

NEWS

of the LEPIDOPTERISTS' SOCIETY

EDITOR Stephanie McKown 650 Cotterell Dr. Boise ID 83709 USA

ASSOCIATE EDITOR

NEWS FROM EUROPE W. O. De Prins



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RESULTS OF THE PUBLICATIONS QUESTIONAIRE

by Bob Robbins Chair, Publications Committee

A publications committee was appointed at the 1992 annual meeting to poll members of the Society and to recommend changes in the Society's publications. The publications committe included John Brown, Ron Leuschner, Stephanie McKown, Floyd Preston, and Robert Robbins (Chair). A survey was created and sent to all members along with dues notices and ballots. The tabulated results are listed at the end of this report. We thank those 488 members who took the time and effort to respond, particularly those outside of North America who returned questionaires by airmail. We are also grateful to those who wrote additional suggestions. Some of these comments are mentioned below, and at the very least, the editors of the News and Journal have read your suggestions.

We discuss below the results of the questionaire and some issues that they raise. The backgrounds and interests of Society members are quite diverse, as expected in a large Society, and the question arises how to deal with subjects or features that many members like, but others dislike. We feel that the best strategy for our Society is to include topics that interest a large proportion of members. People who dislike these topics can ignore them and read those features that do interest them. In other words, a policy of inclusion rather than exclusion underlies this report.

Members of the publications committee are not professional pollsters and did not foresee problems with some of the questions that were asked. For example, we asked about interest in Journal articles on the Lepidoptera of different geographical zones, but it was more difficult and expensive for members living outside North America, who might be more interested in geographical regions other than North America, to respond. Another error was that some members with life memberships did not answer the question -"If membership were offered without the Journal, but at a slightly reduced rate, would you consider this option?" - because it was not applicable to them. Some respondents re-worded or crossed out parts of questions. Despite these and other problems, we believe that the results contain useful information.

The News

Short Notices, Articles, and Letters are the parts of the News that are enjoyed by most members, with 70-80% responding favorably. About 60% also like the Season Summary, Membership List, and Buy and Sell Notices, despite high (23-29%) negative ratings. A frequent written comment was that the Season Summary is scientifically valueless, but the value of the Season Summary is that members enjoy it, not that it is "scientific". Producing the Season Summary takes a lot of resources, however, and it is fair to ask if modifications are possible to lessen its "cost". There were few specific comments about the Membership List and the Buy and Sell Notices. In sum, if the News changes in the future, it will probably be by adding, not eliminating or replacing, topics.

In terms of content, a majority of members want to see more News articles on Techniques and Equipment (65%), on Collecting Trips (54%), on Conservation, Butterfly Gardening, and Related Topics (52%), and on Non-scientific Discussions of Specific Groups of Butterflies or Moths (51%). The Society is planning a techniques manual for the Memoirs, and articles on techniques have appeared recently in the News. A few members commented that articles on conservation and butterfly gardening should not appear in Society publications, but a majority disagreed. Interest in regional checklists (37%) and articles for beginners (26%) was lower than for other topics, but even if only a quarter of the Society are "beginners", a policy of inclusion means that some articles on subjects of interest to beginners would be a good idea.

A flaw in the question about what members would most like to see in an expanded News was that it mixed up topics of content (discussed in the previous paragraph) with topics of format. Although only 26-29% of respondents would most like to see more and better quality pictures and one or more color issues a year, more than twice that number (59%) offered to provide their color photographic slides for use in the News if there were a color issue. Further, the addition of longer articles on techniques, butterfly gardening, etc., would probably necessitate better illustrations. The point seems to be that the most pressing need for the News right now is articles on more subjects and that the style and format in which it is done is not as important to members. A number of members commented that cost is a major factor in determining whether or not to introduce better quality pictures and/or color, a point with which the publications committee is in full agreement.

The Journal

Over the years, there have been complaints that the Journal is too technical for most members. Indeed, a number of respondents made this point in a variety of ways. On the other hand, many members remarked that even if they did not understand or were not interested in certain Journal articles, it was important to know about them. Further, only 18% of respondents said that they would consider membership without the Journal, and this percentage would not seem to be high enough to offset the increased cost of adding a new class of membership, with its attendant bookkeeping and different mailing labels.

Since most Society members live in North America and are interested in butterflies, it was not surprising that a majority most enjoy articles on North American butterflies. However, another way to view these results is that if we published more articles on the butterflies of other geographical areas, we might then attract a more internationally diverse membership. A majority of respondents also like Book Reviews and Obituaries (59%) and General Notes and Technical Comments (50%). In response to the question asking for the 2 or 3 Journal articles that were most enjoyed, many different articles were mentioned... most of them on North American butterflies. However, no single article was listed by more than 2% of respondents, again indicating the diverse interests of Society members, and that articles on many subjects are probably the best way for the Journal to meet member interest.

Survey Results

There were 488 responses. For a particular question, the total number of responses do not add up to 488 and the reported percentages do not equal 100% because some people did not answer that question.

1. If you read the News, please put an "M" before those parts of the News that you most enjoy reading and find the most useful, and an "L" before those that matter the least to you: Season Summary, M-296(60.7%), L-118(24.2%). Short Notices, M-360(73.8%), L-53(10.9%). Buy and Sell Notices, M-289(59.2%), L-140(28.7%). Membership List, M-294(60.3%), L-115(23.6%). Letters and Short Articles, M-387(79.3%), L-38(7.8%).

2. Which of the following changes in the News would you most like to see ("M"), asssuming that these changes were financially feasible? More articles on collecting trips, M-262(53.7%). More articles on techniques and equipment, M-318(65.2%). More articles for beginners, M-127(26.0%). More and better quality pictures, M-127(26.0%). Non-scientific articles on specific groups of butterflies or moths, M-251(51.4%). Articles on conservation, butterfly gardening, and related topics, 252(51.6%). Regional checklists, M-181(37.1%). One or more color issues a year, M-143(29.3%).

3a. If the News were increased in size, would you be willing to write non-technical articles for it? Yes-284(58.2%), No-139(28.5%).

3b. Would you make your color slides of habitats and bugs available to the News for use with articles? Yes-288(59.0%), No-98(20.1%).

4. If you read the Journal, please put an "M" before those parts of the Journal that you most enjoy reading, and an "L" before those that you like the least: Articles on butterflies, M-394(80.7%), L-23(4.7%). Articles on moths, M-261(53.5%), L-96(19.7%). Articles on ecology and behavior, M-299(61.3%), L-68(13.9%). Articles on taxonomy, M-201(41.2%), L-132(27.1%). Articles on Lepidoptera of North America, M-357(73.2%), L-21(4.3%). Articles on Lepidoptera of Latin America, M-188(38.5%), L-138(28.3%). Articles on Lepidoptera of the Old World, M-130(26.6%), L-193(39.6%). Book Reviews and Obituaries, M-286(58.6%), L-73(15.0%). General Notes and Technical Comments, M-245(50.2%), L-84(17.2%).

5. If membership were offered without the Journal, but at a slightly reduced rate, would you consider this option? Yes-88(18.0%), No-365(74.8%).

6. Please list the 2 or 3 Journal articles in the last decade that you most enjoyed. Responses were diverse with no single article being mentioned by as many as 2% of respondents.



The Observer's Butterfly Behavior Checklist

13010 Northland Drive, Cedar Springs, MI 49319

Butterflies generally attract pleasant and positive attention. they are colorful and do not sting, bite, or transmit diseases. Most species occupy tropical regions but temperate areas have a bountiful variety. The Observer's Butterfly Behavior Checklist will assist people in becoming butterfly enthusiasts without necessarily requiring an identification guide or natural history reference book.

The purpose of the checklist is to provide people with a meaningful butterfly encounter whether or not they desire to know species by name. For people interested in enjoyable discovery of butterfly wonders but not interested in identification, the checklist will help you know what behaviors to watch.

As a naturalist at Bryce Canyon National Park in Utah during the 1970's, I led groups on butterfly behavior discovery hikes which stimulated excitement and enthusiasm beyond "Oh, there's a butterfly". Now I use the checklist to enthuse others about butterflies as I work with 4-H groups, school classes, conservation organizations, natural history museum visitors, or nature center participants. It is my hope that the checklist will assist lepidopterists and non-lepidopterists to develop richer and more productive observations.

The Observer's Butterfly Behavior Checklist

Watch a particular individual or recognizable butterfly and determine which of the following behaviors is most commonly practiced. It is likely you will discover previously unrecorded behaviors. At such times it is helpful to have a good library reference like Opler and Krizek's *Butterflies East of the Great Plains* or Scott's *Butterflies of North America*. These references are large and kept in my vehicle so reference can be quickly made regarding life history details of species I encounter. Field guides are great, but do not include detailed natural history accounts helpful in understanding butterfly behavior.

FEEDING AND FLOWER ASSOCIATIONS

(butterflies drink with a long coiled tube called a proboscis that may be as long as their body)

Sipping fluids from damp ground or other non-flower source? Sipping fluids from flowers? (record the flower species, color, the height of the flower above ground, whether it's a single flower or cluster, and whether flower is flat or tubular.)

FLIGHT CHARACTERISTICS

(each species has its own unique flight movements)

____Casual and undisturbed?

- Evasive flight tactics? i.e. dives to ground, rapid zig-zag, upward flight, fast and straight, or other?
- Butterfly-encounter flight? i.e. how does the butterfly react to its own kind and others?
- ____Butterfly encounter with other organisms and objects? how does it respond to objects like rocks, colored berries, forest

clearings, animal droppings, etc.

- ___Mate searching? i.e. patrols environment for receptive female,
 - perches and flies up to investigate passing butterflies, etc.

THERMO-REGULATION

(butterflies do not have internal temperature regulation and thus depend on various behaviors to regulate body heat in the environment) Dorsal basking: i.e. are wings spread with back toward sun? Lateral basking: i.e. are wings folded over back with side toward sun?

____Cooling? i.e. turns so sun rays pass by wings or moves into shade?

___Shivering to elevate temperature?

TASTING AND SMELLING

(used in mate selection and to select food plants for larva)

_____Waving antennae in air, or touching object or another butterfly with antennae?

_____Rapidly drumming or scratching leaf with spurs on front legs?

BUTTERFLY MATING

tail end of bodies clasped together?

- _____Do they couple in flight or on a surface? Which sex carries the other in flight while coupled?
- Precopulation courtship behaviors? (describe)

EGG LAYING

(easiest way to find eggs is to follow butterfly to where she lays them) Eggs laid singly? (describe specific location)

Eggs laid in a cluster?

BUTTERFLY SPECIES NAME or describe wing colors and pattern and distinctive characters so that kind of butterfly can be recognized and enjoyed on future behavioral observation forays.

More on collecting and the Endangered Species Act: a Reply to Ziegler

by David L. Wagner, Assistant Professor University of Connecticut, Storrs, CT

Although I myself am a dyed-in-the-wool collector; add between 3,000-5,000 Lepidoptera to my collection each year; have raised my 3and 7-year-old children to appreciate, watch and collect insects; am responsible for growth and maintenance of a small institutional insect collection; and am in partial agreement with Ziegler (Lep. News May/June 1993), I find much in his letter that disturbs me.

First and foremost, our mission as members of the Lepidopterists' Society need not include a focus on unrestricted collecting, rather I would hope our mission would fall more along the lines of furthering knowledge and appreciation of Lepidoptera.

Ziegler's position that "I would like all young people in [the] future to have the same opportunity that all of our great lepidopterists have had to collect and to study collections of <u>all</u> (emphasis his) species of Lepidoptera as the only way to properly and fully appreciate these insects" is untenable and long outdated. Fortunately, his claim is untrue. For if it were true, then the greater body of ornithologists, herpetologists, mammalogists, ichthyologists, and botanists will forever be disadvantaged, for they shall never "properly and fully appreciate their organisms." Practitioners of all of these disciplines recognize that collecting and collections are essential, but that some restrictions on collecting are fully necessary.

I object to Ziegler's premise that the US Fish and Wildlife Service or others seeking to protect a species' welfare (by regulating habitat destruction, taking, etc.) need be charged with the responsibility of demonstrating that collecting negatively impacts a species. To the contrary, the burden of proof should fall on us--the individuals, societies, or institutions doing the taking--a position which becomes less and less defensible as larger and larger series are harvested, especially if for commercial purposes. Many species of Lepidoptera are now threatened and endangered, virtually all because of habitat destruction and/or the introduction of alien species. As Ziegler and others have stated, collecting has had little to do with the demise of any species (although as he noted anecdotal accounts abound about the disappearance of isolated populations). But our responsibility as an international society of lepidopterists is to insure the welfare of imperiled Lepidoptera, and to do whatever possible to see that rare and otherwise endangered butterflies and moths have the opportunity to continue on their evolutionary journeys. We are the well informed, and without our endorsements and attentions, many lepidoptera taxa undoubtedly will perish.

Ziegler's comments on the Endangered Species Act are so far removed from my way of thinking that I have trouble addressing them. The Endangered Species Act of 1973 is our single most important vehicle for the protection of this nation's biodiversity. It is held in high international regard, and has been used as the model for endangered species legislation by other countries. Contrary to laws in other nations which equate listing with protection, the ESA goes beyond merely listing, and instead, emphasizes recovery and the delisting of imperiled taxa. I would hope that all who think of themselves as biologists, or are otherwise interested in protecting this nation's natural heritage, would endorse at least the intent of the ESA.

With regard to the Endangered Species Act, Ziegler claims that "The only named public supporters of this legislation were..."environmentalists and conservation groups" and "I found no reference to any input from individuals or organizations specifically devoted to scientific research in any of the biological sciences..." Here he (and his congressional representative) are far from the truth. Presently, the most important body endorsing the ESA is the Endangered Species Coalition, which includes more than 80 environmental, scientific, and animal welfare organizations, representing more than 5 million United States citizens. Among the scientific societies represented are the American Institute of Biological Sciences (their outlet is the scientific journal, <u>BioScience</u>), American Ornithologists' Union, American Society of Mammalogists, The Xerces Society, and the Society of Conservation Biology. Last month the Society for Systematic Biology (a large fraction of which is made up of entomologists) voted to endorse and join the Endangered Species Coalition. The Society also passed a resolution asking for the reauthorization and strengthening of the ESA.

In March of this year, a letter of endorsement regarding the ESA was sent to the Members of Congress by 16 of our nation's most distinguished scientists (all members of the National Academy). (I hope Lep News will opt to publish this in its entirety.) Six of the sixteen (H. L. Carson, P. R. Ehrlich, T. Eisner, D. H. Janzen, C. D. Michener, E. O. Wilson), the greatest proportion of any discipline represented, were entomologists.

Contrary to the title of Ziegler's letter, "Conservation vs. collecting...," these two aren't always at odds. Collecting is necessary for acquiring the geographic and abundance data that form the basis of sound conservation decisions. Similarly Orsak's article "Killing butterflies to Save Butterflies" (Lep. News May/June, 1993) provides an important example of where these two practices go hand in hand. A superb treatment of the collecting-conservation issue is Pyle's (1992) Chapter 3, "Watching vs. Catching" in his book <u>Handbook for Butterfly Watchers.</u> p73.

I am a collector. I enjoy planning collecting trips...being out in the field and finding insects that I had previously only read about. I will not easily forget the night I encountered my first luna moth, or traversing talus slopes in Colorado in pursuit of *Erebia magdalena*. In addition to being personally rewarding, such collecting efforts often serve important roles in scientific research, education, and conservation. For example, with regard to the latter, my collections have had direct relevance to conservation decisions made in the State of Connecticut by the Department of Environmental Protection.

I see my right to collect stopping when and if for any reason my efforts are likely to significantly impact a population or species--laws or no laws. Examples of highly vulnerable populations might include the tiny, geographically restricted populations of the El Segundo Blue at the Los Angeles International Airport; the Karner Blue populations at Concord, New Hampshire; or Lange's Metalmark at Antioch, California. Larvae can be especially vulnerable, in that entire cohorts might be collected during a visit. The flower-feeding lycaenids, e.g., *Incisalia fotis bayensis* on San Bruno Mountain, would be susceptible to collecting. For such vulnerable populations, restrictions are certainly warranted...be these self-imposed, society endorsed, and/or state and federally legislated...and I would hope and argue for all of the above.

The point of Ziegler's first paragraph on Mitchell's Satyr remains vague to me. He concludes with "This is reminiscent of the notorious Snail Darter/TVA Tellico dam fiasco and many other more recent controversies of similar nature involving the ESA." What's his point? That we (as a Society) should not be sympathetic to saving the largest remaining population of the Mitchell's Satyr? With this kind of rhetoric and thinking, there is little question that San Francisco's San Bruno Mountain would have fallen to developers. I imagine the greater proportion of Bay Area residents will long be thankful for the butterflies, ESA, and the handful of individuals who helped set aside this real estate in what otherwise is a sea of dense residential housing and industry.

The ESA is presently up for reauthorization; there is no question on Capitol Hill whether the law will be reauthorized by this Congress. The only issue is which of the five bills presently in the house will be ratified. Only one of the bills, The Studds(D), Dingell(D), and Saxton(R) bill (H. R. 2043) seeks to strengthen the law and provide adequate money for its implementation. There is but one bill in the Senate, the Baucus(D)-Chafee(R) Bill (S. 921)--this like H. R. 2043, seeks to strengthen the ESA.

In contrast to the position held by Ziegler, I think it would be prudent and timely for our Society (1) to adopt a resolution endorsing H.R. 2043 and S. 921; (2) to follow the lead of our sister organization, The Xerces Society, and join the Endangered Species Coalition; and (3) to consider appointing a committee to draft a letter to the Fish and Wildlife Service Division of Refuges and Wildlife, asking for them to reevaluate their present collecting and permitting restrictions on invertebrates.

S. pyri calling A. polyphemus

8780 Red Lion - Five Points Rd., Springboro, Ohio 45066

An incident occurred this spring that I felt may be worthy to report to the Lepidopterists Society. In fact, the first time the phenomenon was noticed was spring of 1992.

Saturnia pyri had just emerged at the end of April in that particular species' synchronized manner. Following a cold spell, I had a female emerge late. Her wings were badly misshapen but all else seemed to function as I observed her calling for a mate. Of course, all the males had already perished. I left her in my cage on my back porch.

The following morning, I checked the cage as usual. About four feet away, I heard a rustle in the window well. There was a male *A. polyphemus*. I imagined it must have been attracted to the light from my window. I released it the next night, never giving it a second thought.

This year S. pyri emerged the first week in May, a week later than last year. As my wife and I listened to Jay Leno's monologue, a motion outside the window caught my attention. A male polyphemus was fluttering between the lighted window and the cage containing the last unmated female pyri. There were no other moths present, and of my three polyphemus cocoons, the first did not emerge until a week later. (It was a male and my only female polyphemus emerged three weeks later still.) Opening the lid, the male polyphemus flew in and eagerly attempted to copulate with the female pyri. For over an hour it tried to get a grip on the female but was unable. The female appeared irritated by the situation and had stopped calling. She even left her original perch with the male polyphemus in pursuit. Since this was going no where, I interrupted and released the male. He flew off and was not discovered in the immediate vicinity the next morning. Still unmated, the female pyri called the next night. At about the same time of night, another smaller polyphemus male was attracted.

Having made note of this, I could not recall any mention of a successful cross between *S. pyri* and *A. polyphemus* in any literature. It would make sense to some degree that there may be some distant relationship genetically since both are in the tribe Saturniini.

I reviewed <u>The Moths of America North of Mexico</u>, <u>Moths and How</u> to Rear Them, <u>A Silkmoth Rearer's Handbook</u>, and <u>Foodplants of</u> <u>World Saturniidae</u> without finding any mention of hybrids between the genera *Saturnia* and *Antheraea*.

This year I had *S. pavonia* out much earlier (the end of March) and did not attract any *polyphemus*.

Having reported this observation, I would welcome information from any one with similar experiences, especially those members out west where our own *Saturnia* occur. by Charles V. Covell, Jr.

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This column is dedicated to sharing ideas and techniques on any aspect of lepidopterology. Please send anything you feel our readers would enjoy to me at Dept. of Biology, University of Louisville, Louisville, KY 40292-0001.

Here are two tips sent by Dr. Roy W. Rings, OARDC, Wooster, OH 44691-4096:

SHEET-SIDE SERVICE TRAY

When collecting moths at night it is usually a problem to transfer moths from the killing jar to a holding container without dropping one on the ground where it is difficult to locate. It is also awkward to bend over to transfer specimens on the bottom overlap of the collecting sheet. I have solved this problem by painting an old TV tray with white enamel and then setting this up besides the collecting sheet. The white background makes it easier to see moths that are dropped. You can also put your bottle of killing liquid, a flashlight, killing bottle and holding container on the tray where they can easily be reached without bending over. I use a transparent, plastic, sandwich box as a holding container and line the bottom with a sheet of paper towel which is slightly moistened. To separate collections I use one box for mercury vapor light collections, one for sugaring, one for blacklighting, and one for bait traps. - Roy W. Rings.

AN EMERGENCY HEAD NET

When collecting moths at night in bogs, swamps and other wetlands mosquitos can sometimes be a real problem. Ordinarily the use of repellents applied to the hands and face will provide relief from attack. However, I have been in areas where the mosquitos are so numerous and aggressive that they hovered around my head and some were partially inhaled. To avoid such an experience I carry an extra net bag in my car and a wide-brimmed hat. When this situation occurs I put the net bag over the hat, put it on my head and tuck the net rim area into the top of my shirt. This is an excellent substitute for a mosquito head net and most lepidopterists have an extra net handy. - Roy W. Rings.



Spreading Lepidoptera...

is one of the most difficult skills to master, but is much easier if several "critical conditions" are understood and met. These below are 10 points I have taught, but you may think of others. Please send me any comments.

1. Specimen soft enough. I usually place fresh-killed moths and butterflies in a relaxer for at least a few hours before I attempt to spread them. If the wings move freely when blown on, I deem it ready to spread.

2. Spreading board fitted to the job. The two side pieces of the board need to be exactly the same height, and the central groove only slightly wider than the specimen's body. No board parts should be loose. Soft material holding pin in the groove should be hard enough to hold pin firmly in place, but not so hard that the pin will be hard to push in.

3. Insect pin pushed straight into thorax. The pin should be at a right angle to both longitudinal and cross planes of the body. Check by looking at results from both side and front of the insect.

4. Body at right height in board groove. Wings should lie on side pieces when at right angle to dorso-ventral plane of the body. They should not slope downward, or be lower than tops of the two side pieces of the board. Body should not touch sides of groove, either, or wings won't move easily into place.

5. Paper strips holding wings correctly placed. I use precut strips of tracing paper to hold wings in place. The strips are pinned on the board in a position so as to leave about 1 mm of space between edge of paper and edge of board groove, so I can move wings into place easily.

6. Use sharp pin or needle to pull wings into place. I use minuten pins mounted in shaved down matchsticks or toothpicks. Size #0 or 1 insect pins work pretty well, and larger pins can be used for very large specimens. Be sure to find strong points behind wing veins (Costa of FW; Subcosta or Radius of HW; both not too far from wing bases). When moving wings forward, be sure to do so in an arc, like moving a gate on hinges.

7. Be sure inner margin of FW is about at right angle to longitudinal axis of body, and HW is pulled up so only a small triangle of space separates them.

8. Be sure paper over wings covers wingtips, and is tight over wings. Don't spare pins here.

9. Position antennae and abdomen so they are flat in body plane.

10. Place board in a dry, pest-free place, and leave on board long enough to be sure specimens are dry before moving. And do not forget to write your data labels to afix later.

McLean's Mysterious Ghost Moths

by Robert Dirig Ithaca, NY

Cornell University's McLean Bogs Reserve lies in the northeastern corner of Tompins County, New York. Nestled in the lowlands in glacial kame-and-kettle topography, its preservation dates from the 1920s. A biological survey done by famous early Cornell naturalists soon after its acquisition is historically priceless (<u>Bulletin of the Lloyd Library of Botany, Pharmacy & Materia Medica</u> 27, Entomological Series No. 5, 1926).

McLean's present richness derives as much from its foresighted preservation as from its edaphic conditions. In this reserve, calcareous fen-meadows, seeps, and swamps are juxtaposed with acidic uplands and quaking bogs. These extremes of soil pH and topography provide a large variety of habitats with an associated rich array of plants and animals.

One of McLean's most mysterious living treasures is the Silver-spotted Ghost Moth, *Sthenopis argenteomaculatus* (Harr.) of the family Hepialidae. The moth is large (2-3 inches in wingspan) and possesed of odd habits, with a reputation for rarity. I had been curious about it for years, but had never seen one flying in the wild, although a friend and I had found females at lights in the Karner Pine Bush near Albany, New York, on 8-9 June 1979.

Five years later, in June 1984, Sandra Knapp (then a graduate student at the Bailey Hortorium Herbarium, Cornell University) and her husband James Mallet (a British lepidopterist who had studied other hepialid species in England) asked me about *Sthenopis*. Had I ever seen one? Had I collected it at McLean? Did I know exactly when, where, and how to seek it? Would I like to go with them and try to find it? As a result of our conversation, a silver-spotted Ghost Moth expedition was planned.

Our first step was to thoroughly educate ourselves about the moth. W.J. Holland, in his classic <u>Moth Book</u> (Dover Publications, N.Y., 1968), enticed us with his characteristically terse prose:

> "The moths have the habit of dancing in the air at sunset, and perform very peculiar gyrations over the spot where oviposition is to take place."

Other sources told us that the males had grey hindwings, while those of the larger females were straw yellow; and, remarkably, that the lifecycle took two years, the larvae boring in partially submerged roots of alders (Alnus spp., Betulaceae). Specimens in the Cornell University Insect Collection and my Karner field notes indicated that we should expect the moths around June 10 on evenings of high humidity and heat. We then Consulted Dr. John G. Franclemont, resident "expert" on things lepidopteral. Yes, he had collected Sthenopis at McLean years before. Males hovered around alders at dusk, and females flew through seeking a mate. You had to be quiet, approach closely, and you got only one sweep with your net. If you were lucky you might catch one. The moth flew for just 15 minutes each night, and should be on the wing during the next week or so. Intrigued by the prospect of actually seeing the mating dance of the Silver-spotted Ghost Moth, we set a date for the trip and hoped for hot, muggy weather.

June 12 came--as hot and humid as we could wish, and then some. We had planned to have dinner together at 6:30, and start for the reserve an hour later. While we were enjoying "five-onion soup" at Sandy and Jim's, it started to rain. It poured. The sky was rent by huge lightning gashes as the atmospheric tension of the whole day broke. It seemed to pass quickly. Did we still want to go? Yes! A little rain was not going to dampen our enthusiasm for a glimpse of this rare Ghost Moth. We donned raincoats, high rubber boots, and brought umbrellas. Each of us carried a collecting sack, flashlight, and an insect net, and had been baptized with a liberal dose of mosquito repellant. Jim and I also wore gym whistles on strings around our necks so we could signal each other if we saw a moth.

It was <u>very</u> wet, especially as we made our way through the thick shrubbery surrounding Mud Pond, where Dr. Franclemont had suggested we look. I had worried that the rain might have ruined our chances for the evening, but the air had not cooled very much after the shower, and it was still a few minutes before "dusk", an imprecise term, we quickly realized. The three of us moved slowly around, getting wetter, eyes alert for any movement. I left Jim and Sandy in the alders and proceeded to the edge of Spaerium Brook near the place where a plank footbridge crosses this alder-fringed stream.

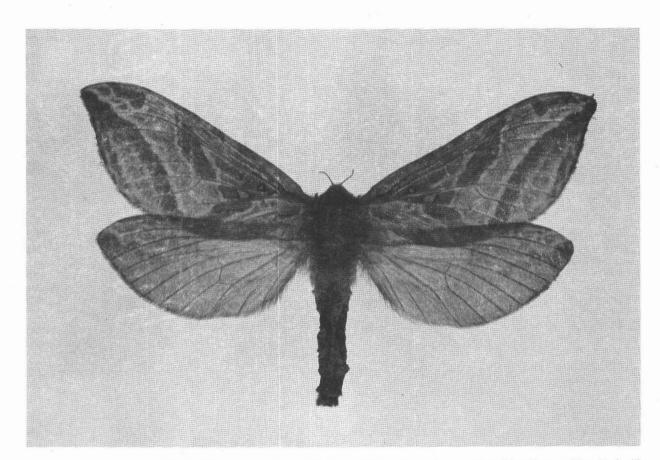
It quickly grew darker. Then I saw one, a slowly moving tan shadow, much like a tiny bat, crossing the glade in front of me...an eerie, indeed, a ghostly apparition. It flew over the brook and was too far away to swing my net. When I remembered my whistle, Jim's blast came as if in echo at the same moment. The Moths were perfectly synchronized, and began to fly at 9:00 sharp.

I waited a few moments, but saw no others along the brook, so I made my way back through the alders to Sandy and Jim. They were stationed a bit apart, nets at the ready, and had seen three or four singletons, but none close enough to catch, and no assemblies.

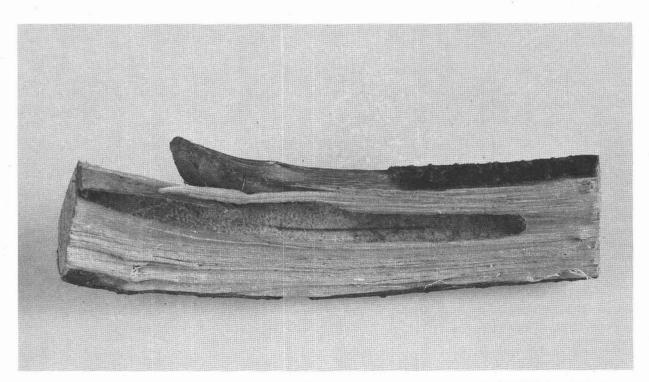
Then Jim shouted to come, he saw two at once, hovering. Sandy and I breathlessly clambered through the shrubs, miring nearly to our knees at least one apiece, while Jim shouted that a third had arrived. We watched them, evidently three males awaiting a female. The best way to visualize their flight is to hold your hands side by side with the palms outward, hook your thumbs together with fingers spread, and flutter your hands as fast as you can; then rock your arms from side to side in an upward-tending arc. Imagine three large tan moths about 10 feet above the ground hovering and swaying back and forth in this strange rhythm, against the greenish-black backdrop of the alders and distant forest beneath a purpling sky. No female came-- if one was in the area our scramblings probably scared it--and the little group disbanded within two or three minutes. We saw one more moth a short time later, but the flight for the night was past, it was much darker, we were wet and mosquito bitten, and it was time to go.

We had glimpsed a rarely observed phenomenon, of which the best souvenir is probably the memory, not a pinned specimen. A few of these large, mysterious moths fly for a few minutes on a few warm nights in June, at the end of their 24-month cycle, lending by their brief adult existence a touch of faerie and romance to the remote wetlands of the McLean Basin.

> Robert Dirig Ithaca, New York



Female Silver-spotted Ghost Moth (<u>Sthenopis argenteomaculatus</u>) from McLean Bogs Reserve, Tompkins County, New York, 17 June 1953, J. G. Franclemont leg. (courtesy Cornell University Insect Collection and The Cornell Plantations, photograph by Charles Harrington).



Channel in Alder (<u>Alnus</u> sp.) trunk made by the larva of <u>Sthenopis argenteomaculatus</u> (courtesy Cornell University Insect Collection and The Cornell Plantations, photograph by Charles Harrington).



The Society has recently been informed of the following members deaths:

B. Adrienne B. Venables....

died unexpectedly on 28 May 1993 at the age of 35. She joined the Lepidopterists' Society in 1982, and was a nominee for the Executive council in 1992. although in good health for the past few years, she had chronically suffered from juvenile diabetes. Adrienne received a Masters of Science Degree in Biology form Georgetown University in 1984, and her thesis research on whether Skippers are primarily pollinators or nectar theives was published in the Journal in 1985 (co-authored by E. M. Barrows). She entered a Ph.D. program at the University of Maryland in 1988 and published a paper in the Journal in 1991 on neotropical hairstreaks of the genus *Janthecla* (co-authored with R. K. Robbins). At the time of her death, she had nearly completed her dissertation on the phylogeny and higher classification of the Pieridae, and the National Sicence Foundation had awarded her a post-doctoral fellowship to continue her studies on Lepidoptera.

F. Martin Brown....

of Colorado Springs, Colorado, died at his home on 30 May 1993, slightly more than two months after his 90th birthday. He was a charter member of the Society and one of the founders, served as president 1968-1969, and was elected to honorary life membership in 1973. His several hundred scientific publications have dealt with taxonomy of living and fossil Lepidoptera, history of nature study in the West, insect pathophysiology, bacterial genetics, geology, paleontology, archaeology and anthropology. He taught formally for over 40 years, and many of his students and others of us who came under his influence are active in the Society or otherwise in science. He was also a philosopher, humanitarian, civic leader and philanthropist; his passing marks the end of an era in a sense, but its continuation is nearly guaranteed by the legacy which endures. He is survived by his wife, Grace, whose grief is shared by hundreds of others around the globe, who will carry on the multitude of projects that he occupied himself with or encouraged others to pursue. A formal biography and complete bibliography will appear in the Journal in the near future.

Announcements and Notices



Notice of Proposed Amendment to the Lep Soc Constitution

At its 1992 meeting the Executive Council found it impossible to interpret objectively the intent of the Constitutional requirements regarding audits. It was also apparent that we were not adhering to these requirements as written. The present text is as follows:

> "ARTICLE X. AUDITING COMMITTEE. <u>Section 1.</u> The President shall appoint an Auditing Committee consisting of three members who shall audit the accounts of the Treasurer and render their report to the Secretary before December 31st."

What period of time is to be audited? The current calendar year? The previous calendar year? July to June? The books for the current calendar year close by the following 1 March.

Finding <u>three</u> competent people who can cooperate on the job in a timely fashion (and probably from separate time zones) is unlikely.

We are on record as not understanding what our Constitutional connotation of the word "audit" is. Is it an informal review of the books, or a more formal evaluation, as by a CPA?

The existing Article puts on the President the onus of getting the auditing arranged. Quite often he/she may not be appropriately qualified to make the appointments. Shifting the onus to the Treasurer puts it where it has been in recent years, as a practical matter. Formalizing what kind of review and auditing we want, and the frequency thereof, is essential.

The outgoing treasurer deserves to be able to leave office with the knowledge that his keeping of the accounts has been reviewed and found valid by a professional auditor. The incoming treasurer needs to know that he starts his term with the books in proper order.

The replacement Article below, written in collaboration with Treasurer Robert Borth and Assistant Treasurer Eric Metzler, has been endorsed by the Executive Council and will appear on the ballot for members' consideration at the end of this year.

> "ARTICLE X. AUDITING. <u>Section 1.</u> <u>Audits</u> <u>following the first and second years of each threeyear term to which the Treasurer is elected</u>: The Treasurer shall present to the Executive Council, for its approval, the names of one or more members qualified and willing to perform an informal review of the accounts of the Treasurer at the close of the books for that calendar year. The reviewer's report shall be rendered to the Secretary within ninety days of the closing of the books.

> Section 2: Audit folowing the third year of each three-year term to which the Treasurer is elected: The Treasurer shall present to the Executive Council, for its approval, a draft contract with a qualified outside auditor for a formal audit of the third year, to be performed at the end of that three-year term. The audit report shall be rendered to the Secretary within ninety days of the closing of the books.

> Section 3: The President, the Treasurer, the Secretary, or any five members of the Society, with the approval of the Executive Council, may call for an additional formal outside audit at any time."

W.D. Winter, Jr. Secretary

Israeli Lepidopterists Society Celebrates Birthday

At the end of April 1993 the Israeli Lepidopterists Society celebrated its ten years anniversary at the Tel-Aviv University Dept. of Zoology, Israel.

We presently have some 50 members mostly Israelis, having annual meetings and News that is published irregularly one to four times a year. For some time we took part in "Shapirit" an Israeli Bulletin for Invertebrata that will reappear soon after a 3 years break.

For more information contact:

Dubi Benyamini, President Israeli Lepid. Society P.O. Box 3550 Ramat - Gan 52134 I S R A E L

From the Idaho Conservation Data Center Nongame and Endangered Wildlife Program

Idaho Department of Fish and Game Boise, Idaho

Dear Stephanie:

Several months ago, you requested information on the protection of insects and regulations regarding the collection of insects in Idaho. As I mentioned to you in the interim, I put your request to a deputy attorney general at the Department of Fish and Game. He has not responded, so I have done some checking of my own.

The state library checked the Idaho Code for me, and the only mention of insects relates to forest infestations.

Chuck Harris, CDC zoologist, and I checked the Idaho Fish and Game Code. Essentially, the Department has authority over all wildlife in the state. The term wildlife is broadly defined and, at least the way I read it, could include butterflies and other insects if the Department wished. Crayfish is the only invertebrate species managed and regulated by Fish and Game. Currently the Department does not regulate the collection of insect species. (Collection permits are required for vertebrates, and the fisheries bureau requires collection permits for listed mollusks.)

To my knowledge, the only restriction on the collection of any insect species relates to the Idaho Dunes Tiger Beetle, a candidate for listing as threatened or endangered. With good reason, in my opinion, Bruneau Dunes State Park is denying permission to anyone wishing to collect this species.

> Sincerely, George Stephens Information Manager

Editor's note: When visiting any public lands it is a very good idea to ask permission before collecting. A state, county or city park/forest/picnic area/ natural area may have rules that apply only to that particular place.

Research Notices



For molecular systematic studies of heliothine Noctuidae, we are seeking alchohol-preserved specimens of species in the genera listed below. We will provide collecting supplies and instructions, and a modest cash reward for specimens obtained. Contact Charles Mitter, Department of Entomology, University of Maryland, College Park, MD 20742; Phone 301-405-3957; FAX 301 314 9290. Genera of interest include <u>Baptarma</u>, <u>Erythroecia</u>, <u>Pyrrhia</u>, <u>Derrima</u>, <u>Microhelia</u>, and <u>Rhodoceia</u>.

Arctiid Research WANTED: Ova, larvae, pupae, or adult Arctiidae for Behavioral Research, especially *Cosmosoma myrodora, Syntomeida ipomoeae*, and *Composia fidelissima*. Will buy or trade for Ecuadorian arctiids (papered). Please contact Bill Conner, Department of Biology, Wake Forest University, Box 7325 Reynolda Station, Winston-Salem, NC 27109. Phone 919-759-5023. FAX: 919-759-6008.

REQUEST FOR INFORMATION - Seeking insect stories: The BBC Natural History Unit in Bristol, UK has recently embarked on a major new six-part series exclusively about insects. The series will take a "science fiction" style look at the alien world of insects. Visually stunning computer effects mixed with live action are one strength of the series. The other is provided by the insects themselves extraordinary creatures carrying on extraordinary lives, most of which have never been previously filmed.

Our aim is to seek out the most new, exciting and bizarre insect stories to include in six programmes with the following themes: - insect design, reproduction, feeding, migration and dispersal, social insects and man/insect interactions. We are particularly keen to film mass migrations of butterflies other than the famous Monarch Butterflies of Mexico. We would therefore be pleased to hear from anyone who either has some good insect stories or could notify us of any visually spectacular butterfly migration they may be observing that we could get to quickly to film. If you are able to help with either of these requests please contact: Wendy Darke (Tel: 44 272 742164) or Ian Gray (Tel: 44 272 742428) FAX no: 44 272 237708. BBC Natural History Unit, Broadcasting House, Whiteladies road, Bristol, BS8 2LR, UK.

Skippers WANTED for genitalia photography. I am dissecting and photographing the genitalia of male North American (primarily N of Mexico) skippers, with a view to preparing a book on the subject. If you will send pinned or papered specimens, I will return them, intact except for p[art of the abdomen, together with the dismantled genitalia preparation (uncus, valvae, etc.) and an 8" X 10" photograph of the preparation in successive stages of dissection. Alternatively, we can exchange. For a list of skippers that I already have and therefore don't need, and an exchange list (mostly Western US), contact Roderick K. Clayton, 4176 Inglewood Blvd. Apt. 9, Los Angeles, CA 90066.

Swallowtails WANTED for research. Papered or mounted specimens of *Papilio rutus* and *P. eurymedon*, with collecting data, needed by graduate student doing research on Western U.S. Swallowtails. Will pay. Michael Pucher, 19608 Lull Street, Reseda, CA 91335



5th European Congress of Entomology will be hosted by the Royal Entomological Society, 29 August through 2 September 1994 at the University of York, United Kingdom. Broadly interpreted themes include: Insect life histories; Habitat management, creation & restoration, Population processes & spatial dynamics, Biodiversity: Does taxonomy matter?, Management of pests & beneficial insects and

Insects as indicators of environmental quality. Offers of papers and workshops welcome. The European Congress takes place at four year intervals and is the only forum to cover Entomology in its widest sense across Europe. For details and further mailings contact IFAB Communications, Institute for Applied biology, University of York, York Y01 5DD, UK. Phone: +44 (0)904 432940 FAX: +44 (0)904 432917

An international symposium "Ecology and Conservation of **Butterflies**" will be held 10-12 September 1993 at Keele University, Staffordshire, U.K. Speakers include Phil DeVries, Paul Opler, Ernie Pollard, and Tim New. For details write to Dr. A.S. Pullin, Department of Biological Sciences, Keele University, Staffs ST5 5BG, UK.

The 4th National Pesticide Conference is scheduled for 1-3 November 1993 in Richmond Virginia. For more information contact Diana L. Weigmann, Conference Director, Virginia Water Resources Research Center, Virginia Polytechnic Institute & State University, 617 N. Main Street, Blacksburg, VA 24060-3397. (703) 231-6673.

1994 - The 9th European Congress of Lepidopterology is scheduled for 5 - 9 September 1994. The Congress will be held at "Lednice na Morave", Czechoslovakia.

Corrections and Minor Changes to the 1992 Membership Directory

(make appropriate changes in Alphabetical List of Members)

LAMPE, RUDOLF E.J.: change postal code to "90489 Numberg



New & Reinstated Members

(NOT included in 1992 Membership Directory; all in U.S.A. unless noted otherwise)

ABADJIEV, STANISLAV: Block 415, Entrance G, Flat 80, BG-1582 Druzhba 2, Sofia, BULGARIA.

ALLEN, VICTORIA: 98 John Street South, Hamilton, Ontario L8N 2C1, CANADA.

AONUMA, KUNINOBU: 4-5-17 Nakagosho, Nagano City, Nagano Pref., JAPAN.

BALLETBO, PERE RIBAS: c/o Maurici Vilumara No. 4, El Prat de Llobregat, Barcelona 08820, SPAIN.

BLINN, JERRY: Perceptive Systems, 3623 Brook Street, Lafayette, CA 94549.

BUCKINGHAM, GARY R. (Dr.): USDA/ARS, P.O. Box 147100, Gainesville, FL 32614-7100.

BURNETT, ROBERT DOUGLASS: #66 Prices Switch Road, Warwick, NY 10990.

CAVALCONTE, PAUL: 3025 Colden Avenue, Bronx, NY 10469. CRUCET, ARTURO: 521 Rosewood, Norman, OK 73069.

GINN, SCOTT: 22 Beechwood Parade, Cherrybrook, New South Wales 2126, AUSTRALIA.

GOODWIN, GLENN K .: P.O. Box 96, Etna, CA 96027.

HARIBAL, MEENA (Dr.): Section of Ecology & Systematics, Corson Hall, Cornell University, Ithaca, NY 14853-2701.

HIROSAWA, MIZUYOSHI: 2-7-21 Nishikata, Bunkyo-ku, Tokyo 113, JAPAN.

IWANO, HIDETOSHI (Dr.): Department of Entomology, University of Minnesota, 219 Hodson Hall, 1980 Folwell Avenue, Saint Paul, MN 55108.

JOHNSTONE, JOHN: 5519 Queensville Side Road, RR 3, Mount Albert, Ontario L0G 1M0, CANADA.

LAMOND, STEVE: P.O. Box 1783, Cairns, Queensland 4870, AUSTRALIA.

LERCH, ERWIN: 61 Birch Avenue, Richmond Hill, Ontario L4C 6C4, CANADA.

MARICICH, ROBERTA: 5222 Montair Avenue, Lakewood, CA 90712. MATSUMOTO, KUNIOMI: #102 1-9-15 Kakinokizaka, Meguro-ku, Tokyo 152, JAPAN.

MOAYERI, ALI: 7334 North Brooks, Fresno, CA 93711.

NAGAI (KABUTO), SHINJI: 1-20-5-601 Shimotakaido, Suginami, Tokyo 168, JAPAN.

PATTERSON, DAVID C.: 12915 46th Avenue North, Plymouth, MN 55442.

PATTERSON, JAMES C.: 12915 46th Avenue North, Plymouth, MN 55442.

PIERCE, NAOMI E.: Museum of Comparative Zoology, Harvard University, 26 Oxford Street, Cambridge, MA 02138.

SAUL, RICHARD BERTRAND (M.D.): 1601 Walnut Street, Suite 1010, Philadelphia, PA 19103.

SCHLICK, TOBY: 3067 Sugar Bush Road, P.O. Box 331, Fish Creek, WI 54212.

SOCOLOF, ROSS: P.O. Box 1987, Bradenton, FL 34206.

SPOOR, RYK P. (Dr.): Dept. of Biological Sciences, Albany College of Pharmacy, 106 New Scotland Avenue, Albany, NY 12208-3492. UNGER, FRED E.: 1503 Birch Court, Bel Air, MD 21014.

UNGER, STEVEN E.: 1503 Birch Court, Bel Air, MD 21014.

VAN LIEW, RUTH K.: 23 Wooddale Avenue, Croton-on-Hudson, NY 10520.

VEDA, HIROYUKI: 208 Mikonohama, Tanabe-shi, Wakayama 646, JAPAN.

WANZOR, SCOTT: 3055 Abbotts Pointe Drive, Duluth, GA 30136. WARDROP, SCOTT: 990 North 1400 West, Saint George, UT 84770. WARDROP, WADE: 990 North 1400 West, Saint George, UT 84770. WELSH, GARETH S.: 2, Brafferton Close, Woodham Burn, Newton

Aycliffe, Durham DL5 4RQ, ENGLAND.

WENGER, REMO: CH-3986 Ried-Morel, SWITZERLAND. WIDAGDO: Jalan. Anas Karim 35, Padang Panjang 27116, West Sumatra, INDONESIA.





(all U.S.A. unless noted otherwise)

BARD, ALANA H.: 18 Links Road, Westford, MA 01886-1537. CASSELL, RICHARD: 1289 Parkway Gardens Court, G-127, Louisville, KY 40217-1280.

EGBERT, ROBERT (Dr.): P.O. Box 2035, Collegedale, TN 37315-2035. FLAUGER, NORBERT (Dipl. Ing.): Apto. 49, 2040 Bejuma, Carabobo, VENEZUELA.

HOLMQUIST, DAVID V.: 8 Roane Circle, Little Rock, AR 72204-3547.

KANSTRUP, MICHAEL: 331 Frank Street, Ottawa, Ontario K2P 0X7, CANADA.

KEVERLINE, JEFF: 2214 West Laurel Avenue, Visalia, CA 93277-2122. **KING, RON:** 1321 Audubon Street, Columbus, IN 47203-1431.

McGRATH, ROBERT D., Jr.: 11 Lelland Road, Stoughton, MA 02072. QUINN, MICHAEL A.: 500 Boyett Street, College Station, TX 77840-1212.

RITTNER, OZ: Davidzon 2, Rishon le-Zion 75357, ISRAEL.

ROCKWELL, RONALD F.: 5429 Knollwood Drive, #1, Cleveland, OH 44129-1647.

SHIRAIWA, KOJIRO: 4-13-17 Miyagidai, Funabashi-shi, Chiba 274, JAPAN.

TAYLOR, MICHAEL J.: 1138 Tulane Drive, Mountain View, CA 94040-3633.

WEBER, JOHN, Jr.: Route 1, Box 48A, Nevis, MN 56467-9713.

WHITE, VICKI: P.O. Box 74, Anadarko, OK 73005. ZUFELT, KIRK W.: 475 Sandringham Crescent, Unit 15, London, Ontario N6C 5B9, CANADA.

The Market Place Buy • Sell • Exchange • Wants

BUY - SELL - EXCHANGE: POLICY STATEMENT

Items submitted for inclusion in this section are dealt with in the manner set forth on page 20 of the Jan/Feb 1993 NEWS. Please note that in keeping with the guidelines of the Society, henceforth no mention of any species on any threatened or endangered species list will be accepted in these items. This will include all Ornithopterans now and for the forseeable future. Items will be accepted from members only and will be printed only once unless entry in the maximum of two successive issues is requested. Please keep items short. A maximum of 100 words is allowed. SASE in an ad stands for self-addressed stamped envelope. Ads may request bids by mail on a time-limited "best-offer" basis. OBO in an ad stands for "or best offer". For example: "Watching Washington Butterflies, by Pyle, 1974. \$10 OBO received by 1 Dec 1992".

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. However, aggrieved members may request information from the Secretary regarding steps which he/she may take in the event of alleged unsatisfactory business transactions.

Note: U.S. Department of Agriculture (USDA) may require permits for transport of live lepidoptera in any stage. Please inquire.

FOR SALE: Large selection of butterflies and beetles from diverse regions of the former USSR, many rarities available. I specialize in butterflies: Papilionidae, Colianidae, Pierinae, Satyridae; moth: Sphingidae; coleoptera: Carabidae, Cicindelidae, <u>Potosia</u>, <u>Dorcadion</u>, but have many other families. Write or call for price list. Tatiana Klimova, 4020 Tanglewood Tr., Chesapeake, VA 23325, USA, telephone/fax 804-440-1913.

FOR SALE: Cornell drawers in cabinet. SASE for information. Russell A. Rahn, 3205 W. Rochelle Road, Irving, TX 75062.

FOR SALE: A large collection of tropical butterflies, moths and beetles. A select collection set in glass covered drawers in cabinets that are 5 ft. high. Drawers are 18 in X 18 in X 3 in. There are a total of 12 cabinets in all. Contact Elmer L. Griepentrog, Elsie Rt., Box 740, Seaside, OR 97138. Phone: (503) 755-2259.

FOR SALE OR EXCHANGE: *A. pernyi* 1st brood pupae. Also limited pupae of *S. pavonia*. Mike Matheson, 69 Detroit Ave., Wheatley, Ontario CANADA

FOR SALE OR EXCHANGE: Many Russian papered butterflies and beetles in good condition. For example: *Parnassius ariadne, P. loxias, P. tenedius, P. eversmanni, H. helios, S. telamon, Colias macropolo, C. thisoa, C. staudingeri, C. melinos, Erebia sibo, E. embla, E, calmuca, E. keffersteini, Oeneis norna, O. calmuca, O. skulda, O. ammon, O. magna etc.* . Please offer material of your region in exchange. J. Kruger, Danziger Str. 14, D-40822 Mettmann, Germany.

FOR SALE: Eudicella smithi from Kenya, S.W.A., Malawi, Uganda, and Burundi, E. gralli, Ranzonia splendens petersiana, Neptunides polyehloros, N. stanleyi. Please write for free list of Lucanidae, Scarabaeidae, Cerambycidae, and Buprestidae. Chris Adamson, 5010 Solano Ave., Richmond, CA. 94805. To Give Away: I have living material of the *Atala butterfly, Eumaeus atala*. Will give this, free of charge, to anyone who has a large --- and I do mean large --- supply of Coontie (*Zamia pumila*), the host plant (which is known also as *Z. integrifolia*). Paul F. Pfenninger, 4085 Floral Drive, Boynton Beach, FL 33436

FOR SALE: Butterflies from California and Arizona - 115 species+. Business size S.A.S.E. please for free lists. Robert Wuttken, 9506 National Blvd. Palms CA 90034-2820.

FOR SALE: Living *Attacus atlas* cocoons from the Philippines. Limited number available. Send SASE to Ken Deitcher M.D., Box 5162, albany, NY 12205-0162.

MEMBER'S COMMERCIAL NOTICES



MIGUEL SERRANO, Tropical Butterflies of America - 6823 Rosemary Drive, Tampa, Florida 33625 USA - specializing in tropical American butterflies, moths, beetles and other spectacular insects from tropical areas of the world. Send \$2 for comprehensive lists with color plate.

TRANSWORLD BUTTERFLY COMPANY, Apartado 6951, 1000L San Jose, Costa Rica, Central America: NEW 12-PAGE LEPIDOPTERA CATALOG includes Neotropical, African, Palearctic and Indoaustralian region butterflies. Many species are ex-pupae and seldom available. We operate Naturalist and Lepidopterist (photographic) tours. Transworld Butterfly Company has been serving Lepidopterists worldwide for over 17 years. Latest catalog \$1. One year's mailing list \$6.

E.W. CLASSEY LTD., P.O. BOX 93, FARINGDON, OXFORDSHIRE, SN7 7DR, ENGLAND. Tel: 44 367 820399 Fax: 44 367 820429. Announcing: THE BUTTERFLIES OF THE WEST INDIES & SOUTH FLORIDA by David Spencer Smith, Hope Professor of Entomology, Oxford, England and Drs. Lee and Jackie Miller, Allyn Museum of Entomology, Florida. Large 4to format, 280 pages, 33 fullpage color plates by Richard Lewington. Includes taxonomic checklist, list of families of plant genera mentioned as larval\adult foodplants\nectar sources, extensive bibliography and index. Provisional date\price: February 1994\£85.00 (c.\$125.00). TAKING ORDERS NOW. Send no cash, we will keep you updated with news of this publication.

FLORA & FAUNA BOOKS, P.O. BOX 15718, GAINESVILLE, FL 32604. phone: (904) 3735630 or 3355011. Check our real list prices! (not inflated prices of some dealers): Comstock, Butterflies of California. (1989 facs. ed.) \$27.50 cl; Emmel, Butterflies So. Calif. (1973) \$7.50 pap; Lepid. Cat. 118. Noctuidae (Poole, 1989) 3v. \$75.00 cl; Taiwan Illus. Moths (Chang, 1989-91) 5v. \$196.00. Also: *Minno\Emmel, Butterflies Fla. Keys (1993) \$18.95 pap\31.50 cl; Emmel et. al., Florissant Butterflies (1992) \$14.95 pap\35.00 cl. Low shipping charges: \$2 first bk\75¢ each added bk (outside USA add \$1.50 per bk). Order prepaid please with 10% off above listed prices (*except Minno\Emmel book). MC\VISA\AmExp.



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

Address Correction Requested

Nonprofit Org. U.S. POSTAGE PAID Permit No. 116 Lawrence, Kansas

1725

John A. Snyder Department of Biology Furman University Greenville, SC 29613-0001

DEADLINES: Material for the Jan/Feb issue should reach the NEWS EDITOR by <u>1 Dec</u> of the previous year, and that for the Mar/Apr Issue by <u>15</u> <u>Feb</u>, for the May/June issue by <u>15 Apr</u> and for the July/Aug issue by <u>1 June</u>, the Sept/Oct issue by <u>15 Aug</u> and the Nov/Dec issue by <u>15 Oct</u>. Reports for the Season Summary must reach the Zone Coordinators listed on the front cover no later than <u>5 January</u>. The NEWS Editor accepts articles in any format, but appreciates double-spaced typewritten copy accompanied by a computer disc in any DOS format. NEWS EDITOR is **Stephanie** McKown, 650 Cotterell Drive, 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). BOOK REVIEW EDITOR is Dr. Boyce A. Drummond, Natural Perspectives, P.O. Box 9061, Woodland Park, Colorado 80866, USA. Phone (719) 687-6596.

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, Robert J. Borth, 6926 N. Belmont Lane, Fox Point, WI 53217, USA, phone (414) 351-3816, the full dues for the current year, \$25.00 US, together with mailing address and a note about areas of interest in 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) 326-2634.

Requests for Missed Issues (i.e. those not delivered although dues have been paid on time) should be sent to the TREASURER, Robert J. Borth, address above, or the PUBLICATIONS MANAGER, Ron Leuschner, address below. Defective issues will also be replaced by the TREASURER. <u>Do not</u> request these of the NEWS or JOURNAL editors.

Manuscripts submitted for publication in the JOURNAL are to be sent to Dr. John W. Brown, EDITOR, JOURNAL of the Lepidopterists' Society, San Diego Natural History Museum, P.O. Box 1390, San Diego, California 92112, USA. Work phone (619) 942-5147, home phone (619) 422-1846. See the inside back cover of a recent issue of the JOURNAL for editorial policies. Book reviews for the JOURNAL should be sent to Dr. Boyce A. Drummond, Book Review Editor (address above).

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