

NGNU

of the LEPIDOPTERISTS' SOCIETY

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Presidential Profile

Jacqueline Y. Miller, of the Allyn Museum of Entomology, Florida Museum of Natural History, Sarasota, Florida, currently serves as the President of the Lepidopterists' Society. Born in Joliet, Illinois, she developed an early interest in natural history and insects while growing up in Washington County in southwestern Pennsylvania. Springs and summers were spent wandering through the woods observing birds and butterflies, making insect collections, and identifying various plants in the area. Her preference for the outdoors and natural history continued into college, and she received a B.Sc. in biology from the University of Pittsburgh in 1965. She also worked in the Department of Biology as Curator of <u>Drosophila</u> in association with geneticists, Frederick Gottlieb and Eliot Spiess. It was during this period that she met Richard Fox and Harry Clench of the Carnegie Museum and developed an



interest in taxonomy and systematics, as well as insect physiology. While holding various research, teaching and curatorial appointments at a number of colleges and universities in the Washington, D.C. area, she completed an M.S. degree in Biology (Entomology) at the Catholic University of America in 1968. Later that year she married Lee D. Miller and accepted the position of a curatorial assistant with Arthur C. Allyn in Chicago, Illinois. The Allyn Museum collections were subsequently transported to Sarasota, Florida in the fall of 1969 and moved to their present location on Bay Shore Road in 1973. In 1982, while maintaining her position at the Allyn Museum, Jacqueline continued graduate work in the Department of Zoology, University of Florida. She was privileged to work with Thomas C. Emmel, Lincoln Brower, and Dale Habeck (Entomology) and completed a Ph.D. degree in 1986. She is currently the Assistant Curator, Allyn Museum of Entomology/Florida Museum of Natural History and holds an appointment as Affiliate Assistant Professor, Department of Zoology, University of Florida, Gainesville.

Jackie's career has been shaped by a series of fortuitous events rather than by design. Following the completion of her undergraduate degree, she found the physiological study of insects and other invertebrates intriguing. After accepting a graduate appointment in the Department of Pharmacology at the University of Pittsburgh Medical School, she found that she really missed the field work. Quickly realizing this mistake, she requested reappointment to the Department of Biology at Catholic University. It was also about this time that Edward Keller, a geneticist at the University of Maryland, was looking for an experienced Curator of Drosophila and someone to coordinate experiments for the first Biosatellite Project. Jackie gladly accepted.

The curatorial position with Arthur Allyn opened not only new avenues for research and field work but presented both Jackie and Lee with a unique opportunity to build and shape an international lepidopteran research collection. The seventies brought the initiation of the <u>Bulletin of the Allyn</u> <u>Museum</u>, the establishment of the Karl Jordan Medal through the Lepidopterists' Society, and saw unprecedented collection growth, increasing the holdings to almost one million specimens today. In 1981, in order to insure the continuity of the collections as a research resource, Dr. Allyn donated the Museum collections and assets to the University of Florida Foundation Inc. with corollary agreements with the Florida Museum of Natural History and the University of Florida.

Dr. Miller is the author or co-author of more than 65 articles on the Lepidoptera, principally butterflies. Her primary area of research has focused on the taxonomy, systematics, and zoogeography of neotropical genera, especially those of the Hesperiidae and Castniidae. Other research topics include the study of fossil butterflies and comparison to extant fauna. Jackie's present field and research efforts are directed toward revisionary studies of

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individual genera of the neotropical Castniidae as well as a book on the Butterflies of the West Indies. The latter is a collaborative effort with Lee D. Miller and David Spencer Smith, Hope Museum Collections, Oxford University, England. Jackie's service to the Lepidopterists' Society

Jackie's service to the Lepidopterists' Society includes: Assistant Secretary, 1971-1976; Cohost, Lepidopterists' Society Meetings, 1973; Member-at-Large 1977-80; Vice-President 1987-88, Chairman, Committee for the Consensus on Common Names 1984-present; Chairman, the Committee for Future Meeting Sites, 1986present. Dr. Miller is a member of a number of scientific societies, including a Fellow, Royal Entomological Society London, New York Entomological Society, Sigma Xi, and Xerces Society. She is the Associate Editor of the <u>Bulletin</u> of the Allyn Museum and a Research Associate, Section of Invertebrate Zoology, Carnegie Museum of Natural History. Since 1979, she has collaborated with the Florida Federation of Garden Clubs on their butterfly gardening program and has been actively working with other private, state and federal conservation organizations to protect critical habitats.

Other activities include fishing and maintaining a greenhouse with a moderate sized orchid collection. Jackie is an accredited judge with the American Orchid Society, and currently serves along with her husband, Lee, as the Cocoordinators for Judges' Training, Florida North Central Region.

Dr. Miller feels that the Lepidopterists' Society is a unique organization in the respect that it encompasses both professional and amateur lepidopterists. The Society provides open forum and a special opportunity for members to share knowledge and exchange ideas toward one common goal, the study of the Lepidoptera.



NEW MOTH RECORDS FOR UTAH (SATURNIIDAE, SPHINGIDAE)

During correspondence with Wilford J. Hanson, Curator of Entomology, Utah State University, Logan, Utah; I received data on a species of Saturniid and two species of Sphingid moths that represent state records for Utah and significant range extensions based on the information available to me. Since these groups are currently of interest to several workers, I wanted to document these records. I also want to acknowledge the exceptional help provided by Will Hanson of Utah State University. Will has sent all specimens to me for review and verification of species and they have been returned to the USU collection.

<u>Automeris io neomexicana</u>: this species (and subspecies) was previously recorded from central New Mexico (Jemex Mts., Sandia Mts.) and north into the Front Range of Colorado as <u>A. io io</u>. The USU collection has two male specimens that fall into the <u>neomexicana</u> phenotype from Utah, San Juan Co., Natural Bridges Nat. Mon., collected at restroom lights in mid-July. Will Hanson was on the field trip where these were collected and confirms the data. This is a state record for Utah and a fairly significant range extension to the northwest.

Euproserpinus wiesti: this rare day flying Sphingid has been found sparingly throughout the eastern Plains region of Colorado and in a few localities in north-central and northeastern New Mexico. A specimen in the USU collection is labeled Utah, Wayne Co. (actually should be in Kane Co.), Bullfrog Campground, 21 April 1983. This locality is in the Glen Canyon Recreation Area in extreme northeastern Kane Co. This is also a state record for Utah and a very significant range extension from the distribution listed above. It also opens up the possibility of finding this desirable moth in southwestern Colorado, northeastern Arizona, and northwestern New Mexico.

Hyles gallii: this specimen previously has been recorded from northwestern Wyoming and northcentral Colorado. A specimen in the USU collection is labelled Utah, Daggett Co., Summit Springs Ranger Station, 7 Aug 1965. This locality is found south of Manila, Utah and west of the Flaming Gorge Nat. Rec. Area.

These records all represent new state records for Utah and range extensions for the species listed. Records such as these should certainly encourage the collecting of sparsely sampled regions of the west and indicate the surprises that await the enterprising collector.

Michael J. Smith Citrus Heights, CA

IDALIA SOCIETY OF MID-AMERICAN LEPIDOPTERISTS SOARING

The first formal meeting of the Idalia Society of Mid-American Lepidopterists took off soaring on December 2, 1989 at the home of Suzette Slocumb with a delicious potluck supper and a fascinating color slide program on "Collecting in Mexico" presented by James Adams, a soon to be Ph.D. from the Department of Systematics and Ecology at the University of Kansas. Several Missouri butterflies and moths and cocoons were auctioned off to help build up the treasury. The evening's door prize was won by Steve Kinder. During the business meeting the officers were elected, a logo considered and future meeting dates determined. The first President is Richard Heitzman of Independence, Missouri, Secretary is Suzette Slocumb and Treasurer is Steve Kinder, both of Kansas City, Missouri. Dues were set at \$5.00 per family unit or \$2.00 for children under 16 whose families are not members. It was decided to meet 3 times a year on the first Saturdays of March, September and December and to have one organized summer field trip. The meetings will be held regularly at the Camp Lake of the Woods Lodge in Swope Park, Kansas City, Missouri. About two dozen members attended this first meeting with persons there from Iowa, Kansas, Missouri and Nebraska. Membership is open to all interested lepidopterists. Dues can be sent to Treasurer Steve Kinder, 11123 McGee, Kansas City, Missouri 64114.

ARTISTIC EXPRESSION IN THE <u>JOURNAL</u>: WE WANT YOUR DRAWINGS AND PHOTOGRAPHS

Our Society is fortunate to have many members with superb artistic skills. This is a reminder to all of our artists and photographers that the <u>JOURNAL</u> welcomes drawings and photographs for two recently established submission categories [see <u>ANNOUNCEMENT</u>. J. Lepid. Soc. 42(3): 203]. These submission categories are: COVER ILLUSTRATIONS and FEATURE PHOTOGRAPHS. Submissions in both categories may deal with any aspect of Lepidoptera study but must be accompanied by brief captions that include scientific names.

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

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

Submissions in both of these artistic categories should be sent to the <u>JOURNAL</u> editor, Dr. Boyce A. Drummond, Natural Perspectives, P.O. Box 9061, Woodland Park, CO 80866-9061 USA.

BUTTERFLY WORLD TAKES OFF FLYING

In only 18 months since BUTTERFLY WORLD opened its doors to the public in Coconut Creek in south Florida, it has introduced hundreds of thousands of visitors to the wonders of Lepidoptera and the natural world around them. Butterfly World became the first butterfly house in the United States to open, on March 31, 1988. The \$1.2 million facility was built by partners Ronald Boender of Ft. Lauderdale and Clive P. Farrell of England, at no cost to local taxpayers, on 2.8 acres of leased county-owned land. It provides visitors with a beautifully-landscaped, unique scientific and educational showplace that represents a means to excite more people about Lepidoptera than perhaps any means yet devised. At the formal grand opening on April 21, 1988, Clive Farrell acclaimed Butterfly World to be the largest such facility in the world. Farrell, who opened the first public butterfly house in London, England, in July 1981, said that all four of his major butterfly exhibit facilities in the United Kingdom (see News of the Lepidopterists' Society, No. 3, 1987) could fit inside the single tropical aviary of the new Butterfly World enterprise!

The new Butterfly World facilities were conceived and designed in consultation with famed professional designer James Gardner of London and constructed by Ronald Boender, a member of the Lepidopterists' Society and owner of the former butterfly rearing firm, MetaScience, Inc., in Ft. Lauderdale (since merged with the new Butterfly World). Located in Tradewinds Park, 10 miles north of Ft. Lauderdale, Butterfly World may be reached easily via the Florida Turnpike or Interstate 95, at its address of 3600 W. Sample Road, Coconut Creek, Florida 33073. Here, the southern Florida climate in this subtropical setting is nearly perfect for both temperate and tropical butterflies to be "outside" on live exhibition year-round. Perhaps the best way to appreciate the magnitude of this enterprise, and the fascination it provides for the visitor, is to take off on a typical walk through all the facilities, in the order that you would normally encounter and experience them.

The tour starts at the **Laboratory**, or butterfly farming, portion of the Butterfly World facility, where visitors can look through a one-way glass wall to watch several of the two dozen employees feeding and caring for the larvae and pupae of butterflies that are in culture. In the Laboratory, larvae are reared in individual lucite boxes, which provide an easy way of limiting the spread of disease or other problems usually associated with mass culturing of Lepidoptera. Excess production of pupae of any particular species can be distributed to other butterfly houses that have opened in the U.S. since Butterfly World's opening, or sent to Europe for release in stocking butterfly houses there.

Behind the Laboratory, out of sight of the usual visitor but open by advance arrangement to lepidopterists with special interests in rearing, are the **Rearing Facilities**. Here are the world's most extensive, and indeed finest, butterflyrearing facilities available today. In addition to large, screened rearing enclosures and air-conditioned rooms, more than three dozen separate, specially-screened walk-in enclosures, each with its own water supply, benches, and other support facilities, are used for individually rearing tropical species in large numbers but in completely enclosed conditions (with double doors, etc.) which prevent accidental escapes. Hundreds of potted food plants are being cultured in an adjacent **Nursery** and can be moved in and out of these cages daily, to ensure that larvae have a healthy, continuous supply of food. This large-scale production of pupae and adults of scores of butterfly species continues year-round.

But the typical visitors are anxious to see living

butterflies in quantity, and they soon walk rapidly onward from the Laboratory viewing section through an airlock, where they enter into the first of the huge flight chambers or aviaries. The air jets above the door prevent the escape of the adult butterflies inside this first North American flight enclosure, filled with species native to the United States. This huge, screened aviary includes dozens of North American species, which fly about the flower-bordered paths in great numbers. Many eastern species of U.S. swallowtails may be observed busily courting in the open spaces over the paths. Mating pairs hang on the vegetation or fly cumbersomely about, and females can be seen laying eggs on some of the larval food plants that have been brought in to allow the temporary demonstration of oviposition behavior. (No butterfly species are reared in the flight enclosures, and larval food plants are normally not brought into the aviaries. Only adult nectar sources and pollen sources are provided in the aviaries. Among other considerations, this prevents visitors from casually removing eggs, larvae, or pupae from the enclosure to the outside.) A small pond and other landscaping attractions entice the visitor to stay awhile, perhaps sitting on one of the park benches placed here and there, to watch the endlessly entertaining activities of the abundant butterflies.

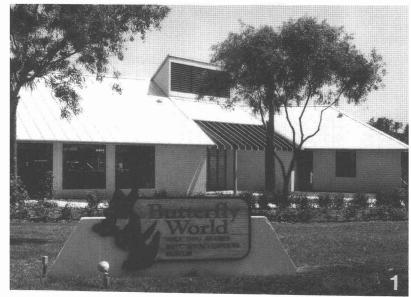
The spacious **Basket Walk** — a broad corridor lined with hanging baskets of many flowering plants — leads to the next aviary. On the way through this corridor, one can enjoy looking closely at insectivorous plants on display, glass observation boxes with pupae and newly emerging adults, and other special temporarily-available, close-up exhibits of the living life history stages of exotic butterflies and moths.

One now emerges into a huge 8,000-square-foot, screened, circular **Tropical Rain Forest avlary** which houses at least 2,000 flying butterflies from all over the world. In fact, the total screened area between the North American house and the Tropical Rain Forest house represents some 240,000 cubic feet of space! These two enclosures provide a marvelous open-air environment for the free-flying butterflies, and the enchantment of the visitors wandering in the midst of lush tropical plantings is plain to see. This large-domed Tropical Rain Forest enclosure is over 30 feet high, with a central waterfall lined with picturesque rocks and a stream emerging from it which tumbles down into a quarter-acre lake. Periodic mists squirt briefly from specially constructed sprinklers, simulating rain and maintaining humidity.

As many as 80 butterfly species from South and Central America, the Philippines, Malaysia, Taiwan, and other Asian areas may be on exhibit here in the Tropical Rain Forest aviary at any one time. Some of the visitor favorites include the owl butterflies (genus Caligo), which often may be found at eye-level for even the youngest child when they rest in semi-darkness during mid-day in the "rock-cave, which leads below the central mountain area and the origin of the waterfall. A trail winds up the hill to the top, where one can look out over the entire aviary and watch longwinged heliconian butterflies slowly flying from flower to flower. Again, the remarkable tameness and completely natural flight and courtship behavior of most species is enchanting. Here and there, feeder platforms of rotting fruit are placed close to the visitor paths to attract some of the larger nymphalid species, such as Hamadryas, Morpho, Prepona, and other feasting nymphalids. Those lepidopterists familiar with wild South and Central American subspecies of Heliconius erato and H. melpomene will be astonished to see wonderfully colored, "new' genetic forms flying in this Tropical Rain Forest enclosure the result of advanced breeding experiments by Boender in his laboratory area.

Leaving the Tropical Rain Forest through another airlock doorway, one emerges into an extensive **outdoor Butterfly Garden**, planted with subtropical plants especially attractive as nectar sources. Hundreds of native south Florida butterflies, especially <u>Phoebis</u> species and swallowtails, swarm daily around the <u>Pentas</u>, <u>Asclepias</u>, <u>Lantana</u>, and other attractant plants. One can also wander off here into the **Vinery**, a series of trellises where an extraordinary collection of over 100 species of passionflower vines (*Passiflora*) are cultivated, along with

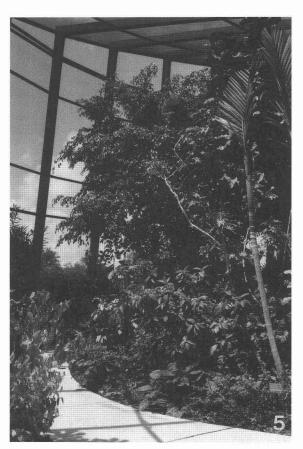
PHOTOGRAPHS FROM BUTTERFLY











WORLD, COCONUT CREEK, FLORIDA



PHOTO CAPTIONS: Scenes along a tour through BUTTERFLY WORLD at Coconut Creek, Florida: (1) The entrance building, containing the lobby, gift shop, and snack bar; (2) Ron Boender, founder and director of Butterfly World, at work in the Laboratory (3) The Tropical Rain Forest enclosure, largest of the outdoor aviaries for free-flying section, sorting monarch pupae; butterflies, as photographed prior to the 1988 opening before landscaping was completed; (4) One of the double-doored, airlock entrances to the Tropical Rain Forest aviary that allows visitors to pass easily in and out without escape of the several thousand butterflies inside; (5) Inside the Tropical Rain Forest, there are no distracting central supports and the tropical vegetation towers towards the roof more than 30 feet above the visitor, yet the butterflies stay principally near the paths where abundant flowers and fruits attract them; (6) A bridge crosses the stream tumbling down the mountainside inside the Tropical Rain Forest aviary, and children are fascinating by the dancing butterflies a few inches away from them over the water; (7) Well-informed Butterfly World staff (including some who are members of the Lepidopterists' Society) are on hand in every part of the facility to answer visitor questions and show the most recently emerged adults from the Laboratory as they are released into the public aviaries; (8) The Butterfly Gardening Plant Shop offers some 2,000 potted butterfly foodplants and nectar souces for sale, and is an exceptionally popular part of the Butterfly World facility; (9) A Hypolimnas nymphalid (11) A Heliconius melpomene hybrid from two South American from Asia; (10) <u>Heliconius hecale zuleika</u> from Costa Rica; subspecies; (12) Papilio demoleus from Asia. All butterfly species reared at Butterfly World and put on public display are formally approved for importation and culture in close cooperation with the Florida Department of Agriculture's Division of Plant Industry and the U.S. Department of Agriculture. Photographs by Thomas C. Emmel and James L. Nation, Jr.

many species of *Aristolochia* (Dutchman's Pipe Vine). Here, swarms of native adult <u>Heliconius</u> <u>charitonius</u>, <u>Agraulis</u> <u>vanillae</u>, and <u>Battus polydamus</u> entrance the visitor as they court, oviposit, and emerge from pupae in this cornucopia feast of food!

The next stop is a beautifully modern, air-conditioned, 1,500-square-foot **Museum** building with outstanding collections of exotic and temperate butterflies, moths, and other insects on display. Using black walls and brilliant halogen spot-lighting, the exhibits here literally "leap out" at you, and the Museum displays, which are attractively arranged and identified with locality information and names for most species, have proven to be one of the most popular stops on the tour for most visitors. (Perhaps this is because such publicly-displayed collections are so hard to find today. Many of our metropolitan museums have stopped exhibiting "collections" of insects, perhaps having lost sight of the fact that many of <u>us</u> first got our start in Lepidoptera when we were young children, wandering through our local museum and stopping to look at these pinned collections for hours — thus getting our first strong stimulation towards collecting and studying these fascinating creatures.)

From the Museum building, one can continue back to the Lobby and Entrance Building, passing on the way an outdoor Plant Shop, where a spectacular variety of butterfly larval food plants and nectar sources are for sale at very modest prices. Surely, this facility provides the finest and largest collection of passionflower vines, aristolochia, and adult butterfly nectar sources of any nursery in the world. It has proven to be an amazing popular source in the past year for Floridians to come and buy butterfly plants for landscaping their homes and businesses throughout south and central Florida.

In the lobby building, one many enjoy refreshments at the **Snack Bar**, and find interesting, Lepidoptera-oriented purchases in the **Gift Shop**, such as books, T-shirts, and even original Lepidoptera paintings and limited-edition prints.

It is especially noteworthy to me that visitors repeatedly return to Butterfly World, both with their families and with out-of-town visitors. On a visit, people commonly spend a half day to a full day here, enjoying all the sights and repeatedly making the rounds. Of course, as the day progresses, different butterfly species become more active and start new behaviors. The average person casually interested in nature may never before have had the occasion to experience such "close encounters" with butterflies, and the response is amazing! Photographers <u>especially</u> have found this to be a paradise for taking close-up pictures of butterflies, and up to several dozen rolls of film may be easily shot in a day by the average photographer. (Kodak now has posted signs suggesting the best shots at Butterfly World!)

To look at the wider perspective for a moment, one of the most exciting things about Butterfly World to us in the Lepidopterists' Society is that by being the first facility in the U.S. of this type, it has been featured on countless TV programs all over the world. It has made the front page of the Wall Street Journal (in January 1989, with a lead article running 37 column inches!), and the front page of the New York Times last fall. It has been featured in a Scholastic News issue distributed to 1.25 million first and secondgrade children this year, and it will shortly be featured in Ranger Rick Magazine to this same general national audience of school children. The media attention in the last 24 months, during the period that BUTTERFLY WORLD was under construction and since it has opened, has probably done more to publicize Lepidoptera and their usefulness in nature and utility in changing public attitudes towards conservation than all the rest of the scientific literature on the group combined during that time period.

Personal contact with Lepidoptera through attendance at Butterfly World has been phenomenal. Some 30.000 school children in the first through the third grades have come through the facility in the first six months of 1989 alone. The staff at Butterfly World is developing kits for classroom teaching, and these educational packets will introduce countless others (including the children's parents) to the world of nature through the medium of butterflies. In other words, Butterfly World is making a lot of people excited about butterflies! Butterfly gardening seminars are offered every few weeks at Butterfly World (there were 110 people at one two-hour seminar alone!). With more than 2,000 plants on the tables in their Plant Shop, they still can hardly keep it stocked because of the weekly turnover in At least once a month, Butterfly World also has sales. educational seminars on natural history topics (even including snakes), photo seminars by professionals, breeding seminars, etc., to serve as a resource to the local community.

Butterfly World has also been working very hard to spread the word about the importance of conservation of the overall environment. Their gardening seminars push not only private butterfly gardens, but planning gardens for new (and old) city buildings and recreational parks. The staff are promoting seminars for landscape architects and nursery managers and landscapers, training them how to use butterfly plants in landscaping. Since its inception, Butterfly World has also been supplying major university research labs with material - everything from Giant Swallowtail larvae for experiments with the toxicity of aerially sprayed mosquito-control pesticides (University of Florida), to genetic breeding experiments with Heliconius (University of Texas and University of Georgia). They have been involved in actively fighting Broward County government plans to spray Dibrom aerially across that county, which would have exposed hundreds of thousands of people to this organophosphate pesticide and would have had a devastating effect on insect populations throughout this large south Florida area. Ron Boender and his colleagues are also carrying out extensive research on the world's 600 species of Passiflora, and already have 120 passionflower species in culture there — the world's largest living collection. They are investigating such questions as why Heliconius species are catholic in host plant tastes in some instances, and extremely limited to only one host species in other cases. With a nursery of approximately 10,000 plants, they are producing more than 50,000 pupae a year and have raised approximately 600,000 butterflies in the last several years.

Following the opening of BUTTERFLY WORLD in March 1988, another "Butterfly World" (part of Marine World Africa U.S.A.) opened at the end of May in Vallejo, California, and in late September 1988, the outstanding Day Butterfly Center opened in Calloway Gardens, Pine Mountain, Georgia. The latter parks purchase pupae from Ron Boender's Butterfly World in Florida to supply part of their living exhibits, and most of the English butterfly houses purchase livestock from Boender's farming facilities. Thus, Butterfly World occupies a pivotal point in the successful spread of the idea of butterfly houses in both Europe and the United States, and it is exciting indeed that a member of our Lepidopterists' Society has achieved such success already with both the concept and the implementation of this really astonishing facility.

On your next trip to Florida, be sure to plan to spend at least a day at Butterfly World in Coconut Creek, and be prepared to take home an outstanding array of pictures and memories of a wonderful experience.

Thomas C. Emmel Univ. of Florida, Gainesville, FL



SOCIETY PROMOTIONAL BROCHURES AVAILABLE

The Lepidopterists' Society wishes to make its promotional brochure and membership application more broadly available to the public in an effort to increase its membership. Local nature and science centers, and natural history museums, frequently have book or gift shops. These are the sites we would like to contact.

If you are familiar with such a center or museum in your area, I would appreciate having you send me its name and address, and also the name of a contact person, if possible. We shall then be able to send them a small poster to draw attention to the society, and also a supply of brochures which can be handed out to visitors specifically requesting them.

Let me hear from you now, before spring comes. This is an opportunity for you to help the Society grow.

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

LOST MEMBERS:

Publications directed to two current members in Florida are being returned by the Post Office. If you know the present address of Warden Beebe and/or James F. Collins, please notify the Assistant Secretary, Julian Donahue (address on back cover).

POSITION AVAILABLE SOON

Support scientist in USDA, Agriculture Research Station, Systematic Entomology Laboratory, wanted to work on Pyralids. Masters degree or above required. If interested, contact Dr. M. Alma Solis, USDA, S.E.L., c/o Nat'l Museum of Natural History, NHB 168, Washington, D.C. 20560.



RAY W. BRACHER

Word has been received of the October 25, 1989 death of Ray W. Bracher of South Bend, Indiana. Mr. Bracher was a frequent contributor to the NEWS and had been a Society Member since 1962. He was 81 years old and had been retired since 1973 from his position as national credit manager with Associates Corp. of North America. He was a veteran of World War II and served on the local draft board during the Korean War. He held memberships in many and varied organizations, including the Michigan Entomological Society and the Nature Conservancy along with the Lepidopterists' Society which reflected his interest in life histories and the rearing of lepidoptera.

TERRY GRANT

Mr. Terry Grant of Dar-es-Salaam, TANZANIA was killed, along with his young son, in an automobile accident in Tanzania on July 31, 1989. He had an interest in Papilio. Charaxes and Sphingidae in particular and had been a Society member since 1984.

Information from J. P. Lequeux

THOMAS A. MILLER

Dr. Thomas Anthony Miller, an Associate Editor of the Journal of the Lepidopterists' Society, died 8 February 1989 at his residence in Frederick, Maryland. As Chief of the Health Effects Research Division at the U.S. Army Biomedical Research and Development Laboratory, Dr. Miller supervised a staff in excess of 40 military and civilian scientists, engineers, technicians, and clerical personnel conducting research in environmental quality technology and occupational health. Born in Akron, Ohio, on 12 February 1940, Tom graduated from St. Mary's High School in 1958. He received a B.S. in biology from Kent State University, and an M.S. and a Ph.D. in entomology from Ohio State University in 1965 and 1967, respectively. Thereafter, Dr. Miller served for ten years as an active duty Army officer and medical entomologist before joining the reserve forces. Since 1977 he had worked in federal civilian service as a research and development manager. Dr. Miller was the author of over 50 scientific journal articles and Department of the Army technical reports in entomology, pesticide efficacy, pesticide disposal, environmental protection, and reproductive behavior and biology of the Saturniidae.

Lewis R. Boobar, Ft. Detrick, Maryland

JOHN W. CADBURY III.....

Longtime New Jersey member John W. Cadbury III died on 13 February 1989 after a lifetime of interest in Lepidoptera. Born in New Jersey on 9 May 1912, Jack attended Moorestown Friends School, Earlham College in Richmond, Indiana, and was graduated from Cornell University in Ithaca, New York in January 1936 with a Bachelor of Science degree. Throughout these years he collected extensively in the Pine Barrens of New Jersey, the mountains of New Hampshire and Maine, and the pine forests of South Carolina, Georgia, Florida, and western North Carolina. During the summers in the 1930's Jack did volunteer work at the Academy of Natural Sciences of Philadelphia and became a full-time employee of the Entomological Department in 1936. Here he worked on the ANSP Lepidoptera collection, wrote papers and book reviews, described a few new species, and was honored when J. C. Franclemont named Comachara cadburyl after him. Although not a Charter Member, Jack Cadbury joined the Society just fifteen months after its establishment in 1948, a time when there were less than 300 members worldwide. After serving in a variety of high administrative positions with the American Friends Service Committee in England for six years during World War II, he returned to the United States and joined the Delaware Valley Ornithological Club and devoted many thousands of hours to what had become his favorite pastime, birding. Jack accompanied Mrs. C. Reed Cary on several trips to help her collect Sphingidae, including Venezuela for six weeks in 1949, and Jamaica in 1951, 1955, and 1958. The Caribbean Islands sphingid material collected on these trips is now housed in the Peabody Museum at Yale University. Jack's extensive collection of 8200 butterflies and 38,000 moths, which include 4300 Catocala and 2175 Sphingidae, were given to me in the summer of 1982. When I finish mounting, identifying, and cataloging this vast collection, it will be deposited in a well deserving museum in Jack Cadbury's memory. In the meantime, his legion of friends, relatives, and collecting companions will remember Jack Cadbury for his generosity, good companionship, and enjoyment of natural history. He is survived by his wife, Tessa, and his daughter, Allison Senter.

William F. Boscoe, Willow Grove, PA



MEMOIR #3 AVAILABLE

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

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

\$7.50 US First Class or Air Post to Canada \$9.00 US Air Post outside North America

Non Members: \$10.00 US Surface Mail

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

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

RECENTLY PUBLISHED BOOKS

- Emmet, A. Maitland & John Heath (eds.). 1989. <u>The Moths and Butterflies of Great Britain and Ireland</u>. <u>Volume 7</u>. <u>Part I.</u> <u>Hesperiidae-Nymphalidae</u>: <u>The Butterflies</u>. Color plates by Richard Lewington; text figures by Timothy Freed. Harley Books (B.H. & A. Harley, Ltd.), Martins, Great Horkesley, Colchester, Essex CO6 4AH, England. 370 pp., 74 maps, 24 color plates, hardcover, £49.50.
- Goldsworthy, Graham J. & Colin H. Wheeler (eds.). 1989. Insect Flight. CRC Press, 2000 Corporate Blvd. N.W., Boca Raton, FL 33431. 371 pp., text figures, 2 color plates, hardcover, \$195.
- Inomata, Toshio (ed). 1986. <u>Atlas of the Japanese</u> <u>Butterflies</u>. Color photographs by Katsuji Iwao. Take Shobo Co. Ltd., 7-3, lidabashi 2, Chiyoda, Tokyo, 102 Japan. 500 pp., text figures, 86 color plates, hardcover, £440.
- Nielsen, Ebbe S. & Niels P. Kristensen. 1989. Primitive Ghost Moths: Morphology and Taxonomy of the Australian genus Fraus Walker (Lepidoptera: Hepialidae s. lat.), Monographs on Australian Lepidoptera, Volume 1. CSIRO Publications, 314 Albert Street, East Melbourne, Victoria 3002, Australia. 206 pp., 435 text figures, hardcover, \$A 60.00 (includes surface mailing).
- Spuler, Arnold. 1989. <u>Die Baupen der Schmetterlinge</u> <u>Europas</u> (reprint of 1904 edition). Apollo Books, Lundbyvej 36, DK-5700 Svendborg, Denmark. 38 pp., text figures, 60 color plates, hardcover, DKK 780.

COMPLETE SETS OF THE JOURNAL OF RESEARCH ON THE LEPIDOPTERA AVAILABLE

The Lepidoptera Research Foundation is streamlining its publications organization and will consequently consolidate and discard the printed material it has on hand. All past issues of the JOURNAL OF RESEARCH ON THE LEPIDOPTERA have been ordered into complete sets. These will be offered for sale directly or through booksellers as long as they last. The residue will be largely discarded. Anyone who needs single issues to fill gaps in their libraries must order them prior to April 1, 1990. After that date only complete sets will be left, excepting special single subject issues as "Butterflies of Yosemite," "Butterflies of Staten Island," "Hilltopping," etc.

About forty sets, complete except for 1 to 3 limiting issues, will be sent to universities, museums, and other appropriate institutions in countries with soft currencies and that cannot otherwise pay for them. The overseas mailing cost for these gifts cannot be borne by the foundation, however. We are soliciting your tax deductible contribution for this very worthy cause. The cost is about \$35.00 per set. We furthermore solicit inquiry from, or suggestions of, organizations which would find benefit from availability of this material.

For further information, please contact the Lepidoptera Research Foundation, 9620 Heather Road, Beverly Hills, CA 90210, USA. Telephone (213) 274-1052.



Although winter in the tropics is little different from the summer and one can find butterflies and moths flying every month of the year, in the temperate zones winter is more a time to reflect on the past collecting season and to plan for future ones. Winter is a good time to spend reading lepidopterological journals, to spread papered specimens, to work at identifying those hard to determine butterflies and moths and to enjoy the camaraderie and fellowship of kindred souls. In this regards, it is exciting being in on the beginnings of the newly eclosed Idalia Society of Mid-American Lepidopterists, just as it is exciting to watch a newly eclosed butterfly or moth emerge and pump the fluid into its wings and then take off soaring on the breeze.

As I begin my eighth year as NEWS editor, I am continually pleased and amazed by the amount of publishable material sent to me by you Society members, and I want to thank all contributors for helping to make this task as editor so enjoyable and enlightening. Please do not be discouraged if articles don't appear immediately. I try to print everything within a year of receipt, but sometimes even that is not possible.

The following letter and photograph addresses a problem that is all too common in our modern world destruction of the environment. As always, the letter printed below expresses solely the opinion of the author and does not in any way reflect any policies of The Lepidopterists' Society.

Dear Editor:

This is a brief response to Ron Leuschner's short review of the AI Schwartz book <u>Butterflies of Hispaniola</u>. I am reviewing this book for <u>Journal of the New York Entomological Society</u> but many Lepidopterists' Society members do not receive this journal. In that review I comment on recent habitat destruction at some of the "hard to reach" places on Hispaniola that Ron mentions. One of these areas is "Las Abejas" which is the type locality of some recently described new species of butterflies. The following remarks are pertinent to Ron's review questions and aimed at collectors wondering about exploring Hispaniola.

Regarding Ron's comments, one reason Al Schwartz gives no directions on how to get certain places is to prevent potentially dangerous "wild goose chases." Upland hardwood forests at Las Abejas, for instance, have only been reached by persons who took several years to figure out which upland tracks eventually led there. In any case, the last 4 or 5 km. are on foot even if one knows the way. Exchanging landmark information, Al Schwartz and I are still not sure we have been working in the same area of "Las Abejas." As Schwartz notes, each of us has caught rare critters not found by the other. The political climate a few years ago was better; now several problems are involved. The "protected" forests are rapidly being destroyed by locals who frequent the area by horse and mule trails (see photo). As of summer 1989 most of "upper Abejas" had been cut down and there was continued cutting in and around "lower Abejas." There is no way to reach the area by public roads and access to the old private roads requires papers to pass at least four police and army roadblocks to the region (originally closed to outsiders as a "mining district"). Non-Dominicans in the region without permission are regularly chased down by the army. This summer, to assess deforestation, David Matusik visited the area with a representative of the Dominican Republic national museum (latter nearly requisite for getting permission). Photographs of the local destruction are saddening. A recent attempt by workers from an American university to reach the area from the southwestern slope (by public track and foot) was unsuccessful since the distance was just too great. Private owners of surrounding mining districts are reluctant to allow access permission because of safety factors and prudence concerning local officials and the army. Thus, these areas along the Haitian border are particularly difficult to penetrate. Next year, the Allyn Museum will publish a report on recent collections of some of the new taxa from the area. I have a feeling that, because of deforestation, the handful of Lepidopterists who have visited the area will be reluctant to return. You can imagine the expense and the effort versus the saddening result.

By contrast, access to areas in the Central Cordillera and regions around major roads west and east of Santo Domingo (or other major cities) is much easier. We recently provided several workers with exact locations for biological studies and these proved both easy to reach and productive. Aside from quickly disappearing upland hardwood forest, upland pine forest and isolated desert areas on Hispaniola still promise surprises in the Lepidoptera. To summarize, areas of the Dominican Republic historically open to public traffic are quite easily accessible for outsiders. However, areas with little history of public intrusion provide some extremely difficult obstacles.

Dr. Kurt Johnson, Entomology Dept. American Museum of Natural History New York, New York



Recent deforestation in Parque Nacional Sierra de Baoruco (Las Abejas forest), type locality of five species of butterflies described by K. Johnson and D. Matusik (Carnegie Annals, 1988). David Matusik of the Field Museum, Chicago in the background with a net.



• Wanted: Living eggs, larvae or pupae of the following Geometrid moths: Erranis tiliaria (Linden looper or winter moth), Paleacrita vernata, P. merriccata, Alsophila pometaria (Cankerworm moths), Operophtera bruceata. Specifically, I am interested in rearing <u>any</u> species of Geometrid moth which has a wingless female. Any information leading me to a source of these insects would be sincerely appreciated. Please contact Jayne E. Yack, Dept. of Zoology, Erindale College, University of Toronto, 3359 Mississauga Road, Mississauga, Ontario, CANADA L5L 1C6. Telephone (416) 828-5244.

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- PETTUS, SHARON WRIGHT: 6 Daniel Road, Saint Louis, MO 63124-1410.
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- WAGNER, DIANE: Dept. of Biology, Princeton University, Princeton, NJ 08544.
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- SHAW LAWRENCE H.: P.O. Box 8643, Orange, CA 92664-8643. SHIRAIWA, KOJIRO: 1000 Patterson, Box 68128, Eugene, OR 97401.

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. SASE in an ad stands for self-addressed stamped envelope.

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

- FOR SALE: Papered specimens, in good condition, with data. <u>Charaxes</u> from rain forests of Central Africa, Zaire; Brazzaville; Central African Republic, Banguí. Including <u>C</u>. <u>candope</u>, <u>ummines</u>, <u>laodice</u>, <u>porthos</u>, <u>ameliae</u>, <u>tiridates</u>, <u>zingha</u>, <u>bohemani</u>, <u>monitar</u>, <u>varanes</u>, <u>protoclea</u>. Also <u>Charaxes</u> from Bonga, Ethiopia. Many <u>Cymothoe</u> <u>sangaris</u> and Danaidae from Zaire. <u>Charaxes</u> from Letecia, <u>Colombia</u>, Amazon, also Caligos and Preponas. <u>Papilio</u> <u>memestheus</u>, <u>hesperus</u>, <u>phorcas</u>, <u>nireus</u> from Zaire. Papilios from Bonga, Ethiopia. <u>P. thersitis</u> from Jamaica. <u>Urania leilus</u> and <u>Historis orion</u> from Colombia. Or will <u>exchange</u> for wild collected cocoons of <u>H. cecropia</u>, <u>A.</u> <u>polyphemus</u>, <u>Actius selene</u>. John Bradley, 90 Pembroke Road, Clifton, Bristol BS8 3EG, England.
- WANTED: Useable copy of Jean-Paul Laplante's book, <u>Papillons et Chenilles du Quebec et de L'est du Canada</u> [Lepidoptera and Larvae of Quebec and of East Canada]. 1985, 280 pp. (See review in JOURNAL, Vol 43, No 3, 1989.) State price and condition. Vincent P. Lucas, 800 Brick Mill Run, #301, Westlake, Ohio 44145 USA.
- FOR SALE: Two copies of Holland's <u>Butterfly Book</u>, both are second editions, 1905 and 1929. Both in excellent condition. Send SASE for prices. ALSO FOR SALE: Light traps for use with 12 volt batteries or 120 volt AC, or both. Portable and light weight with 8, 15 or 22 watt bulbs. Beetle screen and rain drain. Excellent design and construction. For more information and prices, contact Leroy C. Koehn, 2946 N.W. 91st Ave., Coral Springs, FL 33065. Telephone (305) 344-3873.
- WANTED: PUPAE/COCOONS of A. <u>luna</u>, <u>E. magnifica</u>, <u>E. imperialis</u>, <u>H. columbia</u>, <u>H. cecropia</u>, <u>C. promethea</u>, <u>S. cynthia</u>, <u>P. modesta</u>, <u>P. glaucus</u>, <u>P. troilus</u>, and others. Will buy or exchange for European species. Correspondence invited. Drs. W. de Rover, Kampheidelaan 19, B-2300 TURNHOUT, Belgium.
- WANTED TO BUY: Live pupae, eggs; <u>Papilio zelicaon</u>, <u>P. indra</u>, <u>P. rutulus</u>, <u>P. multicaudatus</u>, <u>P. cresphontes</u>, <u>P. eurymedon</u>, <u>P. rudkin</u>. Mary Carol Krane, 24932 Rivendell, Lake Forest, CA 92630. Phone (714) 837-1077.
- FOR SALE: Cocoons of <u>H. cecropia</u> and <u>A. luna</u>. Send SASE to Daniel Bantz, 12524 7¹/2 Mile Road, Caledonia, WI 53108 or phone (414) 835-2870.

- FOR SALE OR EXCHANGE: Surplus butterflies from Arizona, including ex pupae <u>Megathymus</u> and <u>Agathymus</u>. All material A+ perfect with full data. Tom W. Kral, 6600 N. Galaxy Rd., Tucson, AZ 85741.
- FREE TO A GOOD HOME: Approx. 1000 Western USA butterflies, all families, papered, pest-free and with 99% full data. Condition variable, however most are damaged. Good for the beginner, or dissections for students, or anyone to whom A-1 condition is unimportant. Dr. Bruce O'Hara, 24211 Cross St., Newhall, CA 91321, USA.

MEMBERS' COMMERCIAL NOTICES

- E. W. CLASSEY LTD. P.O. BOX 93, FARINGDON, OXON SN7 7DR, ENGLAND. FAX 011 44 36782 429. WE ARE THE WORLD'S LARGEST ENTOMOLOGICAL BOOK DEALER. New and Secondhand/Antiquarian books on Lepidoptera. To keep up to date with new and forthcoming titles eg, <u>Butterflies of</u> Laos, <u>Butterflies of Tanzania</u>, <u>D'Abrera Butterflies of the</u> Australian Region 3rd edn., The Genitalia of the British Tineidae & Tortricidae ETC., ETC., ETC., send for, or FAX us for our FREE catalogues. We accept Credit Cards & U.S. \$ cheques.
- JOHN McFEELY, 90 STONECHAT AVENUE, ABBEYDALE, GLOUCESTER GL4 9XF ENGLAND. FOR SALE (or exchange): LIVESTOCK offers. <u>Saturnia grotei</u>, <u>S. pavonia</u>, <u>S. pyri</u>, <u>Actias selene</u>, <u>Loepa katinka</u>, <u>Brahmaea wallichii</u> (from Taiwan), <u>Acherontia atropos</u>; Also <u>Apatura ilia</u>, <u>Ap</u>. iris. <u>Ap</u>. metis, <u>Sasakia charonda</u>, <u>Charaxes jasius</u>. Please send \$2.00 cash for AirMail price list.
- CHRISTOPHER J. FARRELL. Apartado #360, Buga, Valle, Colombia, S. America. Colombian Lepidoptera and Coleoptera for sale including, subject to availability, many rarer species, e.g.: <u>Heliconius godmani, gyanesa, ernestus, longarena, Prepona werneri, Anaea laura, panariste, titan ssp. nov.</u>, Papilio cacicus, ascolius, Parides childrenae, Eurytides orabilis, etc., also many other rarer species, assorted lots, <u>Morphos, Caligos, Papilios</u>, Nymphalids etc. Send \$1.00 for list. Wholesale (dealers) only.
- TRANSWORLD BUTTERFLY COMPANY, Apartado 6951, 1000L San Jose, COSTA RICA, C. America (Tel. +506-284768, FAX +506-281573). Serving Lepidopterists around the globe since 1976. LATEST 12-PAGE CATALOG includes Neotropical, African, Palearctic, Indo-Australian butterflies and moths. Papilionidae, Morphidae, Brassolidae, Nymphalidae, Lycaenidae, etc. Books and more. WE OPERATE PERSONALIZED & GUIDED NATURALIST & ENTOMOLOGIST TOUR PROGRAMS. Latest catalog \$1 or \$6 for year's monthly lists via airmail.
- THANAT ŚIEW, 92, Lebohraya Perajurit 2, Ipoh Garden East, Ipoh 31400, Malaysia. Breeder & supplier of Malaysian butterfly pupae. Also supply beetles, butterflies & insect specimens. List \$2.00 air mail.

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Forthcoming Meetings

NEW YORK NATURAL HISTORY CONFERENCE

The future of New York State's natural resources will be the focus of biologists attending "The New York Natural History Conference" at The New York State Museum in Albany, N.Y. June 20–22, 1990. Dr. Edward O. Wilson of Harvard University will deliver the keynote address, "Biodiversity and the Future of the Global Environment." Dr. Wilson is a renowned evolutionary biologist and author of <u>Genes, Mind, and Culture</u> among other works. He received the National Medal of Science from President Carter in 1977 and the Pulitzer Prize for <u>On Human Nature</u> in 1979.

The conference will examine current research on animals and plants of New York State and will focus attention on critical research needs. The program will include presentations by scientists from throughout the northeast on topics including the ecology of streams and lakes, biology of social insects, forest history and animal ecology. For more information about this conference, phone (518) 474-5812 or write to New York Natural History Conference, Biological Survey, 3rd Floor CEC, New York State Museum, Albany, NY 12230.

SOUTHERN LEPIDOPTERISTS' SOCIETY

The 1990 annual meeting of the Southern Lepidopterists' Society will be May 11, 12 and 13 at Pigeon Key Research Station in the Lower Keys of Southern Florida. Pigeon Key is located in the middle of the Old Seven Mile Bridge south of Vaca Key. For more information about the meeting and the Southern Lepidopterists' Society, contact Leroy C. Koehn, 2946 N.W. 91st Ave., Coral Springs, FL 33065. Telephone (305) 344-3873.

IDALIA SOCIETY OF MID-AMERICAN LEPIDOPTERISTS

The newly formed Idalia Society of Mid-American Lepidopterists will hold its first meeting for 1990 on Saturday, March 3 at 6:00 p.m. at Camp Lake of The Woods Lodge, Oldham and Blue River Roads in Swope Park in Kansas City, Missouri. The session will begin with a pot luck supper, followed by a business meeting and program at 7:30 p.m. Preliminary plans will be made for a summer field trip. Preceding adjournment, there will be an auction of specimens, cocoons, hardware, etc., plus a door prize drawing. Attendees are invited to bring specimens for exchange and identification also. For information or directions on reaching this location, please phone Eleanor Casebolt, (816) 444-4375, from 9:00 till 5:00, Mondays through Fridays.

THE LEPIDOPTERISTS' SOCIETY 41st Annual Meeting Milwaukee Public Museum 800 W. Wells Street, Milwaukee WI 53233 Thursday, June 14 to Sunday, June 17, 1990

The Milwaukee Public Museum, Invertebrate Zoology Section will host the 41st annual meeting of the Society in Milwaukee at the museum. Special features being planned include:

- Access to the MPM insect collection in the Invertebrate Zoology Section, with special display of the James R. Neidhoefer gynandromorph collection and William E. Sieker hawkmoth collection,
- Informal reception at Carpenter Tower Residence Hall, Marquette University,
- Symposia on 1) the biology of caterpillars and 2) the biology of butterflies and moths in the upper midwest region of North America,
- Milwaukee Brat Fest followed by members' informal slide presentations (bring up to 6 of your best, funniest, or most interesting slides to share with the group),
- Opportunity to tour the Rain Forest (winner of 1988 American Association of Museums award for exhibit excellence) followed by annual banquet and awards presentation,
- Field trips to explore and collect in a variety of Wisconsin habitats.

ACCOMMODATIONS

Accommodations for individuals (single or double occupancy) and families will be available in Carpenter Tower Residence Hall at Marquette University for approximately \$13.00 to \$20.00 per person depending on requirements. Carpenter Tower is located four blocks from MPM and parking is available for \$3.00 per day. Several hotels are also located within walking distance (rates ca. \$60.00/single and up). Campgrounds and RV parks are about 45 miles away. Some are state parks where advance reservations are recommended.

More specific information on all accommodations, dining and sightseeing including the Lakefront Festival of Arts (a large juried outdoor art fair) will be included in the pre-registration packet.

REGISTRATION

For further details concerning the meeting, and to assist us with planning, please fill out the questionnaire below and return it IMMEDIATELY. You will be sent a preregistration packet containing the registration form, call for papers, deadline information and more. The packets will be mailed in early February. Video projection capability will be available for presenters.

<u>Important</u> - There will not be a general mailing of registration forms or call for papers. To obtain these, complete and send the form below.

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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, attend banquet, etc.:				
Where will you stay:	Residence Hall	Motel/Hotel	Campgrounds	Other
How will you travel to meeting?	Your vehicle	By plane	Other	
Will you present a paper at the meeting?				
If you are interested in a field trip after the meeting, which are you most likely to participate in?				
Half day, June 17th	Overnight, June 17-18	Several days	s, at one or more sites	
If you have any suggestions, questions, or special needs (such as child care), please indicate:				

Send to: Dr. Allen Young or Susan Borkin, Invertebrate Zoology Section, Milwaukee Public Museum, 800 W. Wells Street, Milwaukee, WI 53233 U.S.A. Phone: (414) 278-2758, Fax: 223-1396

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DEADLINES: Material for the Jan/Feb issue should reach the NEWS EDITOR by <u>Dec 1</u> of the previous year, and that for the Mar/ Apr Issue by <u>Feb 15</u>, for the May/June issue by <u>Apr 1</u> and for the July/Aug issue by <u>May 1</u>, the Sept/Oct issue by <u>Aug 15</u> and the Nov/Dec issue by <u>Oct 15</u>. Reports for the SEASON SUMMARY must reach the ZONE COORDINATORS listed on the front cover no

later than the 5th of January. NEWS EDITOR is June Preston, 832 Sunset Dr, Lawrence, Kansas 66044-2373, USA. Phone (913)

843-6212. RIPPLES EDITOR is Jo Brewer, 257 Common St, Dedham, Massachusetts 02026-4020, USA.

INFORMATION ABOUT THE SOCIETY

Membership in the Lepidopterists' Society is open to all persons interested in any aspect of Lepidopterology. Prospective members should send the TREASURER, James P. Tuttle, 3838 Fernleigh Ave, Troy, Michigan 48083-5715, USA, 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 90007-4057, USA.

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

Requests for Missed Issues (i.e. those not delivered although dues have been paid on time) should be sent to the TREASURER, 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 80866-9061, USA. Phone (719) 687-6596. See the inside back cover of a recent issue of the JOURNAL for editorial policies.

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

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

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

COMMEMORATIVE VOLUME, 1947-1972: a 25-year review of the Society's organization, personnel, and activities; biographical sketches; JOURNAL 25-year cumulative index by author, subject, and taxon; clothbound. Members and subscribers, \$8; non-members, \$12, postpaid.

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

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