

of the LEPIDOPTERISTS' SOCIETY

June Preston 832 Sunset Dr. Lawrence, KS 66044 U.S.A.

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NEWS FROM EUROPE W. O. De Prins



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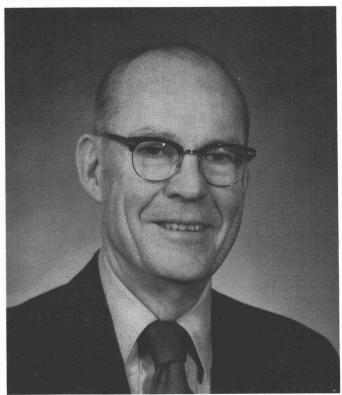
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Presidential Profile

Our current president, Floyd W. Preston, has had a lifelong love of natural history. Born in Albuquerque, New Mexico on February 11, 1923, he moved to Los Angeles, California at the age of 3 months when his father, who worked for the Railway Mail Service, was transferred there. Starting with his junior high school years, he attended many of the monthly meetings of the Lorquin Society at the Los Angeles County Museum and came under the spell of Lloyd Martin and Dr. John A. Comstock. He still remembers the feeling of awe and excitement while a senior in high school at being allowed to use the museum collection to identify butterflies he had collected in the Pinaleno Mtns of southeastern Arizona. He treasures his first butterfly book, the beautiful Butterflies of California, graciously autographed by its author, Dr. Comstock. His high school years were filled with preparation for college, but through the help of a neighborhood Catholic priest, Father George W. Winneman, he was able, with a boyhood chum, to make frequent week-end trips to the Mojave Desert and the surrounding mountain canyons for exciting springtime collecting.



The economic disarray of the Great Depression strongly influenced him to seek a scientific career in the industrial sector. In early 1941, through the encouragement of Dr. Linus Pauling at the California Institute of Technology, Floyd was urged to pursue a Bachelor's Degree in Chemistry by first attending UCLA and then transferring to Cal Tech as a Junior. Implementation of this single decision greatly influenced not only his professional career but his life and lepidopteral hobby as well because, while at UCLA, he met his future wife June. They were married in July 1945 and, as she tells the story, he took a butterfly net on their honeymoon. Therein was the start of a wonderful 46 year team effort at collecting and curating their collection which, specializing mostly in butterflies of North America north of Mexico, has now reached about 30,000 spread specimens and more than that number of curated, papered specimens.

They were only back from the honeymoon a month when World War II ended. Floyd and June soon left California and headed for the University of Michigan so that Floyd could pursue a course of study aimed at a Master's Degree in Chemical Engineering. The move also heightened their interest in butterflies. The eastern fauna was all new to them and that first year (1946) they added 1000 specimens to their collection. While identifying some of their specimens at the University of Michigan Entomology Museum they met Harry Clench in the Spring of 1948 and were excited to become members of the newly formed Lepidopterists' Society.

By late 1948 the West Coast beckoned again as Floyd took a position in the Los Angeles area, working as an engineer for the oil production research laboratory of Standard Oil Company of California. This allowed further opportunity to develop friendships with Dr. Comstock and Lloyd Martin and other Southern California collectors and to learn of exciting new collecting areas such as Madera Canyon in Arizona and the Providence Mountains in California. Specimens from these early trips are still in evidence in their collection. By 1951, Floyd and June were in State College, Pennsylvania where Floyd spent four years working on his Ph.D. in Petroleum Engineering at Penn State. The Pennsylvania years saw a significant growth in both family and the collection. Floyd accepted a position as an Assistant Professor of Petroleum Engineering at the University of Kansas in February 1955 and except for several leaves of absence has been at K.U. since that time. He became an Associate Professor in 1957 and was advanced to the rank of Professor 10 years later. He served as chairman of the combined Chemical and Petroleum Engineering Departments from 1974 to 1979. He retired from the University in May 1991 after 36 years of teaching.

A two year leave of absence from K.U. in 1959 and 1960 to serve as a consultant to the Venezuelan Ministry of Mines and Hydrocarbons led to wonderful opportunities for tropical collecting in the upper llanos regions and the cloud forests of northern Venezuela. By now there were 4 boys in the family and the 2 older ones frequently accompanied Floyd on collecting trips as they were paid a pittance per specimen to collect for their dad. The return to Lawrence in early 1961 added extra

excitement and adventure when the entire family was hijacked for 2 weeks as they and 450 others were on their way to Miami aboard the Portuguese cruise ship Santa Maria. The family and the many Venezuelan butterflies survived the trip without

incident so there were no serious regrets.

The opportunity for tropical collecting arose again during the 1981-1982 academic year when Floyd was awarded a Fullbright Senior Lectureship in petroleum engineering at the University of the West Indies in Trinidad. The 10 month stay allowed June and Floyd to acquire a synoptic collection of two thirds of all the known Trinidadian species.

Although tropical collecting has always had its fascination for both Floyd and June, the North American Arctic has had an equally special attraction. Their first trip to Alaska was made in 1955 when they drove the Alcan Highway with their station wagon and tent, accompanied by Paul Ehrlich and a girl friend of June's. The all gravel road, except for some pavement within Alaska, had been open to the public for only 9 years. There were plenty of primitive campsites along the route and not too many other travellers. Floyd returned to Alaska in 1957 with the University of Kansas Dept. of Entomology summer field trip party. In 1972, through the courtesy of ARCO, Inc., Floyd spent three weeks at an advanced geologic exploration site on the Kavik River, 75 miles SE of Prudhoe Bay, collecting butterflies. The Lepidopterists' Society Annual Meeting in Fairbanks in 1979 afforded an opportunity to return to Alaska. Again, through oil company assistance, he and June collected along the Pipeline Haul Road all the way to Prudhoe Bay, this time accompanied by Jon Shepard of Nelson, British Columbia. This trip was repeated again in 1991 with companions Cliff Ferris and Kenelm Philip.

Floyd and June have been regular attendees at Society Annual Meetings since 1976, except for the meeting in Cuernavaca, Mexico and they managed to attend a number of other Annual Meetings in prior years. Floyd served as a Member-at-large in 1988-90 and as a Vice President in 1990-91. He feels extremely honored to be president of the organization that has meant so much to him and June for the last 44 years. He intends to carry on the fine work of his predecessor, Ron Leuschner, in insuring that the Society serves the interests of professional and amateur lepidopterists alike. He particularly would welcome ideas as to how the Society can better serve aspiring young lepidopterists and its many amateur members.



ACTIVITIES OF THE IDALIA SOCIETY

The third annual "Night With the Insects" was held on August 16, 1991 in the Burr Oak Woods Wildlife Area, near Blue Springs, Jackson Co, Missouri. The program was well received by the more than 5 dozen people in attendance. The Idalia Society furnished displays of mounted butterflies, moths and other insects from around the world plus displayed collecting equipment and gave lessons on rearing techniques, mounting techniques and ways to prepare insect collections. Several varieties of larvae, pupae and cocoons were on display and one Citheronia regalis amazed and delighted the visitors by eclosing right before their eyes. Although blacklighting and sugaring yielded few specimens, it was an evening worth their time and effort for the 7 Idalia Society members who were hosts and teachers, Eleaner Adams, Ron & Cathy Huber, Rick Baker, Richard & Joanie Heitzman and Nathan Schaeffer.

The September meeting of the Idalia Society featured a program by Dr. Orley Taylor, Jr. of the Univ. of Kansas on the interrelationships and mating behaviors of Colias eurytheme and Colias philodice. These species hybridize readily in nature but the conditions and factors involved are elusive and complicated. Mating behavior of the 2 species was explored as it related to color, ultraviolet reflectance, pheromones and albino versus normal females. This meeting was quite well attended as the second year of this regional society's existence drew to a close.



Member Suzette Slocomb, a grade school teacher, enjoyed seeing one of her students, Kirby Wallace, use some of the knowledge she had gained in studying Monarch Migration last fall. "Going to Mexico" was a beautiful work of art produced with the help of Kirby's mom for Halloween. Suzette's students also planted a wonderful butterfly garden in one of their school's courtyards last Earth Day, with many of the flowers and a schema for their garden provided by Richard Heitzman.

Marilyn Koshland

TIPS ON CITING FOREIGN LANGUAGE NAMES AND TITLES

When it comes to dealing with foreign languages, we Americans usually fall short. I often see errors in citations of foreign names or titles. I believe that these errors are made more out of ignorance than carelessness. I am amused by this when reviewers "correct" my own work to an incorrect form. It is not necessary to have studied a particular foreign language to be able to follow a few simple rules. Authors and editors who publish lepidopterological papers may find some of the following points to be of use. I am sure that there are many more of which I am not aware.

1. In German, all nouns are capitalized. So, for example, Voelschow's 1902 work entitled Die Zucht der Seidenspinner (The rearing of the silkworms) would be incorrectly cited as Die zucht der seidenspinner.

2. Double names in French are hyphenated, even when abbreviations of first initials are used in a bibliography. Examples: Pierre-Claude Rougeot is P.-C. Rougeot, not P. C. Rougeot. Eugène-Louis Bouvier is E.-L. Bouvier, not E. L. Bouvier.

3. The Russian alphabet has more letters than the English, so it is not a precise one-for-one situation in transliteration. The Lepidoptera of the USSR by N. YA. Kuznetsov is incorrectly cited as N. Y. Kuznetsov. Ya is that letter that is the mirror image of our R, and Y is the Russian

vowel corresponding to English u.

4. The umlaut in German (the two dots over an a, o, or u) can be alternatively written as that vowel plus an e if the printer cannot provide the umlaut. So, universität becomes universitaet, Neumögen becomes Neumoegen, and Hübner becomes Huebner. Add the e instead of just figuring the typesetter cannot give the umlaut.

5. The letter in German that looks like a capital beta (never use a capital B as an alternative) equals the double s. It is quite useful where a compound word would result in a triple s. Example: Grossschmetterlinge (Macrolepidoptera) becomes Gross-Schmetterlinge since our typewriters will not give Großschmetterlinge.

6. If in doubt about which is the last name of a Chinese author, figure on the one syllable name being the family name, and the two syllable name being the given name. So Ying Min-Wu is cited as Ying, M.-W. in the bibliography. In European and Asian names if you see one written in all capitals, that is the family (last) name, regardless of the sequence.

7. Filho in Portuguese means junior. So José Oiticica Filho should be cited as Oiticica, J., Jr., not Oiticica Filho,

J. as we usually see.

8. The prefixes van or de are not capitalized in a Dutch name unless they stand alone without the first name or initials. In text we would write Van Gogh, Mr. Van Gogh, Vincent van Gogh, or V. van Gogh, but not V. Van Gogh. Of course, Americans with names of Dutch origin almost always capitalize the Van and such names should be treated as their owners would prefer.

9. In some of the French literature prior to around 1940, a title corresponding to English "Mr." is sometimes given before the author's name. This is Monsieur, abbreviated to M. (MM. plural). Unfortunately this is easily interpreted as a first initial. So M. L. Sonthonnax should be cited as

Sonthonnax, L., not Sonthonnax, M. L.

10. A word or name is technically misspelled if it is missing any accent, tilde, cedilla, circumflex, or any other diacritic mark where one should be.

11. Putting an accent on a word that is the name of a country such as Peru, Mexico, or Panama is not correct. These are English names but happen to be spelled like the corresponding Spanish names but without accents and are, of course, pronounced differently.

12. The best way to figure how to correctly cite an author's name is to see if possible how he or she has cited

him/herself in a bibliography.

One final point: I am dismayed at seeing our old friend Jacob Huebner still getting a bum rap, as if he did not check the proofs to the title page of his monumental work on Lepidoptera. American authors continue to write Sammlung exotischer Schmettlinge [sic]. It is true that Schmetterlinge is the German word for Lepidoptera, but they were colloquially yet prevalently called Schmettlinge in the previous century and earlier. This is explained in a book I bought in Germany entitled Schmetterlinge.

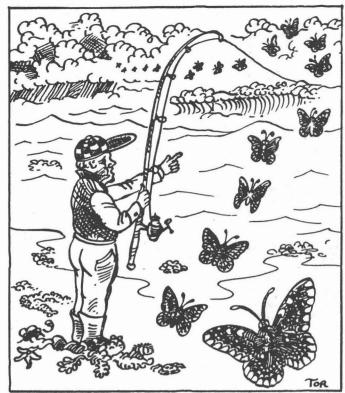
Richard S. Peigler
Department of Zoology
Denver Museum of Natural History

MUSINGS ON A CAPE COD BEACHCOMBING DISCOVERY

While beachcombing along the high tide line at Cape Cod National Seashore on July 7, 1990, I chanced to find, scattered amidst the tidal debris and seaweeds, beside the wave-tossed strands of rockweed (Fucus), vivid green Enteromorpha, and occasional "bladderwort" Ascophylum, one startling butterfly feebly struggling to live. Immediately deciphering its checkered black, white and orange velvety wing scale pattern, despite its tattered sun-bleached condition, I knew I had come across a Baltimore Checkerspot. Cast up onto the Truro Beach, the trembling Baltimore most likely had survived a near drowning in the high choppy offshore waves concealed under the thick morning fog. I placed it in a makeshift collecting bag (an empty cookie box) and began what was to become a four hour tideline odyssey in search of more victims

of a perilous oceanic migration.

Following the undulating contours of the sloping shoreline, I traversed a hopscotch of micro-meandering tidelines over two miles of littoral zone, north toward the Highland Lighthouse and then south to Balston Beach, collecting some 45 butterflies in all. As I picked up their sand littered frames from the high tide line down to the frothy swash zone where the ebbtide breakers sweep the beach in caressing curves, I noted that they were distributed at intervals of two or three every ten yards to one every fifty yards but never more than 100 yards apart. As I walked along the shore, I was awed by the beauty of the wild Atlantic Ocean that had strewn the glistening beach with jeweled butterflies, yet with each recovered Baltimore I felt a growing dismay. Time constraints broke off my northward trek, leaving an unfinished census of these checkerspots that are uncommon to the outer cape. The full extent of their population annihilation remained unanswered as the next day's follow-up trek revealed no butterflies. No doubt the last evidence was swept away by a restless sea.



"Oh ye Checkerspots, wherefor fly into the fog?

Periodic beachcombing can reveal a surprising assortment of clues pertaining to relative abundance or scarcity of characteristic marine life. The perceptive naturalist can ascertain, according to the tideline cast-ups, an indication of what food web organisms are proliferating close inshore. The marine life beyond the first sloping shoals, in deeper water, is less effectively represented. A daily hike may recover many things, from tiny cerinth snails and rare wentletraps to large orange and white Neptune whelks, jellyfish medusas, starfish and sand dollars shipwrecked between and under the seaweeds. In June, whole schools of hundreds of fingerling herring (alewives) can be found stranded, even by the gentlest surf, indicating that large schools of fish abound inshore, probably following the plankton caught by the waves

Despite the apparent hostile and scorching desert-like habitat, seashore insect life is by no means absent from the beach. Small sand-colored grasshoppers, rugged weevils, tiny darkling beetles, racy voracious tiger beetles, active bees, minute wasps, brassy dragonflies and roaming caterpillars explore these barren sandy shores. Hot sands host many butterflies winging over the bordering beach plum and black cherry bushes which are home to the munching larvae of Cecropia and lo moths that are known to thrive to within a stone's throw of the Atlantic. The butterflies glide down over the impressive dunes and headlands to patrol the thin sandy corridor, alighting on Dusty Miller or Sea Rocket or open beach to probe for nectar or water between the sand grains. In order of abundance they are Colias philodice (Common Sulphur), <u>Danaus plexippus</u> (Monarch), <u>Pieris rapae</u> (Cabbage White), Papilio polyxenes asterius (Black Swallowtail), Vanessaatalanta (Red Admiral), V. virginiensis (American Painted Lady), <u>Papilio troilus</u> (Spicebush Swallowtail), and <u>Basilarchia arthemis astyanax</u> (Red-Spotted Purple).

Checkerspot tideline strandings encompass a hatfull of evolutionary implications. Despite heavy and perhaps vital losses to breeding population continuity, science is glad to learn that another segment of the puzzling natural history of this prolific species is further clarified. The Baltimore Checkerspot (Euphydryas phaeton) according to Robert Michael Pyle (author of the Audubon Society Field Guide of North American Butterflies), takes its common name from George Calvert, 17th century American colonist, the Lord Baltimore. The orange and black colors of his heraldic family

shield directly coincide with the Baltimore's wing colors. Checkered butterflies include over 35 species, but there are only 3 species listed for Massachusetts. When poised with open wings at a flower, the dapper imago's hind wing white border scalloping suggests, as in many fritillaries as well, the snarling teeth of a potential predator. This guise is reputed to be a survival advantage, for when seen as if "imbued with sharp teeth" it is thus able to deter the hungry bird.

A member of the large family Nymphalidae (the brushfooted butterflies) the genus <u>Euphydryas</u> has vestigial forelegs nearly useless for walking, a trait common to most of the 150 Nymphalid species in North America. This diurnal flier is single brooded. The larvae are known as "Colonial silk web weavers," since they take shelter collectively. But they overwinter as larvae, not chrysalids, down near the ground in the leaf litter. Larvae prefer turtlehead (Chelone glabra), white ash (Fraxinus americana), and false foxgloves (Gerardia grandiflora & pedicularia) which are also the favored wildflower larval hosts of the smaller, closely related, Harris's Checkerspot. As Massachusetts Butterfly Atlas coordinator, Brian Cassie, points out, Baltimores are thriving more and more on wild plantain (Plantago lanceolata) in open fields and meadows here on Cape Cod, and this is especially so in mainland Massachusetts. Where larval food sources are plentiful, these colonial web weavers are reported in the thousands at specific localities (Brian Cassie-1990)!! The outer cape heath and bog ecotones support plants of Arrowwood Viburnum (V. lentago), another larval favorite, perhaps a likely reason why Checkerspots are sighted with increasing frequency in certain locales from Provincetown to Brewster. This is another example of population success insomuch as they are generalist feeders (reaching greater territorial expansion as the larvae feed on a variety of host plants and imagos nectar at various flowering plants). But on the outer Cape, documented records of Baltimores thriving on June and July nectar sources is scanty to absent at best (Tor Hansen – one imago recovered dead at the foot of a large flowering privet - June '88) and their larval leaf strongholds are questionably or not yet utilized. Since Pleistocene glacial ice melted here 10,000 years ago, I ponder whether the outer cape over hosted the Baltimore in such skyrocketing population climbs?

To reiterate the significance of stranded checkerspots along the Atlantic shoreline, one could presume that the recovered Baltimores were in fact only a sample of a greater migratory flight that was swamped en route to Nova Scotia across the Gulf of Maine. Such reckless abandon is premature, yet why were those 45 Baltimores flying out over "unfamiliar, certainly hazardous territory"? Weather conditions for that July 6-7, '90 cited early morning fog in obscure patches all along the Great Beach, a gusty 15-20 knot southwest wind driving up treacherous seas (from a checkerspot's point of view!). As I walked the tideline between 12 noon and 4 P.M., I found one dozen (more or less) in pristine condition, their big orange knobbed antennae and fluffy head palps brightly intact, hardly a scale out of place. Most others appeared scratched, mauled, and severely tattered, but five were indeed alive, feebly twitching their long antennae! They all died the following morning. Mixed in with the Euphydryas were two bedraggied Red Admirals (V. atalanta) - take note Arthur Shapiro. Also of paramount interest was the fact that upon close inspection through the magnifying lens, two Baltimores still carried two milkweed orange pollinium adhered to their right hind legs, conclusive evidence that Baltimores visit milkweed (Asclepias) and in the process of nectaring, like the Monarch and American Copper (Lycaena phlaeas americana), pick up the sticky pollinium from the blossoms and may be considered to be active cross-pollinators of milkweeds. The assumption that a migratory Baltimore will complete the cross-pollination on arrival in Nova Scotia, some 250 plus miles due Northeast must be viewed with skepticism.

As I overlook the immense Atlantic Ocean from atop a winding trail that traces the glacial headland scarp, 30 miles in all from Nauset Beach in Eastham to Pilgrim Heights in North Truro, with elevations rising to 185 feet above sea level and dropping to mere beach dunes at various hollows, I surmise the fatal plight of 45 Baltimores stemmed primarily from poor weather conditions. Perhaps unknown to these winging Checkerspots, they flew only a short distance offshore, with no intention of swerving out over the water, their

navigational orientation confused and misdirected by the fog. Their rule of thumb might have been to always hug the coastline and dry land. Certainly their genetic memories in mainland populations seldom encounter these hazards, but nonetheless these populations must negotiate inland waterways, rivers, and lakes. But for Cape Cod endemics, the open ocean and Cape Cod Bay must present formidable obstacles.

Now here at the trail's summit in mid-October, there is one nectaring Monarch working the profuse seaside goldenrod with its delicate proboscis. This is the peak of Monarch migration, which lasts a good four weeks. The apparent stragglers are progressing south gradually in their normal pattern of diffuse groups and scattered individuals, not in large densely packed flocks. They delight residents downtown at their flower gardens, roost on roofs, or flutter singly over the thin 10-50 yard wide beaches, dining on nectar furnished by seaside goldenrod (Solidago sempervirens) that grows in festooning clusters along the sloping glacial scarp, enduring the ever-sliding sand caused by the erosive surf and buffeted by an occasional southwester. Do these butterflies know instinctively to drink heartily before attempting a sizeable ocean crossing, and do they capitalize on prevailing weather and wind patterns to assist their migrations? Most of these Monarchs are known to complete a trans-Atlantic crossing from Nova Scotia, New Brunswick, and Maine over treacherous seas, sometimes landing on fishing boats and whale-watch vessels, or even alighting on a calm ocean surface to rest from the tiring odyssey with wings out straight for buoyancy, before resuming the journey. Then with a strong wingbeat they are airborne again. In the spring, Monarchs migrate northward in May and June. Is it plausible that, like Monarchs, Red Admirals, and Painted Ladies, the Baltimore Checkerspots also migrate in search of open fields where imagos can nectar and procreate the next larval generation on an abundance of turtlehead, plantain, viburnum, etc.? How uncanny that two Red Admirals were found shipwrecked with so many Checkerspots: What a mammoth topic of conversation over a hot game of checkers!

Whether this tideline discovery directs us to Baltimore migration confirmation or is no more than a localized navigational accident, it does however, alert us to follow the flight patterns in great depth during May, June and July in the years to come. Research scientists who can shed further light on this unsolved mystery, please contribute to our greater enlightenment! Although concrete evidence of fully-fledged migration of <u>Euphydryas phaeton</u>'s epic scale seashore adventure is thus far only rudimentary, corroboration with United States and Canadian naturalists will portend some exciting prospecting as regards documentation of actual

imago arrivals!

Although the insular approach of statistical analysis confirms that the estimated 50-75 drowned Baltimores is negligible in overall effect on breeding populations of E. phaeton in New England, it does not take into account the untold drownings lost at sea, and further minimizes the true losses sustained to actual breeding sites on Cape Cod, insomuch as habitat destruction and hominid encroachment are continuous threats to their longevity. Assuming this hazardous flight took place during daylight hours, gusty wind and thick morning fog are more detrimental than a possible navigational error. Yet year after year the Baltimores most likely benefit from their altruistic judgment to fly above the fog, seasonally common and usually only several hundred feet high at the seashore. However, we do not yet have data conclusive enough to suggest this migration is an annual phenomena.

Tor Hansen North Truro, Massachusetts



EVERARD M. KINCH.....

Word has been belatedly received of the death on April 4, 1989 of Everard M. Kinch of Fort Worth, Texas. Mr. Kinch had

been a member since 1953 and in 1986 was granted retired status. His interests were especially in the genera <u>Precis</u> and <u>Junonia</u> and he was also interested in life histories.

CONWAY "CONNIE" BERNICE (nee ALFORD) KENDALL.....

Connie Kendall, age 75, of San Antonio, Texas died 6 November 1991 of a heart attack while in hospital. She is survived by her husband of 44 years, Roy O. Kendall; two sons, Bobby Gene, and G. Lynn Montgomery; two sisters, four granddaughters and eight great-grandchildren. Although Connie was not a Society member she enjoyed the hobby of collecting and studying Lepidoptera very, very much, accompanying her husband on many trips and to many annual meetings. She was the gracious hostess for the San Antonio 25th Annual Meeting in 1972, which she helped Roy plan and bring to fruition. Her interests were both adults and immatures. As with most lepidopterists, catching a species not previously seen or finding a well camouflaged larva in nature, was to her, indeed rewarding.

I, and doubtless many of her friends of long standing,

will miss her greatly.

Roy O. Kendall

CHARLES S. BERGSON.....

Word has been received of the death of Charles S. Bergson on August 6, 1991. A resident of Philadelphia, Pennsylvania, Mr. Bergson became a Society member in 1975, but his membership was not continuous. His collection of 110 boxes of insects will go to the Academy of Natural Sciences of Philadelphia.



First of all, I would like to thank all members of The Lepidopterists' Society who sent me their reactions and comments on my first column. Some of the suggestions will certainly lead to interesting items in this column series. But let me give some news in this issue about a topic which is very "hot" these days in Europe: the problems on conservation of

Lepidoptera species and their biotopes.

Because butterfiles are very striking elements in nature, to the public a decrease of density and variety in butterfly populations has been observed for a long time in many European countries. This led in many cases to national laws protecting one or several butterfly (very rarely moth) species. This means that in that particular country such species may not be collected, transported or even possessed. Unfortunately, most politicians think that the job is finished by issuing such laws and no other measures are taken.

It is obvious that such laws do not, in fact, protect really endangered species. Let me illustrate this with an example in Belgium. One of the species protected there is Lycaena helle, a wetland species living on Polygonum bistorta. It is absolutely forbidden to take specimens in any stage of their life out of nature, even when one would like to breed the species in order to study its biology. On the other hand, many of the species' biotopes are now suffering from draining by drinking water companies, slowly killing the whole plant community and with it thousands of eggs and larvae. Although L. helle has been "protected" by Belgian law for several years now, it is steadily decreasing in almost all of its habitats.

In SEL, a special Committee for Species and Habitat Conservation is studying the different problems connected with the protection of butterflies. This year, a seminar on "Conserving and Managing Wetlands for Invertebrates" was held in Liechtenstein. Emphasis was given to oligotrophic habitats because these types of biotopes belong to the most endangered habitats in Europe. The most important anthropogenic influences are: a) agriculture and forestry (drainage!), b) fertilizers imported by atmospheric pollution, and c) definitive destruction of the habitat, often for urban purposes.

The Committee would like to make a list of endangered wetland species based on several criteria, e.g. stenotopy, monophagy, particular ecological needs, and relict populations. Proposed threatened hygrophilic species can be divided into

three categories:

1. Species with populations globally endangered: Maculinea

nausithous.

2. Species with majority of European populations endangered: Lycaena helle, L. dispar, Maculinea teleius, Coenonympha hero, C. oedippus, Euphydryas maturna, Boloria eunomia and B. aquilonaris.

3. Species with only their marginal populations endangered: Heteropterua morpheus, Carterocephalus silvicolus, Colias palaeno, Maculinea alcon, Vacciniina optilete.

Aricia eumedon and Coenonympha tullia.

The Committee will formulate suggestions for the Council of Europe to preserve the autochthonous genetic heritage that hygrophilic ecosystems represent. Eventual laws can only be successful if they completely protect sites with a periglacial mesoclimate (local networks of peat bogs sites in the Alps, but also in the central European mountains) and rebuilding of (supra-)regional wetland habitat networks allowing an appropriate genetic flow between humid or hyperhumid grassland and between thermohygrophilic forests with a rich stratification structure.

Concrete actions for the near future are:

 precise and regular survey of the species concerned by a central staff and local specialists ("biomonitoring" and mapping of sites).

2. high protection priority for all ombrotrophic peat bogs

outside the subarctic area.

3. protection and management plans for all sites of thermohygrophilic forests with a rich stratification structure in central and western Europe: conservation or reconstruction of an open and varying structure.

4. protection, management plans and agricultural extensification campaigns for wet alluvial meadows and

grassland ("biotope-management").

Lepidopterists who are concerned with butterfly conservation and would like to react can send their letters directly to the chairman of the SEL Committee for Species and Habitat Protection, Mr. Marc MEYER, Natural History Museum, Department of Zoology, 24 rue Münster, L-2160 Luxembourg.



With this issue of the NEWS, I end my 9 year tenure as editor and I'll soon have more time for spreading specimens and for working on our collection. My husband and I have just returned from a fabulous two weeks in Brazil where we enjoyed sampling the great butterfly diversity in the vicinity of the FAUCRON RANCHO GRANDE (a Rain Forest Reserve) in the state of Rondonia. Despite almost daily rainstorms (it was the beginning of the rainy season there) we were surprised by the numbers of different species we would see each day mud puddling on the road or sitting on a leaf, flitting along a Rain Forest trail or flying around somebody's bait trap. The latest list of species recorded over 1150 different taxa, and each new group to visit the area manages to add several more species to the list. After this issue goes to the printer I'll be able to get started on the task of spreading some representative specimens from our catch.

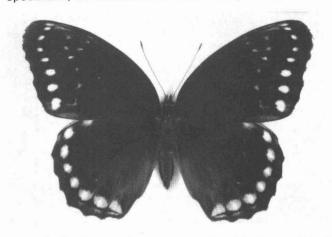
It is again my pleasure to share with you a few of the letters that have reached my desk, along with their accompanying photographs. Also, I want to express my deepest appreciation to all of you members who have sent

letters, photos and articles for the NEWS. I would have had an almost impossible task during these past nine years without your support. I trust you will continue to send a plethora of interesting material to print to Stephanie McKown in the upcoming years, and that she will find her job as rewarding and fulfilling as I have found mine.

- 30 -

Dear June,

I am forwarding this photograph of the most recent "addition to my family," which I thought would be of interest to NEWS readers, as almost any reference to Speveria diana tends to raise the antennae of North American lepidopterists, I've learned. As you know, I have been rearing this species, which is common and widespread in the mountains of north Georgia, for the last 15 years or so, and have never encountered either a gynandromorph or aberrant specimen among the hundreds observed, collected and successfully reared ... until now. This quite spectacular female (from ova obtained at Cooper Creek Recreation Area, 6 miles E of GA Hwy 60, Chattahoochee Nat'l Forest, Union Co, Georgia) emerged on Oct 26, 1991 among a brood of laboratory-condition reared specimens, all the others of which were perfectly normall

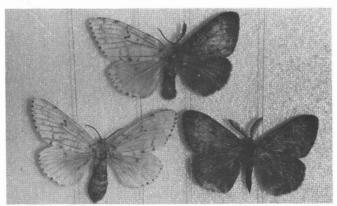


And by the way, in case any reader of Dr. George Krizek's note "Is Speveria diana attracted by manure?" is wondering, this aberrant female was reared entirely on the common Blue Violet (Viola papilionacea Pursh), and not on horse excrement!

> Irving L. Finkelstein Atlanta, Georgia

Dear Mrs. Preston,

In the last few years, the Gypsy Moths have been invading the state of Michigan. This past summer they had advanced as far as our summer home in Ogemaw Co, which is about forty miles northeast of where they were the year before.



I have so many people ask me what a Gypsy Moth looks like, I thought I would catch a pair to show them when they ask. There is no problem catching the females. They lie motionless on the tree trunks, but the males are more elusive. When they see the net they head for the underbrush. While collecting

males, I was lucky enough to collect a perfect gynandromorph. What makes it a little more interesting is that because it is a moth, it has both male and female antennae, whereas in a butterfly gynandromorph the antennae would look alike. thought other members might like to see this photo.

Earl Hoke Byron Center, Michigan



NEW BOOK FOR YOUNG LEPIDOPTERISTS

Signed Copies of a New Butterfly Book are available from the Author. "Discover Butterflies", written by Gary A. Dunn, M.S., R.P.E., F.R.E.S., Executive Director of the Young Entomologists' Society, has been published by Publications International. Explore the fascinating world of butterflies extraordinary colors, amazing photographs, migration, survival, caterpillars and the miracle of change. This 44 page hardcover book features hundreds of color photographs and drawings plus an informative, easy-to-read text. Ages 8 and up. Autographed copies available for \$10.95 (plus \$1.50 S&H) from Gary A. Dunn, 1915 Peggy Place, Lansing, MI 48910-2553.

BOOK REVIEW

SARAPIQUI CHRONICLE: A Naturalist in Costa Rica, by Allen M. Young. July, 1991. Price: \$40 (Cloth) or \$16.95 (Paper). 361 pages. Numerous blk/wht photographs. Smithsonian Institution Press, Dept. 900, Blue Ridge Summit,

PA 17294, USA. Add \$2.25 for postage/handling.

Allen Young has been spending part of each year in Costa Rica from 1968 to the present. He tells how he changed from a novice, unsure how to survive in the tropics, to an experienced naturalist, leading teams of researchers. Throughout the book, his love of the tropics comes through in every story and description. The many research projects in various orders of insects are described, but this is not a book of dry, technical research results. Instead, this is the story behind the studies, and an interesting story it is, too.

There are studies of Morpho butterflies and their foodplants, discoveries of communal roosts for Heliconius charitonius, habits and habitats of Cicada's, Katydids, Lantern flies and Orchid bees. In each case, the exciting narrative style makes you feel as though you were there during the often long and arduous process of finding the secrets of nature. Theories were advanced, and disproved; approaches tried and discarded; but through persistence and occasional luck, answers and insights were obtained. Yet often each answer leads only to more questions and the need for more study.

This is the kind of book that will encourage future students to pursue their own tropical investigations. But even the armchair reader will feel a strong urge to visit a neotropical wonderland like Costa Rica and see the wonders

of nature firsthand.

Ron Leuschner



LOST MEMBER

William S. Cassel, M.D. (Pustal Service says that his new address in Atlanta, GA, as reported in 1991 NEWS #6, does not exist). Please notify Julian Donahue (address on back cover) if you know his present address.

NEWS MATERIAL TO BE SENT TO NEW EDITOR NOW

All items, photos, ads, notices, etc. for the NEWS should now be sent to NEWS Editor, Stephanie McKown, 650 Cotterell Dr., Boise, ID 83709 USA. Any ads received for this issue that were to be run twice will be sent on by the retiring editor, along with any unpublished material for which there was no space. Deadlines for each issue are printed on the back page. Also printed there are names, addresses and phone numbers of key persons to contact within the Society.

REPRINTS AVAILABLE

Reprints of nine publications (listed below) by the late Robert E. Silberglied are available on a first come first serve basis. We have more than 50 copies of numbers 8, 14, 21, 22, and 24, but a very limited number of copies of the other four. If you would like any of these titles, please send a list of the numbers you wish, together with an address label, to:

Annette Aiello Smithsonian Tropical Research Institute Unit 0948, APO AA 34002-0948

 Silberglied, Robert E., and T. Eisner (1969). Mimicry of Hymenoptera by beetles with unconventional flight. Science, 163(3866): 486-8.

 Hinton, H. E., D. F. Gibbs, and R. Silberglied (1969). Stridulatory files as diffraction gratings in mutillid wasps. Journal of Insect Physiology, 15(4): 549-52.

 Silberglied, R. E., and O. R. Taylor (1973). Ultraviolet differences between the sulphur butterflies <u>Colias</u> <u>eurytheme</u> and <u>C. philodice</u>, and a possible isolating mechanism. Nature, 241(5389): 406-8.

 Silberglied, R. E. (1977). Communication in the Lepidoptera. Chapter 17, In: How Animals Communicate, ed. Thomas A. Sebeok. Indiana University Press. Pages 362-402.

Silberglied, R. E., and O. R. Taylor (1978). Ultraviolet reflection and its behavioral role in the courtship of the sulfur butterflies Coliaseurytheme and C. philodice (Lepidoptera, Pieridae). Behavioral Ecology and Sociobiology, 3(3): 203-43.
 Silberglied, R. E. (1978). Inter-island transport of insects

 Silberglied, R. E. (1978). Inter-island transport of insects aboard ships in the Galapagos Islands. Biological Conservation, 13(4): 273-8.

 Silberglied, R. E. (1979). Communication in the ultraviolet. Annual Review of Ecology and Systematics, 10: 373-98.

 Silberglied, R. E., and A. Aiello (1980). Camouflage by integumentary wetting in bark bugs. Science, 207(4432): 773-5.

 Silberglied, Robert E., Annette Aiello, and D. M. Windsor (1980). Disruptive coloration in butterflies: lack of support in <u>Anartia fatima</u>. Science, 209(4456): 617-9.

FRENCH ENGINEER INTERESTED IN SPHINGIDS

A communication was sent to the NEWS recently by a French engineer who has been working on cotton breeding and technology in Africa. He is interested in Sphingidae and has collected specimens in Central Africa and France for several years. He would like to establish contact with North American sphingid collectors. He has been sent a Society membership application, but in the meantime wishes his name and address published so that interested parties might contact him. Jean-Luc Chanselme can be reached at the following two addresses: 11 Avenue des Enjouvenes, 13330 Pelissanne, FRANCE or at IRCT B.P. 764, NDJAMENA, Republique du TCHAD, AFRICA.

ICZN

The following Opinion was published on September 30, 1991 in Vol. 48, Part 3 of the <u>Bulletin of Zoological Nomenclature</u>.

Opinion 1657

Colias alfacariensis Ribbe, 1905, Colias australis Verity, 1911 and Colias calida Verity, 1916 (Insecta, Lepidoptera): Availability of specific names confirmed.

REQUEST FOR INFORMATION ON OPLER'S LONGHORN MOTH (ADELLA OPLERELLA) FROM CALIFORNIA

The U.S. Fish and Wildlife Service (Service) is evaluating the status of Opler's longhorn moth (Adella oplerella). The Service is investigating whether sufficient data exists to propose adding this species to the Federal endangered species list, pursuant to the Endangered Species Act of 1973, as amended. To qualify for addition to the list, a species must be threatened with extinction by one or more of the following five criteria:

 A. The present or threatened destruction, modification, or curtailment of its habitat or range;

B. Overutilization for commercial, recreational, scientific, or educational purposes;

C. Disease or predation;

 D. Inadequacy of existing regulatory mechanisms; and
 E. Other natural and manmade factors affecting its continued existence.

Opler's longhorn moth is apparently restricted to serpentine grassland on the central coast area of California. This animal may be imperiled by urban development. The Service is interested in obtaining information on the biogeography (e.g, known localities or range maps), ecology, habitat requirements, and any threats to this species. identifying human-related ongoing or planned activities within or adjacent to populations of Opler's longhorn moth in the aforementioned areas, the Service will be better able to assess the status of this species and determine if listing is appropriate. If the Service decides to pursue listing of this species, a proposed ruling to list it as endangered or threatened will be published in the Federal Register. Copies of the proposed rule will be sent to local governments, State and Federal agencies, and other interested parties requesting that written comments be submitted to the Service. All information submitted in response to the proposal will be analyzed thoroughly to determine if the species should be listed.

The Service would appreciate any information on Opler's longhorn moth. If you have any questions, please contact Chris Nagano, Fish and Wildlife Service, Sacramento Field Office, 2800 Cottage Way, Room E-1823, Sacramento, California 95825-1846, or phone (916) 978-4866.

FUTURE MEETING SITES

We are currently looking for future sites to host the Lepidopterists' Society annual meetings. As you know, forthcoming meetings will be held at Michigan State University, East Lansing, Michigan, 25-28 June 1992 and at Colorado State University, Fort Collins, Colorado, 8-11 July 1993. As Chairman of the Future Meeting Sites Committee, I am looking for a possible eastern U.S. location in 1994 and a western U.S. site in 1995. If you would like to host a future meeting of the Lepidopterists' Society or can offer suggestions, please contact: Dr. Jacqueline Miller, Allyn Museum of Entomology, 3621 Bay Shore Road, Sarasota, FL 34234 at your earliest convenience.

CREDIT CARDS, ANYONE?

A number of members, including some overseas, have inquired whether the Society would accept credit cards for the payment of dues and the purchase of publications. For the foreign members, one goal is to simplify the process of currency conversion. We have looked into the situation in detail and from several angles, and thus far have come up with the following information:

Any local banks that are geographically accessible to us limit their acceptance to card-in-hand, witnessed signature, face-to-face transactions and will not consider transactions by mail. Nor are they prepared to deal with foreign transactions.

Several large banks or other organizations who will handle by-mail transactions would require that our annual volume exceed, in one instance, 25,000 transactions per year, or in another, \$1,000,000 per year, domestic only. As an organization of under 1700 members, we are obviously playing in a different league!

We do not claim that our search has been exhaustive, but this is what it has yielded so far. If any of our members can come up with objective information about an organization which will handle by-mail transactions in the number of a few hundred per year, or a volume that might reach \$5,000 per year, please contact me.

Dave Winter, Secretary

BIOLOGICAL SURVEY — JAMAICA 1992

Caribbean Wildlife Surveys in association with the Natural History Division of the Institute of Jamaica, announces a biological survey of the montane rainforests of Jamaica commencing April 1992. Primary groups for study are moths and treefrogs at night and butterflies and anoline lizards by day. Participants will join Jamaican scientists in creating data bases to be used in determining boundaries for national parks and areas of special interest for conservation. Strong emphasis will be placed on photography in addition to the collection of representative samples from each of five main forest sites.

Participation is sought from scientific institutions as well as private individuals; teams of 12-16 persons are

required monthly. Dates of the first three surveys are:
April 27 - May 7, 1992. Application deadline: Feb 29
May 25 - June 4, 1992. Application deadline: Mar 31 June 29 – July 9, 1992. Application deadline: Apr 30 Costs, excluding airfares, are \$1,650.00 per person per survey. For details contact Dr. Tom Turner, 2321 State Road 580, Suite 6, Clearwater, Florida 34623. Phone (813) 797-0466







U.S.D.A. INSECT IMPORT RESTRICTIONS

NEWS #5, 1991 and NEWS #6, 1991 carried an advertisement from a member in Belgium offering, among other things, egg masses of Lymantria dispar for sale. The United States Dept. of Agriculture has adopted a Federal Domestic Quarantine on the importation of any life cycle stage of this extremely damaging pest (the Gypsy Moth). It is Illegal to import or possess any live life stage of this insect within the United States without a special permit from the U.S.D.A. authorizing such possession. Anyone in the United States wishing to obtain any live insect material of any type should first check with the U.S.D.A. on the legality of such imports.



CALL FOR IDENTIFICATION SPECIALISTS

Julian Donahue, in his Presidential Address (J. Sep. Soc. 44(1): 10), offered a plan for a National Lepidoptera Agenda to markedly increase our knowledge of Lepidoptera and to facilitate this program through the active participation and cooperation of both amateurs and professionals. Part of this plan included the establishment of a specialist network to make the critical identifications necessary for completing faunistic publications and to compile and publish a directory of "visiting specialists", who are willing to provide on-site taxonomic assistance in exchange for expenses. If you are interested in participating in either or both of the above programs, please fill out the attached form below and return it prior to 15 April 1992 to the Lepidopterists' Society Education Committee, c/o Dr. J. Y. Miller, Allyn Museum of Entomology, 3621 Bay Shore Road, Sarasota, Florida 34234.

IDENTIFICATION SPECIALIST INFORMATION FORM Name: _ (first) (middle) Address: (state) (postal code) (city) Museum or University Affiliation: Lepidopteran Families of Specialization: Stipulations (sender will pay for postage, charge per specimen, etc.) Are you willing to serve as a visiting specialist and to offer taxonomic assistance in exchange for expenses? Are you associated with a Museum, University, or other institution that is willing to accept voucher specimens for future research and biological analyses? Name of Institution:

New Members





BRANDT, FREDERICK W.: 11525 88th Avenue North, Maple Grove, MN 55369.

CLARK, DALE: Dept. of Biology, University of Louisville, Louisville, KY 40292-0001.

CLAYTON, DALE L. (Prof.): Dept. of Biology, Southwestern Adventist College, Keene, TX 76059.

GROSS, IRWIN: 40 Westwood Drive, Orono, ME 04473. HALIMI, ERIC: 53, Rue de la Pagere, F-69500 Brun, FRANCE.

JACQUES-STAATS, MELANIE: HCR 60, Box 535, North Concord, VT 05858.

JANSEN, NICOLE: 257 Santa Monica Way, Santa Barbara, CA 93109.

MATHESON, MIKE: Box 328, Leamington, Ontario N8H 3W3, CANADA.

McBRIEN, MARCIA MARY: 1009 Olivia Avenue, Ann Arbor, MI 48104

MOLINA RODRIGUEZ, JOSE M. (Dr.): Fray Diego de Cadiz No. 6, 2 dcha., E-41003 Sevilla, SPAIN.

PEDERSEN, TORBJORN: Koff-More, 6018 Alesund, NORWAY. PUTNAM, PATTI: 2134 Tudor Place, Sumter, SC 29150. RAUSCH, OLAF PAGELS: Apartado 71, 1250 Escazu, COSTA

RYALL, LAUREN: [address omitted on request] SCHMITZ, HARALD: Fazenda Rancho Grande, Caixa Postal

361, 78914 Ariquemes, Rondonia, BRAZIL. SPENCER, ALLEN D., Jr.: Biology Department, LIF 169, University of South Florida, 4202 East Fowler Avenue, Tampa, FL 33620-5150.

THURBER, FREDERICK G.: 1680 Drift, Westport, MA 02790.

VOKOUN, WILLIAM: 2605 63rd Street, Downers Grove, IL 60516-1664.

WHITING, BRUCE: P.O. Box 31401, Richmond, VA 23294. WIEDORN, WILLIAM S. (M.D.): 233 Tenth Street, New Orleans, LA 70124.

Address Changes 8



ANDERSON, ERLE: 1114 Ridgeway Drive, Alexandria, MN 56308.

BROWN, JOHN W.: 10 East Sierra Way, Chula Vista, CA 91911.

CHILCOTE, CHARLEY A.: 3190 East Lake Lansing Road, East Lansing, MI 48823-1568. DOCKTER, DAWN E.: P.O. Box 881, Mahomet, IL 61853-0881.

GRIER, JÓN J.: 348 Pimilco Road, Greenville, SC 29607. GRING, DANA M.: 1552 Berkey Road, Swanton, OH 1552 Berkey Road, Swanton, OH 43558-9619.

HANAFUSA, HIROTO: 688-2, Tashima, Tottori-shi, Tottori 680, JAPAN.

HOPKINS, MARTIN K.: 3001 South Date Street, Mesa, AZ 85210-8359.

KARLSSON, BENGT (Dr.): Dept. of Zoology, University of Stockholm, S-10691 Stockholm, SWEDEN.

KONDLA, NORBERT G.: Box 248, Taylor, British Columbia

VOC 2KO, CANADA. LOUN, GEORGE JIRI: 2 280 Washington Avenue, New Rochelle, NY 10801-5915.

MASTERS, ALAN R.: c/o Martinez, Dept. of Ecology & Evolutionary Biology, Princeton University, Princeton, NJ 08544-1003.

MASTERS, KAREN L.: c/o Martinez, Dept. of Ecology & Evolutionary Biology, Princeton University, Princeton, NJ 08544-1003.

McCOTTER, GEORGE: 76-6258 Koko Olua Place, Kailua-Kona, HI 96740-2222.

NAGYPAL, TONY: Glottevollen 23, N-3031 Drammen, NORWAY.

PFEILER, EDWARD J. (Dr.): I.T.E.S.M., P.O. Box 484, Guaymas, Sonora 85400, MEXICO.

RAMOS, STUART J. (Dr.): La Resecadora #409, Mayaguez, PR 00680-7542.

REED, CHIP: 224 Blackthorn Road NW, Calgary, Alberta T2K 4X6, CANADA.

REITTER, RAYMOND (Prof.): 75 Albany Avenue, Toronto, Ontario M5R 3C2, CANADA.

SPOMER, STEPHEN M.: 1003 North 52nd Street, Lincoln, NE 68504-3222.

STEIN, LISA K.: Insectarium, Cincinnati Zoo, 3400 Vine Street, Cincinnati, OH 45220-1333.

SULLIVAN, BARRY E.: 4834 Song Sparrow Street NE, Salem, OR 97301-3259.

WALTON, RICHARD K.: 35 Stacey Circle, Concord, MA 01742.

WATSON, CHARLES N., Jr.: 252 Rock Creek Road, #2, Clemson, SC 29631-1959.

ZUFELT, KIRK W.: 6 Nightingale Street, Hamilton, Ontario L8L 1R6, CANADA.

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 the structure of the Society. However, aggrieved members may request information from the Secretary regarding steps which he/ she may take in the event of alleged unsatisfactory business transactions. Furthermore, given adequate indication of dishonest activity by a member, that member can be expelled from the Society under the provisions of Article III, Section 9. of the Constitution.

FOR SALE: Pupae and ova of A. polyphemus, A. luna, H. cecropia. Pupae available until mid-May, ova available mid-June. Send a SASE to Russell Humphrey, 224 South Huron St, Cheboygan, Michigan 49721.

WANTED: Living specimens of large Scolopendra species of centipedes from around the world and SE and SW USA. Also Texas Desert Scorpion, Centruroides hentzi, plus other US scorpions. ALSO FOR SALE: Seeds of Nerium oleanderpink variety. Raised in my greenhouse. Send SASE to Randy Robinette, 4528 Hatfield St, Ashland, KY 41102, USA.

FOR SALE OR EXCHANGE: I offer living pupae, later in Spring, ova, from East Europe of Z. polyxena, E. pavonia, S. pyri, E. versicolora, S. liqustri, M. tiliae, S. ocellatus, A. tau, A. populi, P. elpenor, O. pruni, C. potatoria, overwint. ova of Catocala fraxini and C. nupta and limited quantity ova and papered adults of Caligula boisduvali from U.S.S.R., also A. pernyi, A. yamamai. Exchange for pupae-ova of <u>Rothchildia</u> and <u>Hemileuca</u> families Bozik Rinn, Studnice u Nachoda 25, or Hvalophora. 54948, CSFR/Czechoslovakia.

FOR SALE: Bait traps in local and tropical forms. Contact William G. Ward, 1474 Melbourne Dr, SE, Girard, OH 44420-1332.

WANTED: A copy of Holland's "The Butterfly Book." Is this rare or am I just looking in the wrong places? If one can be had without costing a small fortune, please write giving price and condition. Monica Miller, 301 Timberidge Drive, Bethel Park, PA 15102, USA.

FOR SALE OR EXCHANGE: Reared adults of <u>Papilio indra</u> phyllisae, <u>P. indra fordi</u>, <u>P. bairdii</u>, <u>P. oregonius</u>, <u>P. rudkini</u>, <u>Hyalophora eurvalis</u>. Send SASE for specifics to Robert Chilson, 10122 Hangman Valley Rd, Spokane, WA

99204, USA.

ATTENTION, THOSE SERIOUSLY INTERESTED IN ARCTIC-ALPINE BUTTERFLIES FROM THE USSR. NOW FOR SALE: Many Parnassius (including top rarities) and other hard-to-get species from Central Asian and Siberian parts of the USSR. Beetles also available (including many Cerambycidae, Carabus, Cetoniinae, etc.). Free price list on request. Write to Alexei G. Belik, ul. Krymskaia, 6, Kv. 93, 410039, Saratov, 39. Russia, USSR.

FOR EXCHANGE OR SALE: From Nebraska, P. indra near indra pupae or reared adults and P. multicaudata pupae. Will exchange for Western US/Canada Papilios, especially pupae or reared adults of P. eurymedon, P. rutulus and any P. indra ssp. Contact Jim Reiser, 7836 Aspen Court,

La Vista, NE 68157 or phone (402) 331-0308.

WANTED: Popular illustrated books about African butterflies and moths, e.g. Pinhey and Loe, Swanepoel, etc. ALSO want butterfly and moth postcards or postcards with butterfly stamps. E. P. Sheskin, 2650 Ocean Parkway, Apt 5E, Brooklyn, NY 11235, USA. Phone (718) 891-8059.

WANTED: I would like to establish correspondence and exchange with other collectors of North American Noctuidae. I have field pinned specimens from western Nevada Co, California (2000' elevation). Please write for additional information. Steve Miller, 20530 Dog Bar Rd, Grass Valley, CA 95949.

WANTED TO BUY OR EXCHANGE, The Caterpillars of British Moths. vol. 1 & 2. W. J. Stokoe, F. Warne & Co. Bee Keeping New & Old vol. 2, William Harold Hempsall F.E.S. Write to Mike Elliston, 4 Eastmount Drive, Winnipeg, Manitoba

R2N 3X1, CANADA.

CORRESPONDENCE DESIRED with serious collectors of <u>Delias</u>. Exchange of information, literature, and specimens desired. Also desire communications with collectors living in the New Guinea area and surrounding islands. Contact: Danny Burk, P.O. Box 403, Mishawaka, IN 46546 or phone (219) 255-5037.

FOR SALE: Cocoons of H. columbia, A. polyphemus, C. promethea, and A. luna — ova of many species in the spring. Papered specimens of many butterflies and moths. Literature on rearing butterflies and moths. Send SAE to Gardiner Gregory, Star Route 79, Box 259, Orland, MAINE 04472.

FORSALE: Insect display cases and drawers including Cornell drawers in easily assembled kits. High quality and quick assembly method. For details, send SASE to Amos Showalter, Route 4, Box 115, Waynesboro, VA 22980.

MEMBERS' COMMERCIAL NOTICES

CANADIAN ORGANIZATION FOR TROPICAL EDUCATION AND RAINFOREST CONSERVATION, Box 335, Pickering, Ontario L1V 2R6 CANADA. Phone (416) 683-2116 or FAX (416) 427-1828. A UNIQUE ADVENTURE IN COSTA RICA. Stay at Cano Palma Biological Station in the northeastern Atlantic Lowland Rainforest and experience this pristine area for yourself. A Lepidopterists' paradise. For more information, write, phone or FAX.

IANNI BUTTERFLY ENTERPRISES, P.O. Box 81171, Cleveland, Ohio 44181, USA. Phone: (216) 888-2310. Worldwide unmounted butterflies, moths and beetles with data in all price ranges. Superior quality, double boxed for shipping safety. Personalized service to all — including new collectors! We specialize in Papilio, Morpho and Heliconius. ALSO, excellent quality insect mounting pins including standard black, stainless steel, and Elephant at the BEST

prices. Send \$5.00 for one year price list subscription.

HARALD SCHMITZ, FAZENDA RANCHO GRANDE, CAIXA POSTAL 361, 78914 ARIQUEMES, RONDONIA, BRASIL. FAX 0055 69535 4347. The FAZENDA RANCHO GRANDE in central Rondonia, Brasil, offers you a real paradise of insects, birds and mammals for collecting and photography. We offer 2500 acres of Rain Forest with 12 miles of trails. German administration, German food, cold drinks. English, German, French, Spanish and Portuguese spoken. No Malaria, No Cholera. To assure you the finest service, we will accept groups no larger than 12 participants. Write or FAX for more information.

BOB BROWN, BUTTERFLIES & EXOTIC INSECTS, 1000 So. Illinois, #1102, Mason City, Iowa 50401 USA. Many exotic & beautiful butterflies, moths, beetles & other insects from many countries & all regions worldwide. High quality specimens with available data. Good prices. (Many common and rare species. Especially Papilionidae, Nymphalidae, Pieridae, Morphidae, Brassolidae & all others. Saturnidae & many other moths. Common & rare Coleoptera & many other insects.) Free list available for long SASE. SASE is

not required for foreign mail outside the USA.

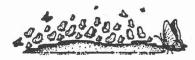
THOMAS GREAGER, R.D. #6, Box 56-B, Greensburg, PA 15601, USA. FOR SALE: WORLDWIDE BUTTERFLIES in all families. Also some moths, beetles, and other insects. Finest quality specimens, with complete data. Satisfaction guaranteed. Good prices. ALSO FOR SALE: INSECT PINS—Imperial, Elephant, and Stainless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

TROPICAL INSECTS AND BUTTERFLY SUPPLIERS, Calcutta Road #2, Post Office, Freeport, Trinidad, W.I. Phone 1-809-679-3991. FOR SALE: Over 600 species of butterflies from Trinidad, the Caribbean, and South America. Major suppliers of South American Morpho species, namely, Morpho rhetenor, Morpho menelaus, Morpho deidamia, Morpho adonis. Also Agraulis vanillae, Heliconius sp, Heliconius doris, Aphrissa statira, Anartia amalthea, Battus polydamas, Parides anchises. Over 600 known

species from Trinidad. Enquiries invited.

TRANSWORLD BUTTERFLY COMPANY, Apartado 6951, 100L San Jose, COSTA RICA, Central America. LATEST 12-PAGE WORLDWIDE LEPIDOPTERA CATALOG includes Neotropical, African, Palearctic and Indo-Australian region butterflies. Specialists in rare Papilionidae, Morpho, Brassolidae. Many ex-pupae specimens available. Books and more. ENTOMOLOGICAL, NATURALIST, BIRDING TOUR PROGRAMS AVAILABLE. Transworld Butterfly Company celebrated 15 years serving Lepidopterists in December 1991. Latest Catalog \$1 or one year's monthly lists via airmail \$6.

E. W. CLAŠSEY LTD., P.O. Box 93, Faringdon Oxon SN7 7DR, England. Tel: 0101 44 367 820399. Fax: 0101 44 367 820429. Entomological booksellers since 1949. To be found in our Autumn 1991 "New Book" catalogue: Butterflies of Kenya — Butterflies of Tanzania (this publication is an excellent guide to East African Butterflies), Studies of Chinese Butterflies, The Parnassiinae of the World, Butterflies of the South East Asian Islands. We have a second hand/antiquarian catalogue out right now. We wish to buy second hand/antiquarian entomological books for cash. Please send list. Our catalogues are FREE — send for one now.



Forthcoming Meetings

NEW YORK NATURAL HISTORY CONFERENCE II

The New York State Biological Survey invites interested persons to A FORUM FOR CURRENT RESEARCH at the New York Natural History Conference II from April 29 to May 1, 1992 at

the Cultural Education Center, The Empire State Plaza, Albany, New York. The conference will allow scientists to present current information on natural history research in New York State, to focus their attention on critical research needs, to develop or renew contacts among individuals or research groups and to rekindle interests and friendships. The keynote speaker will be Dr. Peter Raven, Director of the Missouri Botanical Garden. He is a member of the National Academy of Sciences and a recipient of the International Environmental Leadership Medal. Dr. Raven is one of the most prominent biologists working today and the author of numerous publications dealing with topics as diverse as general botany, plant systematics, chromosome biology, biogeography, conservation biology and ethnobotany.

The program will include invited symposia, contributed papers and poster sessions. Abstracts of all presentations will be published. Student presentations are encouraged. Interested persons should contact the organizing committee at (518) 474-5812 or write to The New York Natural History Conference, Rm 3132 C.E.C., Biological Survey, New York State

Museum, Albany, New York 12230.

THE LEPIDOPTERISTS' SOCIETY 43rd Annual Meeting Michigan State University, E. Lansing, Michigan Thursday, 25 June thru Sunday, 28 June 1992

The Department of Entomology and the Michigan Entomology Society will host the 43rd annual meeting of the Society to be held at Michigan State University, East Lansing, Michigan. Special features being planned include:

 Access to the Entomology Museum on Wednesday (for early arrivers) and Thursday. The collection is richest in Great Lakes and subcontinental Indian specimens, but contains considerable material from other areas.

Welcome reception Thursday evening at the home of Mark

Scriber.

 Symposia on "Ecological and Evolutionary Aspects of Oviposition Behavior" and "Survey and Conservation of Regional Lepidoptera," and a Panel Discussion on "The Pros and Cons of Endangered and Threatened Species Laws."

Friday evening picnic on the Michigan State University

campus, followed by informal slide fest (bring up to 6 of your best, funniest, or most interesting slides to share).

Saturday evening banquet, followed by the annual door

prizes bonanza conducted by Charlie Covell.

 Two field trips (concurrent), one to northern Michigan, and one to southwestern Michigan, both of which offer a great diversity of habitats and species.

 The Michigan Entomological Society will hold its annual meeting on Thursday, June 25, in coordination with the Lepidopterists' Society meetings. Entomological papers on a variety of subjects will be presented at this day-long

Opportunities to tour the Beal Botanical Garden, the brand new \$2,000,000 Horticulture Gardens, The MSU Museum, Abrams Planetarium, and various other MSU and State of Michigan facilities. In addition, those who make the northern field trip can cross the Mackinac Bridge (great views), and visit the Mackinac Island Butterfly House.

ACCOMMODATIONS

Rooms for single or double or family occupancy will be available in one of the MSU dorms at a projected rate of \$14.50 per day per person double, and \$20.00 single. Meals are mandatory at \$9.75 per day (for breakfast and lunch). Dinners have been excluded because of our evening activities on Thursday, Friday and Saturday. Parking will be \$2.00 on weekdays and free Saturday and Sunday. The meetings will probably be held in one of the lecture halls in the dorm, since they are air conditioned. If you do not want dorm accommodations, MSU's Kellogg Center for Continuing Education and several motels are nearby. Camping at State Parks or private campgrounds is also available within 15 miles or closer. Specific information on accommodations and local attractions will be included in the pre-registration packet.

REGISTRATION

For further information and to assist us with planning, please fill out the questionnaire below and return it **IMMEDIATELY.** You will be sent a preregistration packet containing registration forms, call for papers, deadlines and more. We expect to mail the packets in February.

From: The Lepidopterists' Society

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DEADLINES: Material for the Jan/Feb issue should reach the NEWS EDITOR by <u>Dec</u> 1 of the previous year, and that for the Mar/Apr Issue by <u>Feb 15</u>, for the May/June issue by <u>Apr 1</u> and for the July/Aug issue by <u>May 1</u>, the Sept/Oct issue by <u>Aug 15</u> and the Nov/Dec issue by <u>Oct 15</u>. Reports for the SEASON SUMMARY must reach the ZONE COORDINATORS listed on the front cover no later than the <u>5th of January</u>. NEWS EDITOR is Stephanie McKown, 650 Cotterell Dr., Boise, Idaho 83709, USA. Phone (208) 323-9547. NEWS FROM EUROPE EDITOR is W. O. De Prins, Diksmuidelaan 176, B-2600 Antwerpen, Belgium. Phone 03/322.02.35 (from USA use 011/32.3.322.02.35).

INFORMATION ABOUT THE SOCIETY

Membership in the Lepidopterists' Society is open to all persons interested in any aspect of Lepidopterology. Prospective members should send the TREASURER, Fay H. Karpuleon, 1521 Blanchard, Mishawaka, Indiana 46544, USA, phone (219) 258-4893, the full dues for the current year, \$25.00 US, together with mailing address and a note about areas of interest in the Lepidoptera; student membership (must be certified) \$15; sustaining membership \$35; life membership \$500. Remittances must be in US dollars, payable to the Lepidopterists' Society. All members will receive the JOURNAL (published quarterly) and the NEWS (published bimonthly). A biennial membership directory will comprise the last issue of the NEWS in even-numbered years.