with Drs. Thomas C. Emmel and Charles V. Covell, Jr., at the Colorado Outdoor Education Center. In addition to his duties at the Research Station, Boyce conducts natural history workshops for several organizations in Colorado and teaches courses on Rocky Mountain ecology for the University of Colorado in Colorado Springs. His research interests include the reproductive behavior and ecology of butterflies, especially deep forest species in the neotropics and alpine species in the temperate zone. He has authored over a dozen papers and 3 book chapters on the biology of butterflies.



Boyce received a B.S. in Biology from Henderson State University in Arkansas, an M.A. in genetics from the University of Texas in Austin, and a Ph.D. from the University of Florida in Gainesville. After graduation, he served as Coordinator of the Comprehensive Biological Sciences program at the University of Florida for two years, then taught ecology, environmental science, and entomology at Illinois State University in Normal, Illinois, for six years before moving to Colorado in 1984. He lives with his wife and two young children in Woodland Park, Colorado.

Boyce has been a member of the Lepidopterists' Society since 1968. He has served the Society as Zone 13 (South America) Coordinator for the Field Season Summary since 1980 and was a member of the Executive Council from 1984 to 1987. For the past three years he has been an Associate Editor of the JOURNAL and looks forward to continuing the high standards set during this period by outgoing editor Bill Miller.

BUTTERFLIES IN HIGH CITY GARDENS

From the NEW YORK TIMES of Wednesday, September 7, 1988 came a clipped article of a letter written by Joseph Delibery for the Metropolitan Diary column. It was sent to me by David West. A few weeks later Ray Bracher sent a similar clipping, from the September 18, 1988 issue of the South Bend Tribune, referring to the original one. Both items were datelined NEW YORK. The item appears below in its entirety.

"Dear Diary:

While we humans seem to be doing our best to destroy our fragile ecological balance, other creatures are going to great lengths to preserve it. Example:

"My balcony in Lincoln Towers faces west toward the Hudson. It gets a good measure of sunshine and, despite the persistent pollution from West End Avenue, we delight in nursing the few plants we have. No insects ever seemed to be attracted to these sparse plantings.

"Until early this summer, that is. One day I noticed a lovely large black butterfly hovering about. Although I watched for a while, I never saw it alight on any of the plants. Soon after that I was called away and never again saw the butterfly.

"Some weeks later my wife was startled when, picking some sprigs of parsley, she discovered several large caterpillars. They were rather attractive — green bands alternating with black bands with yellow dots — but we brushed them off to save our precious parsley. Checking our 'Golden Book of Insects,' we were astounded to find that the caterpillars were hatched from the eggs of the black swallowtail butterfly and that their natural food is parsley.

"What we find so awe-inspiring is that of all the thousands of plants on thousands of balconies in Manhattan, a black swallowtail from heaven knows where, was able to find our tiny pot of parsley on which to lay its eggs. It gives one faith that all is not lost. We also regret that our own ignorance kept us from sacrificing our parsley in an effort to perpetuate the black swallowtail. But we'll try again next summer."

VISUAL NAVIGATION IN THE CALIFORNIA TORTOISE-SHELL

Simple vision-masking experiments involving 62 individuals of Nymphalis californica (Boisduval) (Nymphalidae) were performed during mid-March 1987 at Jerseydale, 1100 m elev., 14 km NE of Mariposa, Mariposa Co., CA. Weather conditions were mostly clear, sunny, warmish, humid, and breezy. White "Liquid Paper" typewriter correction fluid was applied to the ocelli and/or compound eyes and the behavioral changes recorded upon release. The experimental design was patterned after Wellington (1974). Frame of reference for masking was from the butterfly's dorsal perspective and for subsequent behavior was from the observer's ground perspective. These were hibernant adults netted on muddy ground or in flight in a forest clearing several days after some rain and snow. They were not actively migrating at the time but did emigrate there during early March when numbers suddenly increased and occasional migrants were seen. Both migrating and non-migrating adults were common in late March following snowstorms during the third week of March.

The results were as follows:

Compound eyes covered (n = 7). Flew directly toward the sun in a steadily ascending, fluttering flight.

Right eye only covered (n = 7). Flew upward and away from the sun in a series of clockwise spirals and circles. One flew higher and higher overhead in 22 clockwise spirals (small to giant) until lost from view.

Left eye only covered (n = 5). Flew upward and away from the sun in a series of counterclockwise spirals and circles. Two flew directly toward the sun after the ascending spiral flight.

Top halves of compound eyes covered (n = 5). Flew off in the same direction as the plane of polarized light. Some of these flew briefly in the direction of the sun at first but then changes to the plane of polarized light direction.

Bottom halves of compound eyes covered (n = 5). Same as top half results except that flight toward the sun was more sustained and ascending.

Ocelli covered (n = 5). Flew off in the same direction as the plane of polarized light.

Compound eyes and ocelli covered (n = 8). Dropped or fluttered to the ground and flopped around on the ground, unable to fly off. Four oriented parallel or perpendicular to the sun's rays while on the ground.

Right eye and ocelli covered (n = 5). Flew to ground and flopped around on ground, then rose upward in an ascending series of clockwise spirals.

Left eye and ocelli covered (n = 5). Flew to ground and flopped around on ground, then rose upward in an ascending series of counterclockwise spirals.

Ocelli and top halves of compound eyes covered (n = 5). Flew upward high into the air (without turning) until lost from view.

Ocelli and bottom halves of compound eyes covered (n = 5). Flew upward high into the air, then flew in the same direction as the plane of polarized light.

A larger group with no treatments actively milled about, chased each other, basked, or most frequently imbibed moisture on the muddy ground in the clearing.

The results suggest that the ocelli control sun-directed flight (positive phototaxis), normally expressed as tracking the sun's direction, and the compound eyes control flight in the plane of polarized skylight and upward ascending flight (negative geotaxis). The whole compound eye responds to polarized light but the top half does so more than the bottom half. Left turns are controlled by the left compound eye and right turns are controlled by the right compound eye, from the butterfly's dorsal perspective.

The ocelli contribute to orientation accuracy in the dorsal light reaction in flying insects, with ocellar occlusion decreasing the accuracy of this orientation; the ocelli are also particularly sensitive to changes in light intensity (Goodman 1970). Some butterfly compound eyes are known to contain receptors sensitive to ultraviolet light (Bernard 1979). In bees and ants the ultraviolet wavelengths of polarized skylight are perceived by rhodopsin orientation of the microvilli in the ommatidium's rhabdom or light guide (Wehner 1976). There is some evidence that other nymphalid migrants such as Vanessa kershawi (McCoy) and Danaus plexippus (L.) also key on polarized light during migratory navigation (Shields 1976; Hyatt & Kreithen 1986).

POSTSCRIPT. "Liquid Paper" was applied to the dorsal part of the head behind the compound eyes and between the antennae to mask the ocelli. The external, paired ocelli in butterflies are exceedingly small (less than 26 millimicrons, observable with a scanning electron microscope) and are located "on the vertex of the head posterior to the antennae and dorso-medial to the compound eyes" (Dickens & Eaton, 1973). They are convex corneal lenses that act as simple photoreceptors. External ocelli are present in the adults of Polygonia, Vanessa (close relatives to Nymphalis), and a number of other butterfly families previously thought to be anocellate. This sense of ocelli should be distinguished from the other meaning of the term, namely that of eye-spots on the wings.

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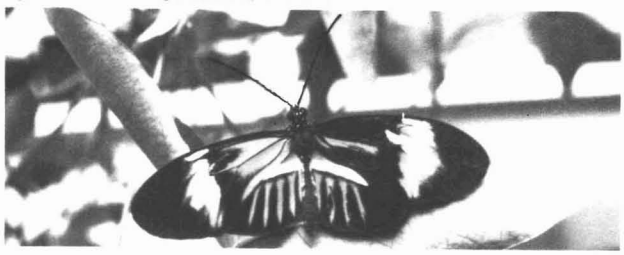
MALE OR FEMALE?

This heading needs a short introduction. In "Butterfly News" (No. 4) there was an article about a rare freak of nature, called a gynandromorph, which had been bred at the London Butterfly House. The butterfly in question was a Heliconius melpomone with different coloring on its wings. It was half male and half female. This was one of only three gynandromorphs of H. melpomone I had ever seen. The other two were bred by the butterfly genetist Dr. John Turner, who has spent the past 14 years breeding H. melpomone.



In mid August, 1988 another freaky H. melpomone was bred at the Butterfly House in Emmen, Holland. A breeding program was begun in 1985 with 30 specimens of H. melpomone. Since then there has seldom been any introduction of fresh stock. The specimen pictured could be a male and a female, but without killing the specimen, how does one determine whether the creature has male or female genitalia? It was released in a cage with another male and also in a cage with another female to see if they were attracted to each other. The gynandromorph was not happy with the male and didn't allow it to mate. Although the gynandromorph tried to lay eggs, it was not able to do so. So, up until now, the staff at the Butterfly House in Emmen are not sure of the sex of this rare freak of nature.

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SOME COMMENTS ON THE PALATABILITY OF BATTUS PHILENOR

I have read W. H. Howe's recent note regarding bird predation on Pipevine Swallowtail (Battus philenor) larvae with great interest (NEWS Jul/Aug 1988). Despite the enormous number of eyewitness accounts of avian attacks on lepidopterans (see Wourms and Wasserman 1985 for summary of North American reports), there is still doubt in some circles (inexplicably!) as to the reality of such predation.

I was startled, however, by Howe's conclusion that B. philenor larvae and probably adults are fully palatable to birds and not aposematically protected. It has been clearly demonstrated on at least three occasions (Brower 1958, Platt et al. 1971, Codella and Lederhouse 1989) that B. philenor adults are indeed noxious to avian predators (but not to some lizards; see Odendaal et al. 1987) and that birds quickly learn to avoid the butterflies via their flamboyant ventral wing coloration. Battus spp. achieve their distastefulness by sequestering aristolochic acids from their hostplants (primarily the pipevines, *Aristolochia* spp.) (Rothschild 1973).

Howe's observations suggest a number of possibilities. It is well known from other systems that individuals in a population may vary considerably in their palatability due to the corresponding variation in hostplant allelochemical concentrations (Brower et al. 1972). It is intriguing to consider that larvae reared on *A. macrophylla,* the host in Howe's case, may be relatively palatable compared to individuals feeding on other pipevine species, which would lead to all sorts of delightful complications, e.g., automimicry. Another possibility is that the early instars are relatively palatable since they have not yet sequestered sufficient allelochemicals to render them distasteful: I infer from Howe's description that he witnessed most of the predation oN young larvae. I am unaware of any experimental verification that B. philenor caterpillars are themselves unpalatable (although this is very likely), at least in the later instars, given that we are dealing with sequestration and not de novo synthesis), and an examination of varying defensive capability during the larval period would be worth pursuing. Finally, consider the following quote from Howe: "Yet despite the seemingly heavy numbers of larvae consumed by birds many larvae escaped without my assistance and attained adulthood on their own. The adults were everywhere in the area." I will leave it to the reader to ponder this statement!

In conclusion, Howe's observations are valuable and raise a number of interesting questions; it is neither necessary nor appropriate, however, to dismiss 30 years of experimental evidence regarding B. philenor's aposematism.

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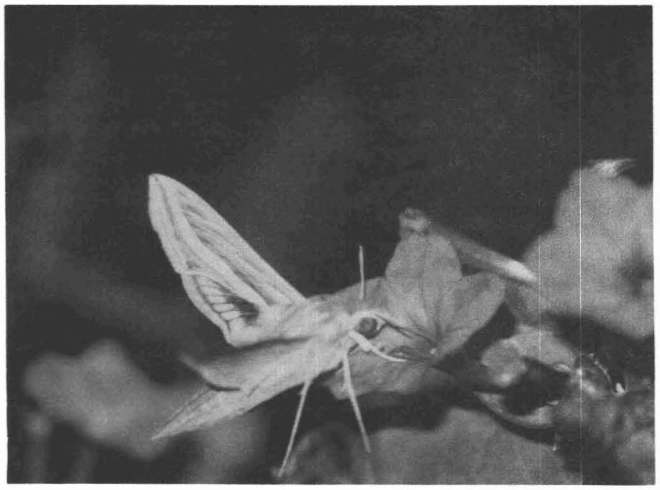
HOW TO PHOTOGRAPH FLYING SPHINGIDS

It is not always easy to photograph insects in flight. Some authors prefer to take such pictures under laboratory conditions where, within a limited space (usually a fishtank containing flowers or greenery), the object is subject to restrained movement and can be kept more or less within the prearranged depth-of-field sharpness of the cameras and other equipment. If, under these conditions, the object to be photographed decides to fly and/or to take nectar, the photographic results are superb.

However, when working outside the laboratory, one cannot use the same techniques. There it is necessary to use the standard photographic approach applied to taking pictures of live insects. A good tip is to adjust the focusing and expected size of frame, to select the proper opening and to estimate the desired depth of field sharpness, etc. during the daylight at the same spot where one hopes to encounter the Sphinx Moths at twilight or darkness. Sphingids may often be found nectaring at flowers such as *Delphinium, Phlox, Mirabilis, Tobacco, Oenothera, Saponaria, Echium, Cirsium, Lantana,* etc. In the darkness, one is often forced to make only "blind shots" when seeing something moving in front of the lens. The help of another person informing the photographer that the object to be photographed is approaching the area under scrutiny can be quite useful. If one should remove his eye from the viewfinder eyepiece, it is usually not possible to refocus quickly enough when looking through the viewfinder again. Reactions must be as quick as possible, but even then one usually makes a lot of "late shots" when one realizes that the object has already disappeared from the area covered by the viewfinder but it was not possible to revoke the mental command to press the shutter release button. Our reactions are delayed due to limits of our neuromuscular system and its physiology, not to speak of the complicated neuronal pathways between the retina of the eye and the different transmitting stations and centers within various parts of the brain (mesencephalon, occipital lobe, motoric part of the frontal lobe, etc.), before the signal reaches the spinal cord and thence the proper group of hand muscles.

Only a small percentage of attempts at photographing flying sphingids are successful. It is advisable to start training for flying moth photography by taking pictures of day flying sphingids such as Hemaris sp. They often congregate in the marshes where *Pontaderia cordata* (Pickerelweed) is in flower, in goodly numbers. Potential photographers should not be discouraged by the appearance of the pictures accompanying this article. They looked much better on the original color slides and prints, but the necessity of turning them into black and white prints to be used in the NEWS took its toll on their quality.

George O. Krizek, Washington, D.C.

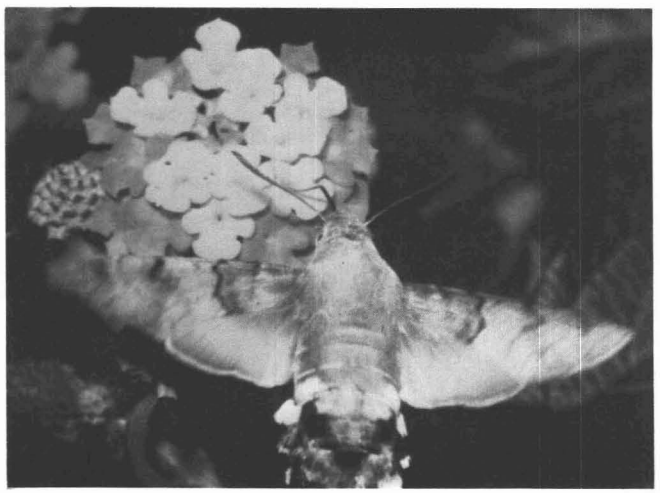


Hippothion celerio (L.). Aberdare Country Club, Kenya, Africa, January 3, 1985. Nectaring at *Mirabilis, Nyctaginaceae.*

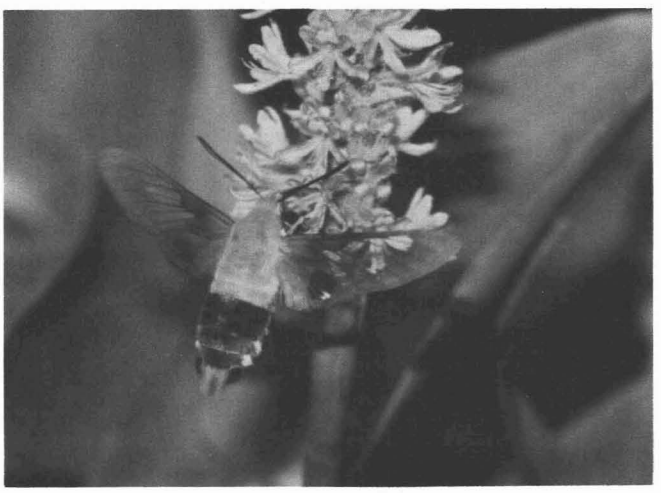
Hemaris diffinis (Bdv.). Seneca, Maryland, July 31, 1987. Nectaring at *Pontederia cordata, Pontederiaceae.*

Hyles lineata (Fabr.). Marrakech, Morocco, June 22, 1982. Nectaring at *Delphinium, Ranunculaceae.*

Hemaris fuciformis (L.). St Raphael, France, July 19, 1980. Nectaring at *Buddleia davidii, Loganiaceae.*



Macroglossum stellatarum (L.). Dubrovnik, Yugoslavia, August 31, 1986. Nectaring at *Lantana, Verbenaceae.*



Hemaris thysbe (Fabr.). Seneca, Maryland, July 13, 1987. Nectaring at *Pontederia cordata, Pontederiaceae.*

FLYING SPHINGID PHOTOS ***By George Krizek***

Metamorphosis

RAY STRAATMAN.....

Word has been received of the death of Ray Straatman of Kuranda, N. Queensland, Australia. He became a member of the Lepidopterists' Society in 1964 and in 1974 took out a Life Membership.

Information from Julian Donahue

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EDWARD F. REID.....

Ed Reid, formerly of Los Angeles, California, passed away on March 16, 1988 at the age of 73 1/2 years, in St. Louis Park, Minnesota. He was a member of the Society for 21 years, from 1965 through 1985.

Information from Julian Donahue

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LELAND MARTIN.....

Lepidopterists everywhere lost a true friend and fellow lepidopterist when Leland Martin passed away August 12, 1988. Leland's death was sudden and unexpected. Many of us recently enjoyed Leland's companionship at the Annual Meeting of The Lepidopterists' Society in Pittsburgh, Pennsylvania in July. Leland co-hosted a post-meeting field trip to Resthaven Wildlife Area in Ohio.

Leland was born March 31, 1920. He started collecting butterflies at an early age with his brother. Both were encouraged by their father. Leland did not collect butterflies continuously, but never lost his love of nature. He kept his father's collection of seeds. Later in life, Leland was asked by a friend at work to collect butterflies in Florida for the friend's child for a school project. During this trip, Leland enjoyed collecting so much, he took up the avocation again in earnest. He spent much time sharing his enthusiasm by giving talks about butterflies at libraries, nursing homes, local nature clubs and other groups who were interested. To honor his contributions, the Library staff, the Friends of the Library and the Wee Wigglers children's group donated butterfly books to the New London, Ohio Library.

Leland was a founding and charter member of The Ohio Lepidopterists. He was a member of the Society of Kentucky Lepidopterists, and served as President in 1979. He was also a member of The Michigan Entomological Society, and the Southern Lepidopterists' Society, plus The Lepidopterists' Society. He published one paper, A whitish Lycaena phlaeas in Ohio, in the Journal of The Lepidopterists' Society, 16(1):59-60, 1962. He also contributed greatly to the knowledge of Ohio butterflies with Butterflies of Findley State Park for 1980, The Ohio Lepidopterist, 3(1):1-6, 1981, and An annotated list of the butterflies of Lorain County, Ohio, The Ohio Lepidopterist, 5(4):43-49, 1983.

Leland's knowledge of the butterflies in his local area is unrivaled by most other collectors in any similar area. His discovery of Euphyes dukesi in Findley State Park led the Ohio Department of Natural Resources to designate the Duke's Skipper Butterfly Preserve in Findley State Park in 1981. His extensive field notes add considerably to his collection and to the knowledge of butterflies in Ohio. The field notes have been important to the manuscript of the butterflies and skippers of Ohio in preparation by David Iftner, John Shuey and John Calhoun. Leland's wife, Louise, plans to donate the butterfly and moth collection to the Cleveland Museum of Natural History.

Leland also learned stamp collecting from his father, another hobby he never gave up. Leland had a special fondness for stamps and other philatelic items dealing with butterflies.

Leland will be missed. His good nature and expertise is remembered fondly. At The Ohio Lepidopterists 1988 Fall Meeting, the members voted to ask the Ohio Department of Natural Resources to re-name the Duke's Skipper Butterfly Sanctuary in honor of Leland.

Submitted by Eric Metzler

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Another year is almost upon us, and I hope that as I start my seventh year as NEWS Editor that you, the members, are satisfied with the product. I wish to apologize for the lateness of NEWS #5, 1988 in reaching you readers. Although the photo-ready copy was taken to the publisher within the first week of September as usual, Allen Press was experiencing some press problems, plus a heavy work load during September, so it took them about a week longer than normal before the NEWS was in the mail. We can do nothing about the slowness of the U.S. mails either, but if you wish to receive your NEWS sooner, it is always possible to pay the extra tariff to have it sent airmail outside the U.S.A. or first class within the U.S.A. Cost is only $10.00 US extra per year and the service can be obtained by sending a check for that amount plus a request for Air Mail/First Class mailings to Jim Tuttle, Treasurer (address on back page).

With this first issue of 1989, I am also breaking in a new typist and have had to change type fonts again. My former typist has moved up in the world to a position as an executive secretary and no longer has time for piece work such as typing copy for the NEWS. She has been a great help in the four and a third years she has been working for me. My new typist does not have the same kind of equipment that my former typist used, but does have a wide variety of type fonts from which to choose, although none is exactly the same as we formerly used. I finally opted for a 12 pt. Helvetica and hope that the new look with this different type font will make the NEWS even easier to read than before, especially after the reduction used in the printing process.

A letter from a new member in Louisiana recently reached my desk. Excerpts from this letter appear below, as it seemed the comments would be of interest to the membership.

Mrs. Preston,

Just received my 1988 membership package and was amazed at the numbers of people involved in the study of lepidoptera. And I thought I was the only one so crazy about butterflies. As I have read, there aren't many reports on Louisiana. I would like to fill the gap, if possible. If there is anyone interested in the butterfly populations in Louisiana, I would be more than happy to answer any questions they might have.

I have been doing a lot of work on the Carolina Satyr (Hermeuptychia sosybius). I have read very little about this species. I have reared quite a number of them and have drawings and paintings of them. The climate in Louisiana is quite warm and humid which allows me to work with butterflies most of the year.

The most abundant species here are the swallowtails, emerging in early March and remaining abundant most of the year. We have P. glaucus, P. cresphontes, P. palamedes, P. troilus, B. philenor, E. marcellus and a few others. The Sulphurs and Buckeyes (Junonia coenia) are most abundant in the summer months with large numbers of Cloudless sulphurs (Phoebis sennae), Sleepy Oranges (Eurema nicippe), Dwarf Yellows (Nathalis iole) and Little Yellows (Eurema lisa) in August. Also, the Leafwings (Anaea andria) can be found by the hundreds. I reared between 50 and 60 last year and have drawings of larvae and pupae.

I am looking forward to society membership and wish to make known the fact that you all have a friend down yonder in Cajun Land.

Keith J. Fruge
P.O. Box 50, Basile, LA 70515

Notices

THIRD ANNUAL LORQUIN INSECT FAIR

The third annual Lorquin Entomological Society Insect Fair will be held on Sunday, 19 March 1989 at the Los Angeles County Arboretum, 301 N. Baldwin Ave., Arcadia, CA, from 9:00 AM to 4:30 PM. The fair is a non-profit event sponsored by the Lorquin Entomological Society and BioQuip Products, who solicit any exhibit dealing with any aspect of entomology. Over 40 exhibitors have participated in each of the last two fairs. Items such as books, specimens (including exotic specimens), arts, and crafts will also be sold and exchanged. The Arboretum requires a percentage of each dealer's receipts.

The fair is unlike anything held in the New World. We encourage participation by any person interested in insects. For more information on exhibiting, contact Rosser W. Garrison at 1030 Fondale St., Azusa, CA 91702-0821, (818) 575-5469; Steve Kutcher, 1737 N. Sinaloa, Pasadena, CA 91104, (818) 791-8295; Richard Fall, Manager BioQuip Products, 17803 La Salle Ave., Gardena, CA 90248, (213) 324-2626; or James C. Wiseman, 33 Calle del Mar, Pomona, CA 91766, (818) 575-5971.

ASSOCIATION FOR TROPICAL LEPIDOPTERA

The new Association for Tropical Lepidoptera is an organization open to all researchers, students, and others interested in tropical Lepidoptera. Its primary purposes are as follows:

a) to provide a forum for all persons to discuss and present information, both taxonomic and biological, on tropical Lepidoptera and to provide an avenue for investigators to solicit aid in any project dealing with the tropical Lepidoptera fauna;
b) to keep collaborators of the Neotropical Lepidoptera Project informed of developments in the project (this project involves research and publication plans for the Atlas of Neotropical Lepidoptera series);
c) to provide more frequent updated information on checklist additions as new species are described (also involving support to maintain a database for tropical Lepidoptera);
d) to update the literature references list for tropical Lepidoptera with additions as they become available;
e) to give updates on the Atlas project to patron nations and other contributors to the Neotropical Lepidoptera project;
f) to provide support for tropical Lepidoptera studies by way of extraordinary contributions any subscribers may wish to make to support research on the biology and systematics of tropical butterflies and moths. Contributions can be designated for specific projects if so requested.

To provide for these goals the Association for Tropical Lepidoptera at this time publishes the "Neotropical Lepidoptera Newsletter" to provide support for its major project, the Atlas of Neotropical Lepidoptera. The Newsletter is supported by subscriber fees ($5 per vol.) and is published on an irregular schedule of 4 issues per volume as material becomes available (Vol. 1, No. 1, was released in March 1987; No. 2 is set for December 1988).

Funds for the Association for Tropical Lepidoptera are being handled for the project by the Center for Systematic Entomology, a non-profit corporation for systematic entomology in Gainesville, Florida.

The Board of Directors for the Association is composed of members also on the Review Board for the Atlas of Neotropical Lepidoptera series at this time: V. O. Becker, EMBRAPA, Planaltina, Brazil; D. R. Davis, Smithsonian Institution, Washington, D.C.; W. D. Duckworth, Bishop Museum, Honolulu, Hawaii; T. C. Emmel, University of Florida, Gainesville, Florida; J. B. Heppner, FSCA, Gainesville, Florida; J. D. Lafontaine, Canadian National Collection, Ottawa, Canada; G. Lamas, Museo de Historia Natural, Lima, Peru; C. Lemaire, c/o Museum National d'Histoire Naturelle, Paris, France; O. H. H. Mielke, Univsidade Federal do Parana, Curitiba, Brazil; A. Watson, British Museum (Natural History), London, England.

The Atlas of Neotropical Lepidoptera is now published by E. J. Brill Publishers, of Leiden, Netherlands. Volume 2 of the series, the Checklist Part 1 (Microlepidoptera 1), was published in 1984. In 1989 will appear Volume 124, a complete annotated bibliography to literature on Neotropical butterflies, by Gerardo Lamas, Richard Robbins, and William D. Field. The second part of the Checklist is also expected in 1989.

For more information, subscription or donations, or to contribute news items, contact the Director and Editor, Dr. J. B. Heppner, Florida State Collection of Arthropods, P. O. Box 1269, Gainesville, Florida 32602, USA. Tel: (904) 372-3505.

WANTED: MONARCH BUTTERFLY DATA
BE ON THE LOOKOUT FOR TAGGED MONARCHS

Thousands of Monarch butterflies (Danaus plexippus) are being banded throughout North America. A small paper tag is placed on the right forewing of each insect. The white-colored tags are 6mm x 10mm in size and are highly conspicuous. Each tag bears an individual number as well as instructions to return the Monarch to the Natural History Museum of Los Angeles County.

Each fall all Monarchs west of the Great Plains migrate to a limited number of localities located along the sea coast of California to pass the winter months. The return migration inland takes place from January through March. The wintering colonies are threatened by urban development, uncontrolled tourism, and especially a lack of active management. Many sites have been destroyed in the last few years. You can help conserve the migratory phenomenon of the Monarch. Each banded butterfly that is recovered provides critical ecological data.

WANTED

BE ON THE LOOKOUT FOR MONARCH BUTTERFLIES WITH TAGS

If you find a DEAD banded Monarch send the entire specimen as well as where and when it was found to: Walter Sakai, Life Sciences, Santa Monica College, 1900 Pico Blvd., Santa Monica, California 90405 (telephone 213 450-5150) or Chris Nagano, Entomology Section, Natural History Museum of Los Angeles County, 900 Exposition Blvd., Los Angeles, California 90007 USA. If you find a LIVE banded Monarch record the tag number and send this information along with where and when it was observed to Walter Sakai or Chris Nagano. In either case, you will be notified of the location and the date the Monarch was tagged.

COLLECTING IN COSTA RICA

1989 LEPIDOPTERISTS PROGRAM IN COSTA RICA: Latest program offers 2 lodges, one located in lowland rainforest, one in high Montane rainforest. Three different, fully-inclusive programs available at low rates. Collectors, Photographers, Birdwatchers welcome. Collecting & export permits obtained for you. Over 1,500 species of butterflies, 9,000 species of moths, 850 species of birds are found in Costa Rica. Personal attention. Just over 2 hours from Miami, beautiful, natural, peaceful Costa Rica welcomes you. Write for new brochure to: TRANSWORLD BUTTERFLY COMPANYLS, Apartado 6951, San Jose, COSTA RICA, Central America. (Tel: 506-284768, 506-281573).

NEW OFFICERS FOR MONARCA, A. C.

With the retirement of Rodolfo Ogarrio as President of Monarca, A. C., after 10 years of service, there has been a reorganization of the structure of the Association in an attempt to strengthen it. The aim of the Association will continue to be conservationist actions in the Ecological Reserve of the Monarch butterfly in Mexico.

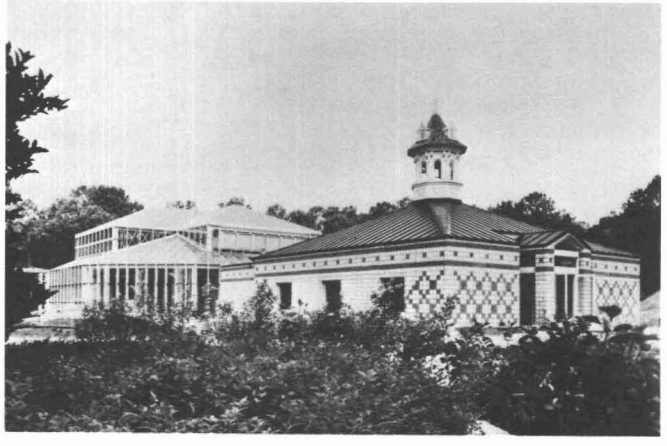
The former treasurer of Monarca, A. C., Carlos F. Gottfried, has been named the new President. He has been associated with the organization for the past 5 years. The General Director of the Association will be Ms. Maria Elena Camus de Castro, who for more than five years has been Secretary of the Board and Programs Coordinator. Rodolfo Ogarrio will continue collaborating with Monarca, A. C. as Honorary Councellor.

LASKY COLLECTION FOR SALE

The Lasky collection of Lepidoptera is for sale as an unbroken unit. The collection consists of over 7000 specimens in Riker mounts. It is a high quality, rather complete selection of North American and exotic butterflies and moths. Replete and complete with Ornithoptera (Allotei female), Morpho and Russian specimens, the collection also contains extinct and endangered species. The collection is housed in Los Angeles and the Laskys wish to sell the complete collection. The larger Riker mounts (230 of them) are easily transported. Detailed inventory will be provided to those seriously interested. Contact Les Stockton, Box 711, Santa Monica, California 90406, USA.

DAY BUTTERFLY CENTER OPENS

September 25, 1988 was a big day in the Callaway Gardens when the 7,000 square foot Day Butterfly Center opened. This glass-enclosed butterfly conservatory is the largest in North America. It will house more than 1,000 butterflies as well as hummingbirds and pheasants in an environment of lush tropical foliage featuring a 12 foot high waterfall and stream ending in a pool. Plants and butterflies native to countries in Central and South America, Malaysia and Taiwan will be used with over 115 different butterfly species featured in the conservatory and its environs. Surrounding the Day Butterfly Center are one and one-half acres of wildlife gardens designed to attract the native butterflies and birds. Seminars will be offered to home gardeners interested in planting their own "butterfly gardens." Admission to the Day Butterfly Center is included in the regular admission fee for entrance into Callaway Gardens, the 2,500 acre year-round botanical garden and resort located 70 miles south of Atlanta in Pine Mountain, Georgia, and is quite reasonable. Manager of the Day Butterfly Center is lepidopterist and Society member Frank C. Elia.



Exterior view of the largest glass-enclosed tropical butterfly conservatory in the Americas.

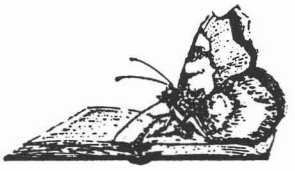
SPECIMEN TRADES WITH THE UKRAINE

Members of the Ukrainian Entomological Society are interested in the exchange of Lepidoptera specimens with collectors in other countries. If you are interested in such exchanges, please contact Dr. Victor N. Fursov, Institute of Zoology of Science Academy of Ukraine, 252601 Kiev, Lenina Str, 15, USSR.

EARTHWATCH NEWS

EARTHWATCH has announced plans to award grants to six research expeditions that will focus on various aspects of rainforest ecology around the world. About $200,000 will be spent on rainforest research and 210 volunteers will be recruited. One of the projects supported by EARTHWATCH involves Dr. Larry Orsak who will continue his research on the defense strategies used by certain butterflies in order to survive in a dynamic rainforest in Papua New Guinea.

Books



FACSIMILE REPRINT

The John Adams Comstock volume Butterflies of California was published by the author in 1927. Scientific Publishers expects to produce a facsimile reprint with an introduction and biography of Comstock by Dr. Thomas C. Emmel. This will include a Comstock bibliography and revised nomenclature. There are 334 pages plus 63 black and white plates and about 40 pages of introductory material in this reprint with an expected publication date of April 1989. Prepublication price, until Mar 31, 1989 will be $19.95 plus $1.50 for handling. The list price after that date will be $24.50. It can be ordered from Scientific Publishers, Order Dept., P.O. Box 15718, Gainesville, FL 32604.

FREE U.S. GOVERNMENT BOOKS CATALOG

You can receive a FREE copy of the U.S. GOVERNMENT BOOKS CATALOG of hundreds of useful and popular books and subscriptions published by the Government. The CATALOG lists Government books on research, census information, business, medicine, law and regulations, statistics, foreign trade, manufacturing, science, and much more. These books are the results of millions of dollars worth of Government research and statistical analysis and are available for sale by the Government.

The illustrated CATALOG includes a section on new publications, a listing of locations and phone numbers of U.S. Government Bookstores located throughout the country, plus a convenient order form.

To get your free copy, write to: BOOKS CATALOG, U.S. Government Printing Office, Stop: SM, Washington, D.C. 20401. Please mention that you saw it in the NEWS.

INTERNATIONAL ENTOMOLOGY RESOURCE GUIDE

The YOUNG ENTOMOLOGISTS' SOCIETY has sponsored the publication of the second edition of the "Y.E.S. International Entomology Resource Guide." This 75 page Guide is for sale for US $7.50. It contains listings of 450 businesses and organizations offering entomology equipment, supplies, services, preserved specimens, live arthropods, books and publications, audio-visuals, educational materials, gift and novelty items, insect zoos and butterfly houses, and entomological organizations. To obtain this guide send a check or money order for $7.50 to the Young Entomologists' Society, Dept. of Entomology, Michigan State University, East Lansing, MI 48824-1115, USA.

Research Notices

● WANTED: Living pupae of Papilio eurymedon for 1989 eclosion; and specific information about particularly promising localities for ovipositing females of P. eurymedon for the 1989 season. For continuing studies of the genetics of behavioral differences between P. glaucus and P. eurymedon. Costs and shipping expenses reimbursed. David A. West, Biology Dept., V.P.I. and S.U., Blacksburg, VA 24061.

New Members

BRAY, TANYA E. (Ms.): 9708 Grover, Omaha, NE 68124.
FIORINO, RICHARD: 32 Manor Drive, Red Bank, NJ 07701.
KEYTER, RICHARD A.: 25 Lady Mary View, Hickleton, Doncaster, South Yorkshire DN5 7BH, ENGLAND.
LITTLE, MYRON: 690 Lawrence Street, Eugene, OR 97401.
MORTELL, EDWARD J.: V.A. Medical Center, Clarksburg, WV 26301.
NONAKA, MASARU: 2-7-20 A-14, Wakunami, Kanazawa, 920 JAPAN.
PORTER, ADAM H.: Dept. of Zoology, Storer Hall, University of California, Davis, CA 95616-5224.

Address Changes

BEEBE, WARDEN W.: 2690 SW 24 Terrace, #2, Miami, FL 33145.
KRAUSS, R. W. (BOB): 701 Clayton Drive, Crescent City, CA 95531.
KOEHN, LEROY C.: CHANGE street number from 2848 to 2946; home phone unchanged.
MACK, RONALD G., Jr.: 28 Brigham Hill Road, Grafton, MA 01519.
PAVULAAN, HARRY: P.O. Box 2494, Rockville, MD 20852.

The Market Place

Buy • Sell • Exchange • Wants

BUY – SELL – EXCHANGE: POLICY STATEMENT ...

At the Executive Council meeting in Fairbanks in June 1979 it was decided that the policy regarding placement of members' notices in the NEWS should be determined by the Editor, in keeping with the purposes of the Society as outlined in the Constitution, i.e.: "... to promote the science of lepidopterology; ... to facilitate the exchange of specimens and ideas by both the professional worker and the amateur in the field, ..." (Article II). Commerce in lepidoptera is not a stated objective.

Therefore, it will be our policy to print notices which seem to meet the above criteria, just as in the past, without quoting prices (except for those of publications or lists). Notices which seem by their listing of offerta/desiderata, or by an organizational title, to be commercial in nature, will be entered in a separate section as "commercial notices," listing only name, address, and a brief indication as to material offered/desired. No mention may be made in these notices of any species on any threatened or endangered species list. This will include all Ornithopterans now and for the foreseeable future.

Only members in good standing may place ads. Ads will be printed only once unless entry in two (maximum) successive issues is requested. A maximum of 100 words is allowed. S.A.S.E. 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.

FOR SALE: Papilio troilus troilus pupae. Also a few Ceratomia undulosa pupae, Ex ♀ form engeli. Frank R. Bodnar, 1201 Ridge Rd, Apollo, PA 15613.

FOR SALE: IWASE No. 1-4, 1983-1987. Descriptions of new species, new subspecies and rare ones of South-east Asian Butterflies, in English and Japanese. Send ¥7,800 to cover publications and mailing costs. Hiroto Hanafusa, 5-12-20-703, Higashimikuni, Yodogawaku, Osaka, 532, Japan.

FOR SALE: Cocoons of Automeris zephyris. I will be in Mexico from October through April. If you wish to correspond with me write to: Jim Coleman, %Teta Kaki Trailer Park, P.O. Box 671, Guaymas, Son. Mexico. I hope to have ova of A. zephyria and A. io neomexicana in late April and May. S.A.S.E. Please.

WANTED: Cocoons or pupae of A. polyphemus oculea, E. oslari, Automeris zephyria, Eumorpha vitis, E. labruscae, E. fasciatus, E. typhon and any other Saturnidae or Sphingidae from the southern U.S.A., the Neotropics and East, West and Central Africa. Will buy or exchange against rare livestock of Saturnidae from South Africa and Madagascar. Any offers are welcomed. Please contact Helmut Probst, Augsburger Str. 7, D-8939 Tuerkheim, West Germany.

WANTED: Companion for butterflying trips. I have had thirteen trips throughout Asia, the Pacific, Central and South America. In March-April 1989 I am going to Irian Jaya and in September-October to Guyane. I am fit and used to hardships and usually go for periods of four to six weeks. Write to R. T. Shannon, 24 Lauderdale Road, Birkdale, Auckland, NEW ZEALAND.

FOR SALE OR EXCHANGE: Archon apollinus and other butterflies from Turkey. I am interested primarily in South American tropical Rhopalocera. For detailed information, please send self-addressed envelope to Dr Oktay Onaran, Havaci Muzaffer Erdonmez Sk, Basak Apt. No 12/5 34800, Yesilkoy, Istanbul, Turkey.

WANTED: Pupae of Eacles imperialis, Citheronia regalis, Citheronia splendens and Citheronia brissoti plus cocoons of Hylaphora eurylis, gloveri and columbia, Actias selene, Actias artemis, Atticus atlas, Antheraea species excluding polyphemus, Automeris species and Callosamia angulifera. Contact Ed Komperda, 58 Birch Lane, Massapequa Park, New York 11762. Phone (516) 795-3883 after 4:00 P.M.

WANTED TO PURCHASE: AGRIAS Key Rarities! Will pay well, depending on specimen and condition. Send for want list with particulars. Serious replies only, please. Robert E. Aronheim, 3442 Lyrac St., Oakton, VA 22124, USA.

FOR SALE: Overwintering pupae of P. glaucus, P. troilus, B. philenor, P. polyxenes asterius, E. marcellus. Shipment in season also possible for all of the above plus certain Nymphalids. FOR TRADE: Eastern US butterflies and moths (Saturniidae, Sphingidae, Catocala, Arctiidae) for western material. All material A+ with full data. Mecky Furr, 7925 Cross Pike, Germantown, TN 38138.

WANTED: Dealers and Collectors who have "Biological Labeled" NORTH AMERICAN Butterfly Specimens to Sell. (No Skippers or Moths.) Have Specific Want or Interest Lists to send to those responding. Response from individual collectors is desired as much as larger dealers. Need Price Lists and/or Catalogs. Specimens will be used to increase a collection of North American Butterflies. No Endangered or Threatened Specimens. Contact David V. Holmquist, 8318 Doyle Spring Rd #12, Little Rock, AR 72209-5361.

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

WANTED: Any of the following books – Colorado Butterflies by Brown, Eff and Rotger; Evolution of Skipper Butterflies in Genus Erynnis by Burns; Butterflies by Macy and Shepard; Checklist of the Lepidoptera of Canada and the U.S.A. (Parts I and II) by McDunnough; The Monarch Butterfly by Urquhart. State condition and price. Vincent P. Lucas, 800 Brick Mill Run, #301, Westlake, Ohio 44145.

FOR SALE OR EXCHANGE: 1989 ova of Automeris io, Hyalophora cecropia, Antheraea polyphemus, Actias luna, Samia cynthia, Pachysphinx modesta, Callosamia promethea, C. angulifera, Eacles imperalis, and a few others. Am interested in trading for other Saturnid ova or large beetles like Dynastes tityus and Lucanus elephus. SASE to Jeff Frey, 364 Oaklyn Rd., Lebanon, PA 17042, USA. Phone (717) 272-6597.

FOR SALE: PACKARD, A. S. 1895. Monograph of the Bombycine moths of America North of Mexico. Part I, family Notodontidae. Leather bound congressional volume. Good condition but the leather is in need of restoration. Send inquiries along with SASE to Steve Stone, 18102 East Oxford Drive, Aurora, Colorado 80013. Phone (303) 690-8649.

FOR SALE OR TRADE: Papilio kahli, A 1 condition. WANTED: (Sesiidae) Melittia satyriniformis, snowii, grandis, Proserpinus clarkiae, flavofasciata, Euproserpinus wiesti, euterpe, phaeton. John Polusny, 641 Martin Ave. E, Winnipeg, Manitoba R2L 0Z7, Canada.

WANTED: Contact with breeders of tropical Saturniidae, particularly Argema mittrei and Copiopteryx sp. – I am interested in purchasing cocoons and/or ova. Also want to purchase Moths and How to Rear Them by P. Villiard and Silkmoth Rearers Handbook by W. J. B. Crotch. Ronald Mack, Jr., 28 Brigham Hill Rd., Grafton, Massachusetts, 01519, USA.

FOR SALE: A limited number of Parnassius phoebus golovinus ♂♀, in A+ perfect condition, collected by myself on the Seward Peninsula of Alaska in 1988. Also specimens of the same in A, A-, and B quality at reduced prices. Contact Tom W. Kral, 6600 N. Galaxy Rd., Tucson, AZ 85741.

WANTED: Seeds of, *Ferula communis, Seseli dioicum, Montanum, P. heterophylla,* and *Angelica archangelica.* ("These are in the *UMBELLIFERAE FAMILY*"). Send amounts & prices of the above, to RANDY ROBINETTE, 4800 State Rt. 5, Ashland, KY 41101, U.S.A. or call – (606) 928-3401 after 4:00 pm E.S.T.

WANTED: Contact with collectors interested in exchanging moths (common species) from central and southern New England. Interested in all families, esp. Noctuidae (spread or papered). Will provide a list of same from my area, and save your needs from next summer's catch. Warren J. Kiel, 6 Blackstone St., Whitefield, NH 03598.

FOR SALE: Caterpillars and Their Moths by I. M. Eliot & C. G. Soule, Century Co., NY, 1902, 302 pp, first edition. Cover faded, spine with slight wear, very minor erasable pencilled annotations; a good copy of this rare classic. Best offer. Please include SASE. Robert Dirig, P.O. Box 891, Ithaca, NY 14851.

MEMBERS' COMMERCIAL NOTICES

JUANA CHAVES de VELA, Sven Erikson 294, Tingo Maria, PERU. FOR SALE: Butterflies from Peru with collection data. Price list $1.00.

FLORA & FAUNA BOOKS, P.O. Box 15718, Gainesville, FL 32604, USA. New books at 5% below list price routinely. Current sale items: Comstock, Butterflies of California (Reprint due winter 1989, with introd. by T. C. Emmel), prepublication sale at $19.95 (B&W plates); Lepidopterorum Catalogus, Fasc. 118, Noctuidae (by R. Poole), at prepublication price of $192.50 (3 parts, due winter 1989); Gerberg & Arnett, Butterflies of Florida, $8.75 (due to publishers delay, expected in Dec.); Schwartz, Butterflies of Hispaniola, $32.50 (due Dec or Jan); D'Abrera, Sphingidae Mundi, $169.50; D'Abrera, Butterflies of Neotropical Region, 4 vol., $595.00. Prepayment from individuals (inst. 30 days); postage/handling $1 plus 50¢/book domestic or $1.50/book foreign (free for orders over $100). Sale expires Feb. 15, 1989.

APOLLO BOOKS, LUNDBYVEJ 36, DK-5700 SVENDBORG, DENMARK. The Lepidopterists' bookseller. Our entomological catalogue #7 is now available. It presents the largest selection of books on lepidoptera available on the European Continent. As for a free copy. BUTTERFLIES OF THE WORLD, NEOTROPICAL REGION VOLS. 4 AND 5. DKK 1,225 each. NOCTUIDAE EUROPAEA VOLS. 1-12, Vol. 1 DKK 800. SPHINGIDAE MUNDI – HAWK MOTHS OF THE WORLD, DKK 1,267. MONOGRAPHS ON AUSTRALIAN LEPIDOPTERA, ed. by Ebbe Nielsen. Ask for a free brochure on this important series. BUTTERFLIES OF THE HIMALAYA, DKK 698. BUTTERFLIES OF AFGHANISTAN (text in Japanese) DKK 1,120. PARNASSINAE OF THE WORLD. To be published in 5 volumes 1989-1991. Upon request we will send further information as soon as such is available.

TRANSWORLD BUTTERFLY COLS, Apartado 6951, San Jose, COSTA RICA, C. America. LATEST NEW CATALOGUE includes species from South America, Europe, Far East etc. Special Morpho listing. Collections. Books, Entomological pins, Moth lights. CATALOGUE $1 (or $6 for year's monthly lists by airmail). 1989 LEPIDOPTERISTS PROGRAM IN COSTA RICA: Now 2 different locations, Lowland & High Montane rainforest. Request brochure.

THOMAS GREAGER, R.D. #6 Box 56-B, Greensburg, Pennsylvania 15601, USA. FOR SALE: Worldwide butterflies in all families; also moths, beetles, and other insects. Finest quality papered specimens with complete data. Satisfaction guaranteed. Good prices. ALSO FOR SALE: Insect pins, and the books "The Illustrated Encyclopedia of the Butterfly World" by Smart, and "Butterflies of the World" by Lewis. United States residents send SASE to begin free price list subscription. Foreign residents send US$5.00 for price list subscription.

LONDON PUPAE SUPPLIES, 8, Glenville Ave, Enfield, Middlesex EN2 0ER, ENGLAND. Tel; 01 367 7940. The world's premier suppliers of live lepidoptera PUPAE to BUTTERFLY EXHIBITIONS, RESEARCH INSTITUTIONS AND HOBBYIST BREEDERS throughout the world.

KEN THORNE, P.O. Box 684, Lambeth, Ontario N0L 1S0, CANADA. Telephone (519) 652-6696. FOR SALE: Worldwide selection of Lepidoptera and Coleoptera. High quality material. Specializing in world Papilio, Morpho, Lycaenidae and North American species. Send $1.00 for lists.

JOHN TROTTER, 11 Laurel Way, London N20 8HR, United Kingdom. Specializes in antique and out of print entomology books. Lists issued. Books purchased. FOR SALE: Ova of Papilons, Polytes, Demoleus, var. Saturniidae. Send for list. WANTED: American Sphingidae and butterflies.

MIGUEL SERRANO, 6823 Rosemary Drive, Tampa, Florida 33625 USA. Specializing in tropical American butterflies, including pairs of many species bred for us in Central America. Send for our list of material (including rarities) covering Papilio, Morpho, Brassolidae, Anaea, Heliconius, etc. from El Salvador, Peru, Colombia, Costa Rica and many other countries. All families represented.

CHANG PI-TZU, P.O. Box 873, Taipei, Taiwan 10099, Republic of China. FOR SALE: More than 100 different dried Formosan butterflies in large quantity; dried Formosan moths including Saturniidae; dried Formosan rare female butterfly specimens; sexual mosaics of Formosan Lepidoptera, including one rare gynandromorpho of Actias sinensis, and dried various Formosan beetles and other insect specimens. Please send $1.00 in cash for price lists and information.

MICHAEL E. SNOW, COSTA RICA RAINFOREST, ACCOMMODATIONS, Apartado 73, Siquirres, Costa Rica. You can collect and photograph butterflies in Costa Rica's Atlantic Rainforest (60-550 meters = 200-1800 feet elevation) with all the comforts of a private home. Weekly rates are available for single, or double room. Rates include meals, a guide and transport to and from Siquirres. Expeditions to the Tortuguera Canal (for Morphos) and to other areas are available at additional cost. Excellent conditions for attracting nocturnal species. Write for a free brochure and check list of Papilionidae, Pieridae and Nymphalidae, plus information about costs.

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"Forthcoming Meetings"

INTERNATIONAL CONGRESS "FUTURE OF BUTTERFLIES IN EUROPE: Strategies for Survival"

An international congress on the conservation of butterflies in Europe will be held in Wageningen, The Netherlands, from 12 to 15 April 1989. The meeting will review the current knowledge on butterflies in order to set up a working programme for their conservation in Europe. The planned themes are: The status of butterflies in Europe; Mapping; Population dynamics; Isolation; Monitoring; Management policy; Perspectives in conservation.

The congress is being organized by the Department of Nature Conservation of the Wageningen Agricultural University, in cooperation with the Dutch Butterfly Foundation and the Netherlands Entomological Society. Requests for further details should be directed to the Congress Building, International Agricultural Centre, P.O. Box 88, 6700 AB Wageningen, The Netherlands.

THE LEPIDOPTERISTS' SOCIETY
40th Annual Meeting
36th Pacific Slope Meeting
The University of New Mexico
Albuquerque, New Mexico 87131
Thursday, 27 July to Sunday, 30 July 1989

Richard Holland, in cooperation with the University of New Mexico Biology Department, will host the 40th annual meeting of the Society in Albuquerque. This will be a combined National and Pacific Slope Section occasion. Featured events at the meeting will be:

- Open house to the Holland Collection of New Mexican Lepidoptera, including 20,000+ specimens of butterflies and moths.
- Symposium on the Lepidoptera of the Mexican state of Sonora.
- Field trips to collecting areas in the mountains around Albuquerque.
- Opportunities to visit the Hispanic villages in northern New Mexico which remain largely culturally unchanged since Spanish colonial days before Mexican independence.
- Access to the Hispanic and Navajo weavers and potters.
- A presentation by Gloria Garcia of Santa Clara Pueblo on butterfly motifs in contemporary Indian pottery.
- Access to the Maxwell Museum of Anthropology and the New Mexico Museum of Natural History.
- Annual banquet and awards presentation.

ACCOMMODATIONS

Hokona Hall (Tewa for Virgin Butterfly) student residence at the University of New Mexico will have rooms (single or double occupancy) available for Society members and their families. These are simple accommodations with community bathrooms, at $13 per day single occupancy, or $10 per person per day double occupancy during the meeting. It will probably be possible to extend the occupancy before or after the meeting. Breakfast and lunch will be catered at a daily cost of $6.65, and this fee will be required of all staying at Hokona Hall. Hokona Hall is approximately one block from the meeting rooms. Cafeteria service is not available at the UNM on weekends.

Hotels and motels are located within two miles of the UNM, and rates begin around $30 per day. Campgrounds and RV parks are about 10 miles distant.

Information on all accommodations will be included in the registration packets, as will be ideas for dining and sightseeing.

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 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 _____ Native Am. Culture _____

Other (please describe) _____

Comments: _____

Mail to: Richard Holland, 1625 Roma NE, Albuquerque, New Mexico 87106, USA. Phone: (505) 842-0126.

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

J. Donald Eff 682
445 Theresa Drive
Fairview Estates
Boulder, CO 80303

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

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INFORMATION ABOUT THE SOCIETY.....

Membership in the Lepidopterists' Society is open to all persons interested in any aspect of Lepidopterology. Prospective members should send the TREASURER, James P. Tuttle, 3838 Fernleigh Ave, Troy, Michigan 48083, phone (313) 689-6687, 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, USA.

Information on Membership and other aspects of the Society must be obtained from the SECRETARY, Dr. Richard A. Arnold, 104 Mountain View Court, 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. Boyce Drummond, EDITOR, JOURNAL of the Lepidopterists' Society, Natural Perspectives, P.O. Box 9061, Woodland Park, Colorado 80866, 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, $12 cloth, $7 paper; non-members, $19 cloth, $10.50 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, $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.