

NEWS

of the LEPIDOPTERISTS' SOCIETY

Number 1

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GHOST DANCING

The locale was around a campfire in the New Brunswick woods many years ago. Some of the happenings, although hardly epochal, will bear relating.

A yarn was born there which many collectors already have heard; it has become a part of that vast body of incredible doings known as the Entomologica Apocrypha (about which the less said in print the better). Stop me if you've heard about the exceedingly steatopygous lady who was demanding, "How you tell dem boy butterfly from dose girl butterfly, huh?" Who could resist telling her, "The girl is wider on the bottom." Fortunately her husband had a beautiful sense of humor. But that is another tale, so to speak, and quite subsidiary to the main event, namely a visit from the camp ranger, bearing gifts for the mad scientist. To wit: one large green telephone insulator serving as a makeshift container for some moths taken at a cabin window. Now, surely every lepidopterist knows Whosit's Law - (Whosit ranks right up there with Parkinson and Murphy as a lawgiver): In any batch of junk picked up by any rank amateur, there will be at least one goodie. Sure enough, a very docile *Sthenops* one of the big ones (*argenteomaculatus?*).

It was news to me that these ghost moths would come to light, any more than to "sugar", but then, happenstances will happen, (as witness the *Hepialus* sp. I took years ago when "sugaring").

The ranger was startled by my erudite first question, "Where's your willow bog?"

"Right across the road. How did you know?" (Sorry, wrong question; two evenings spent prowling at dusk to no avail.)

I went on to expound from my limited knowledge (second hand from the literature) that these moths have mating "dances" at twilight but are very rarely encountered. Also that the eggs presumably are broadcast and that the larvae are root borers taking several years to develop.

The specimen before us obviously was a girl moth, as per the specifications previously set forth, so I had the inspiration to do a bit of jiggling. My unscientific thought was that a bug which does an egg sprinkling act might be ready to shed ova on demand. Well, hardly. The poor old creature may have been too feeble to join the dance to relive her moment of fulfillment, the response was immediate.

Or simply put, when sashayed delicately up and down as nearly as I could enter into the spirit of things to simulate a mating flight, the lady really showered down.

But eggs? Pepper, rather; incredibly tiny. A quantity which must have been into the hundreds was dropped on a sheet of white paper in a very short time. The moth was taken home alive and several times thereafter was coaxed to broadcast a seemingly endless supply of "pepper". If indeed, these were to be all eggs, one must assume the odds against survival to be astronomical, as is believable of an organism starting life in this form and thrown at random into a bog.

The odds against rearing one of these species would seem equally formidable. Aside from sheer luck, how does one go about procuring a pregnant ghost moth? Or how coddle the larvae from pepper grains to full-grown borers?

One step in the needed techniques I believe could be refined from my crude experiments around the campfire. It is awkward to dance with a moth and simultaneously catch the spawn. Why not lash an aluminum cone from a light trap to one's body? This would free a hand to manipulate another useful accessory; a light cheesecloth robe which would add grace to the movements and help one get into the mood of things. Of course, a bit of DeBussey in the background. And the doors locked. And the shades pulled. One would not want the neighbors starting ugly rumors, would one?

Paul Grey
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R I P P L E S

The article A Novel Commercial Oheromone for Attracting Clearwing Moths by Ronald Wielgus which appeared in the NEWS, No. 6, 1976, has caused ripples. The following account was sent in by Mrs. Paul Russell of Greenwich, CT.

In July, 1973, Charles Remington and my husband and I were collecting on West Rock in New Haven. Paul and I were both wearing bright orange shirts, but I was also wearing "Heaven Sent", a cologne by Helena Rubenstein. I was attacked by a number of Edwards' hairstreaks and coral hairstreaks. They came zooming in, apparently out of nowhere - did not flutter around me, but headed straight for my orange shirt. None landed on Paul, despite his shirt of the same hue. Afterwards, I wrote to the perfume company, explained the phenomenon and inquired as to what floral ingredients might be responsible. They took me for some sort of cosmetic spy with a sneaky plan for pirating their formula. It took several letters before they finally admitted to the "presence of clove and geranium".

Since then, the perfume has elicited similar behavior from a red admiral (on a bright blue shirt), and a painted lady (on pink). Since the butterflies did not land on my wrists or behind my ears where I had applied the perfume, I am assuming that they habitually visit flowers of those colors, and that the perfume acted as a decoy.

This revelation adds another dimension to my trail-guiding activities. When I take a group of school children through the Audobon preserve, I can douse myself with the perfume, wear an appropriately colored shirt, and introduce the kids not only to the birds and the animals, but to the butterflies as well.

Sandy Russell, 311 Orchard St.
Greenwich, CT. 06830

And this: --excerpted and paraphrased from an article by Jack Smith in the Los Angeles Times, January 17, 1977:

A man never gets over his romantic fantasies, I suppose. One needs only recall the remark of Chief Justice Oliver Wendall Holmes at the age of 90, as he and a colleague observed a young secretary walking along Pennsylvania Avenue on a summer day: "Oh, to be 70 again!"

However, I am not innocent enough to imagine that the application of something extracted from the abdominal sac of the Mongolian musk deer would drive sensible young women out of their minds and provoke them into fighting like bobcats for my attention. I am not persuaded that smearing my neck with something called Macho or Manpower would turn me into Joe Namath. When a man is masculine enough to appear on television in pantyhose, like Namath, he does not need the assistance of aromatics to arouse the opposite sex...I have never believed for a moment that there was any scientific support for such extravagant claims, but now I'm not so sure. While there is still no proof that such scents work with *women*, there seems to be some very interesting evidence that they actually may help a man to get moths.

Listen to this: A Lepidopterist named Ronald Wielgus of Phoenix...went out in the boondocks looking for a species of clear-wing, (so-called because their wings are clear as Saran Wrap). Before setting out however, Weilgus performed the usual male grooming procedures, and this particular morning for no special reason, he happened to apply Musk instead of his usual Brut 33. "Soon I was encircled by scores of male clear-wings," he recalls, which began to settle on his face and hands. "During my one hour stay," he recalls, "I was constantly plagued by scores of males. I have never been beset by those moths with other after-shave lotions. Old Spice Musk is purported by the manufacturer to be highly attractive and pleasing to members of the female sex," Wielgus concluded, "but it proved irresistible to males of *Hymenoclea palmi*, the clear-wing moth."

I have no intention of endorsing Musk; nor do I wish to discredit Brut 33. It is entirely possible that Brut 33 might prove irresistible to some other kind of moth - female tigers, for example. But even if it isn't all a man could desire, it is still a comfort for Joe Namath, I imagine, as well as for me, to know that when we're over the hill - when the arm is gone and the knees are gone and the hair is gone, we can still attract moths.

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The article on "The Flood and the Butterfly" in the last issue of the NEWS dramatically portrays the damage which occurred in Larimer County, Colorado. It does not touch upon the major research opportunity which the flood created.

Mr. Treatman unquestionably has extensive baseline information on the lepidopteran fauna of the area, and presumably on the flora on which it depended. The situation is tailor-made for the next decade (or longer if necessary), for systematically recording the recovery sequences of both flora and lepidoptera. Which species managed to persist in diapause despite the deluge? Were the populations of these reduced in the second year, through absence of larval food plants? Which species reappeared as nectaring transients, but did not breed? Which returned only after the larval food plant was well established. Which were "permanently" extinguished in the area?

This is probably not the only time the Larimer canyons have been scoured since they were first colonized by lepidoptera. A study such as this could give invaluable information on the resiliency of butterfly populations and their manner of recovery, and would probably elucidate significant principles relative to butterfly conservation. William D. Winter, Jr., 275 Common St., Dedham, Ma. 02026.

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NOTICES

WRITING CONTEST: Data Courier, Inc., publishers of Insect World Digest, a bimonthly magazine devoted to popular articles on insects and insect life, is sponsoring a writing competition for articles on any entomological subject. The prize winning articles will be published in the magazine. All articles submitted will be considered for purchase by the magazine. Five prizes are offered: First prize: \$500, Second prize \$200, and three prizes of \$100 each. The winning articles will be used in the Jan/Feb and following issues. The deadline for submission of articles is September 1, 1977.

The competition is open to any person in the world (except for staff members and employees of DATA Courier Inc.) All articles submitted must be offered for sale and will be purchased at published rates if accepted. All articles must be illustrated with color and/or black and white photographs, drawings and diagrams. No article will be returned unless accompanied by a self-addressed, stamped envelope. (Foreign entries: send international money order for postage, or indicate that you will accept a bill for return postage.)

The articles will be judged by a panel of writers and editors consisting of Dr. James S. Packer, Managing Editor, Entomological Society of America; Mr. Kenneth F. Weaver, Assistant Editor, National Geographic Magazine; Dr. Howard E. Evans, Natural History author, Colorado State University; Mr. Robert Boyle, Senior Writer, Sports Illustrated; and Dr. Ross H. Arnett, Jr., Editor, Insect World Digest.

For detailed information, entry blanks, and author guidelines, write to the Editor, Dr. Ross H. Arnett, Jr., P.O. Box 505, Kinderhook, NY 12106. For sample copies (prepaid \$2.00 each) of the magazine, write to Data Courier, Inc., 620 South Fifth Street, Louisville, Kentucky 40202, USA

JOHN ORRELL of Smithsfield, Queensland, Australia regrets that he can NOT supply specimens of Ornithoptera or other Lepidoptera from Australia. Customs regulation No. 13 expressly forbids the export of any insect, spider, mite, or tick, unless in very exceptional circumstances.

HOW TO PREPARE SLIDES OF SCHLEROTIZED PARTS OF LEPIDOPTERA, by Harry K. Clench and Lee D. Miller, has been slightly revised and reprinted in a more presentable format (offset). Copies may be had by sending 25 cents each (no stamps, please) to Harry K. Clench, Section of Insects, Carnegie Museum of Natural History, 4400 Forbes Avenue, Pittsburgh, Penna. 15213.

THE UTAH LEPIDOPTERISTS' SOCIETY was organized by Utah lepidists at the University of Utah in Nov-Dec 1976. Purposes are to provide a forum for speaker discussions, information exchange, and reinforced stimulation of interest in a common avocation - Lepidoptera. Colonel Clyde Gillette was elected first President (for 1977) and Mr. Kenneyh Tidwell was elected Secretary-Treasurer. The current ten active members invite all interested to participate. For information contact Ken Tidwell, 969 W. Colmar Ave, Salt Lake City, UT 84101

A COLLECTION of Morphos and Birdwing butterflies belonging to Gary Waller Simon will be on exhibit at the Delaware Valley College of Science & Agriculture, Doylestown, PA on April 23-24. The exhibit is free and open to the public.

NOTICES (cont'd)

Word has come from Paris that the former Reunion des Lepidopteristes has "moulted" into the Societe des Lepidopteristes, Francais. The Society will publish a half-yearly bulletin designed as a liason between all lepidopterists, both professional and amateur, and will contain not only papers delivered at meetings of the Society, but collecting news, descriptions, observations, etc. Each article will be followed by a summary in English.

Subscriptions to the bulletin are available to non-members as well as to members. Manuscripts and notices may be submitted for publication to the secretary, Jean Richebourg-Peyerache, Olympiades 75, Rue du Javelot.

Subscriptions to the bulletin may be obtained from the treasurer, Jean-Paul Aubert, 71, rue Parmentier 94130 Nogent sur Marne, on receipt of 50 francs. annually.

ANNOUNCEMENT

Owing to the disruption of schedule engendered by the change of editors of the NEWS, it has been decided that orders for back issues of the JOURNAL will be honored at the old prices (Vols. 1-24, 1947-70 \$8.00 per vol., Vols. 25-28, 1971-74 \$10.00 per vol., Vols 29-present \$13.00 per vol. After April 1 all volumes will be sold at \$13.00. Send to Charles Covell, Assistant Treasurer, Dept. of Biology, Univ of Louisville, Louisville, KY 40208, USA. Make checks payable to Lepidopterists' Society. All orders postpaid.

OBITUARIES

Professor P.M. SHEPPARD, Professor of Genetics at the University of Liverpool, died on the 17th of October, 1976. One of the world's leading lepidopterists, Professor Sheppard devoted much of his life to research on the genetics and evolution of lepidoptera, and particularly in recent years, into the origins of mimicry.

J.R.G. Turner

ROBERT WIND of Antigua, Guatamala, passed away in that country last fall. Mr. Wind and his wife, Clo, were formerly residents of Pacific Grove, California. He was a manufacturer of entomological equipment in Monterey, and a friend of many persons interested in entomological specimens. He will be missed by many of us.

Donald L. Baber

RESEARCH REQUESTS

- WANTED: for a revision of the *Hepialidae* (Ghost or Swift Moths) of North America, localised material, including any battered material, recognisable, for dissections, from all areas north of Northern Mexico, to Alaska. Write to Norman B. Tindale, 2314 Harvard St., Palo Alth, California 94306. Will return from fieldwork February 1, 1977.
- WANTED: living material of *Olene basiflava*, *O. cinnamomea*, and *Hemerocampa Leucostigma* for research purposes. John S. Russin, Dept. of Entomology, University of Delaware, Newark, DE 19711
- WANTED: Numbers or volumes of Proc. New England Zoological Club (1899-1903); Boston Soc. of Nat. Hist. proceedings, Vol. 1. C.F. dos Passos, Washington Corners, Mendham, N.J. 07945 U.S.A. WANTED: Mid-Continent Lepidoptera Series, No. 34-49, microfiche of Edwards' Butterflies of N. America, V. 1-3. Must be negatives, not positives. C.F. dos Passos, Washington Corners, Mendham, N.J. 07945 U.S.A.
- WANTED: Specimens of *Glaucoopsyehidi* for monograph in preparation. Particularly need Eurasian material in series and ecological information. Will purchase, exchange or borrow. All contributions and correspondence acknowledged. R.H.T. Mattoni, 9620 Heather Road, Beverly Hills, CA 90210 U.S.A.
- WANTED: to buy, or exchange; for research project. Short samples (10 pairs) of unusual *Euphydryas* populations in North America or Eurasia. Complete data including altitude essential. Can offer in exchange *Oeneis edwardsi*, *O. lucilla*, *Speyeria apacheana* (males) among others. Let me know your desiderata. Paul R. Ehrlich, Dept. of Biology, Stanford University, Stanford, Ca. 94305.
- EXCHANGE: *A. Luna* eggs or pupae for eggs of other Saturnioidea. Wendell Morrill, Entomol. Dept., Georgia Station, Experiment, Georgia 30212, U.S.A.
- WANTED: Artiidae of Colorado: Information needed regarding species records, flight dates, localities, elevations, notes on habitats and food plant assoc. wanted for Master's thesis. All correspondence will be acknowledged. Ira M. Heller, Biology Dept., Adelphi Univ., Garden City, NY, 11530 USA

THE EL SEGUNDO BLUE

(*Shijimiaeodes battoides allyni*)

General appearance: Wingspan 17-19 mm (58"-3/4"). ♂♂ Upper side of wings purplish blue with broad black margin; small amount of orange at anal angle of HW. Underside of wings buffy with prominent black spots, inner margin of forewing usually heavily dusted with black; hindwing underside with prominent submarginal orange or red-orange band. ♀♀ Upper side of wings uniformly brown except for prominent submarginal orange band on HW. Underside of wings as in ♂♂.

Former Distribution: There is no evidence to indicate that this butterfly ever occurred in any area other than the El Segundo Sand Dunes, an area originally covering approximately 96 sq. kilometers -(about 36 sq. miles). Housing and other developments have destroyed most of this dune system, thus destroying the Coastal Buckwheat which is the only known food plant of the butterfly. This has resulted in the elimination of the El Segundo Blue from most of its former range.

Present Distribution: Two relatively unaltered remnants of the El Segundo Sand Dunes: In El Segundo, approximately 2 acres of land owned by the Standard Oil Company of California, at the extreme west end of El Segundo Blvd. The interest of Ms. Jeannine Oppewall and Entomologist Dr. John F. Emmel, and the cooperation of Standard Oil Company have resulted in the fencing of this area to protect the butterfly's habitat. In Los Angeles, several acres of land west of the west end of the runways of Los Angeles International Airport(LAX). 48 acres of this property at the south end are virtually untouched dunes. The remaining 195 acres were purchased by LAX to reduce the impact of noise on residents and establish clear zones. Dwellings were removed, and at present only sidewalks, streets & a few ornamental plants remain. Airport officials are unwavering at this time in their insistence on constructing a golf course in the El Segundo Sand Dunes, with driving range, 16 tennis courts, an all purpose club house, bicycle paths, and a picnic area. These uses are not compatible with preserving the dunes in their primitive or successional stages. Lax, however, is apparently willing to set aside the southern 48 acres as a natural area.

Butterfly-plant Relationships: The El Segundo blue emerges as an adult from early July to late September (peak flight time mid July - mid August). After mating, the ♀♀ lay their eggs on the flower heads of Coastal Buckwheat(*Eriogonum parvifolium parvifolium*). The eggs hatch in a few days and the resulting larvae feed on the Buckwheat flowers for a few weeks, into September. In September the larvae crawl down the plant into the sand at the base of the plant where they pupate. The pupae remain in the soil throughout the winter and spring until the following July-August, when the adult butterflies again emerge to complete their life cycle and begin a new cycle. There is but one generation per year.

Proposed Protective Measures: Two things are essential to the continued existence of the El Segundo blue. First is the maintaining or increasing of Coastal Buckwheat, the food plant of the larvae. Second is preventing accidental or intentional application of pesticides in the butterfly's habitat. The following measures are recommended. (1) elimination of non-native iceplant, which crowds out native vegetation, (2) severe restriction of foot traffic and all destructive vehicles which cause erosion and destroy vegetation. (3) Prohibit all bulldozing, mulching, seeding with non-native plants.

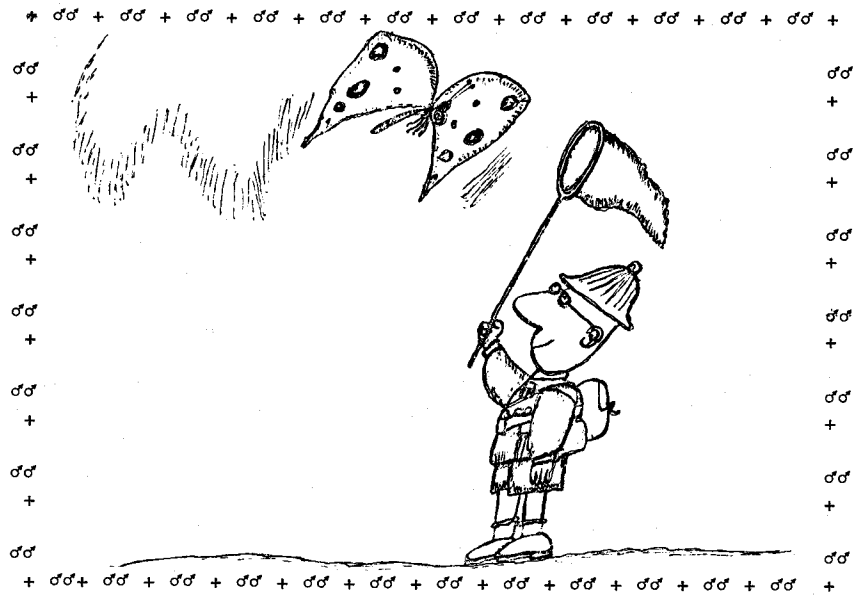
Conclusions : On 10 Feb, 1977 three scientists from the Natural History Museum of Los Angeles County (LACM) made an on-site inspection of the LAX property described above. The three were Julian Donahue, entomologist; Dr. Robert L. Bezy, herpetologist; Dr. Chris Davidson, botanist. As a result of their inspection, the LACM is officially supporting designation of the entire 243 acre parcel as Critical Habitat. This support is based largely on the fact that the dunes are making a rapid recovery in the areas which had been disrupted but from which the buildings have been removed. There seems to be an excellent chance that the food plant of the El Segundo blue can become re-established, which would mean an increased number of butterflies. More than this, the El Segundo Sand Dunes are the last remaining coastal dunes in southern California. This unique ecosystem should be preserved not only for the sake of a single species, but for the sake of the ecosystem itself, with its assemblage of plants and animals which have evolved together for thousands of years.

The Role of the Lepidopterist: Anyone interested may participate in the Rulemaking process by submitting written comments (preferably in triplicate) to:

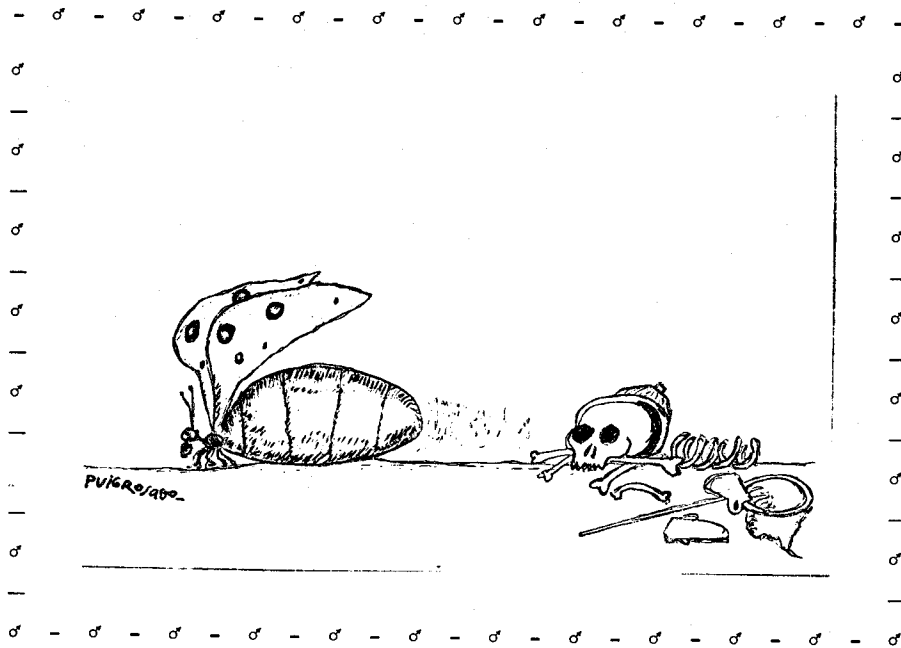
The Director (FWS/WPO), U.S. Fish & Wildlife Service,
Dept. of the Interior, Washington, DC 20240

NOT LATER THAN 8 APRIL, 1977

All relevant comments received on or before that date will be considered.



" - - - certain species of butterflies may have been able to alter their feeding habits over a period of years in situations where the original larval food plant , for one reason or another, became unobtainable."



It used to be that the only "good" bug was a "dead" bug. But, no more. Today, live insects are the main attractions in scientific activities from Junior High exhibits to complex laboratory experiments.

The demand for these creatures in their natural state has prompted "bug" enthusiasts to extend their searches across state lines, and even into foreign countries. What these collectors carry, mail, or have shipped home also happens to be of concern to the U.S. Department of Agriculture's Animal and Plant Health Inspection Service (APHIS). This agency has the job of keeping hundreds of harmful insects out of this country.

To do this, APHIS not only requires special import permits for incoming bugs, but carefully screens them upon arrival at any of about 80 U.S. ports of entry. Interstate movement of live insects needed for just about all purposes; the newest phenomenon in entomology is the insect zoo. Such a specialized facility opened recently at the Smithsonian Institution's Museum of Natural History to serve as a permanent home for a variety of exotic and domestic insect species. These living, crawling specimens are on display in specially built replicas of their own natural habitats.

APHIS' interest in this insect collection is twofold: (1) to restrict entry of known foreign pests, and (2) to insure that permitted insects cannot escape their museum environment to establish in greener U.S. pastures.

Curators for the insect zoo looked abroad for many of their specimens because the larger and more bizarre-looking types are often found in tropical areas. While many are not classed as plant pests, there is still an element of risk in bringing them to the United States.

Past errors in importing and moving insects have brought to this country destructive infestations of gypsy moths, fruit flies, fire ants and cabbage butterflies, among others. Pest establishment is relatively easy once the insect has escaped. With a ready supply of food, a favorable climate and no natural predators, they can easily grow to epidemic numbers. Damage and control costs associated with such outbreaks can run into millions of taxpayer dollars each year.

Such devastation prompted the enactment of two Federal laws; the Plant Quarantine Act of 1912 and the Federal Plant Pest Act of 1957, both of which give APHIS authority to restrict importation and interstate movement of live insects.

When evaluating a permit application, the agency weighs the scientific *benefits* of the requested insect against its *risk* as a possible plant pest. Clearance depends on such factors as whether the insect is already a pest, how widespread and mobile it is here, if additional strains will be bred and how easily an accidental outbreak could be eradicated.

If the insect passes the APHIS checklist and is okayed by the state to which it is going, an entry permit is issued. Responsibility for complying with permit instructions lies with the collector. He or she must see that labels are clearly visible on incoming insect containers, and that shippers are informed of all APHIS import rules.

APHIS approved special permits for virtually all the Smithsonian zoo's insects. "Foreigners" allowed entry included beetles, spiders and scorpions obtained from Smithsonian research centers in Panama and Mexico.

Only one species, the tropical termite, was refused, says Lima, "because it proved an unwarranted risk for which a U.S. substitute could easily be found." For other "high-risk" insects, particularly leaf-eaters like moths, leaf-cutter ants and plant lice, only males were permitted this year. In alternating years, female insects are allowed into the country.

In deciding whether to approve permit applications, APHIS also considered just how and where the collection would be displayed. Museum zookeepers sought the agency's advice in making all cages absolutely escape-proof. Plexiglass containers, equipped with several layers of metal and rayon screening on top as well as an anti-stick paint, prevent insects from crawling out.

The biggest challenge to the Smithsonian zoo will be the area's upcoming winter season when many of the insects begin to die off. To replenish short-lived stocks without further expeditions to native haunts, the facility will also feature an "insect hatchery".

Because insect rearing is a very risky operation, APHIS also provided requirements for this. The hatchery, located behind the main exhibit through a set of heavy double doors, has been "insect-proofed" with all holes in windows, doors, electrical outlets and drains tightly sealed against escape.

The problems associated with keeping insects alive and under control have kept insect zoos from the same popularity here that they now enjoy in Europe and Japan. However, the concept is slowly catching on. Another facility, located in a Cincinnati zoo, is scheduled to open next spring with over 40 types of insects in residence.

Debra S. Kaplan
Plant Protection and Quarantine Branch
Information Division
United States Department of Agriculture
Washington, D.C. 20250

NOTICES - Buy, Sell, Exchange

Members of the Lepidopterists' Society are invited to use this section free of charge to advertise their needs and offerings in Lepidoptera. We cannot guarantee any notices, but all are expected to be made in good faith. Please be brief, clear, and check spelling. Notices will be limited to 2 appearances. The Editor reserves the right to alter or reject unsuitable copy.

- FOR SALE: Handbooks for the Identification of British Insects. Recent additions to this series include Handbooks on the Thysanoptera, two families of aphids and a new edition of the Coleoptera Checklist. A full list of available handbooks can be obtained from the Royal Entomological Society, 41, Queen's Gate, London, SW7 5HU.
- FOR SALE: Used books in excellent condition. Butterflies of the Australian Region, (D'Abrera), \$22.00; Butterflies of the American Tropics, the Genus Anaea, (Comstock) \$20.00; Jamaica and Its Butterflies, (Brown and Heineman), \$16.00; The International Butterfly Book, (Smart), \$10.00; Butterflies of the World, (Lewis), \$8.00; Colorado Butterflies, (Brown, Eff and Rotger), \$5.00; and A field Guide to the Butterflies of Africa, (Williams), \$5.00. Prices include postage and insurance. Jeff Robb, 2304 17th #5, Lubbock, Texas, 79401. U.S.A.
- FOR SALE: If interest warrants, I can supply microfiche copies of Forbes, Lep. of New York, vol. 1 for \$5-\$10. Possibly other out of print books also. All letters answered. Stephan Goldstein, 8 Lee St., Somerville, MA 02145 U.S.A.
- FOR SALE AT AUCTION: Culot: Noctuelles Et Geometres D'Europe, 4 vol., perfect state, 3400 DM (= \$1325) Very rare book. Write G. Mathot, 7 Pied Noir, B-5000 NAMUR (Belgium).
- FOR SALE: Catalogo sistemático y zoogeográfico de los Lepidopteros Mexicanos. 3 Parts. 1940-1942. Facsimile edition, (\$5). Carlos R. Beutelspacher, Sociedad Mexicana de Lepidopterología. Berlin 105, Col. Coy-acan, Mexico 12, D.F.
- INFORMATION WANTED from anyone who knows the fate or whereabouts of LAURENCE ILSLEY HEWES, who wrote "Butterflies: Try and Get Them" in National Geographic, Vol 109 (1936). Dr. Robert M. Pyle, 1 Toll Bar Cottages, Burley-on-the-Hill, Oakham, Rutland, Leicestershire, England LE15 7SX.
- WANTED: Small quantities of viable chrysalids of *Papilio rutulus*, *multicaudata*, *eurymedon*, *glaucus*, and *garamas*. Also need viable chrysalids of *Troides aeacus*, *Trogonoptera brookiana*, *Ornithoptera ephorion* and other Ornithoptera. Please indicate prices and dates of availability. Interested in other livestock in small quantities. Anthony W. Cynor, 2507 E. Banyan Ct., Anaheim, Cal. 92806
- EXCHANGE: Lepidoptera from Finland and Europe, papered or set, for Lepidoptera from anywhere, Antti Aalto, Tuomentie 5 A 3, SF-05840 Hyvinkaa 4, Finland.
- FOR SALE: Butterflies of Australia, Common I and Waterhouse D., \$18.75 P.P.; Butterflies of New Zealand, Laidlaw W.B.R., \$3.40 P.P.; Common Moths of England, Wood, J.G., \$10.00 P.P.; Fauna of the U.S.S.R., Lepidoptera Vol. III, 2, Psychidae 1969 Translation \$20.00 P.P.; All are in exc. cond. Donald J. Dill, 7316 S. Sacramento Ave., Chicago, Illinois 60629.
- FOR SALE: Lepidoptera Rearing Bags 6' by 3'; new and made of 80 grade heavy cheesecloth \$8.50 each Ppd. Can make other sizes to specifications. 20 different U.S. butterflies \$10.00 Ppd; Four different papered Saturniidae, \$4.00 Ppd.; Saturniidae Cocoon Survey Sets, \$9.00 ea. Ppd., includes 4 different species labeled and mounted in Riker Display Mount. Craig R. Kohl, 112 33rd St., SE, Cedar Rapids, Iowa 52403.
- ✓ FOR SALE: Butterflies from Sulawesi (Celebes), the Moluccas Islands, West Irian and sometimes from Papua New Guinea and the neighbouring islands, including Ornithoptera species and other seldom offered material. Malaysian butterflies and other insects always available. Ask for lists from B.L. Gooi, PO Box 9, Tanah Rata, Cameron Highlands, West Malaysia.
- FOR SALE: 130 species - world wide (Sphingids, Saturnids, endemics - living/dead material. Send 60¢ or Int. reply coupons for 1977 list. Ray Adams, Carretera Principal 139, Tamaraceite, Las Palmas De Gran Canaria. BUY/EXCHANGE: Living material (minimum 24 ova, 12 pupae per species. Write advising species, quantity, price/exchange required. Please enclose international reply coupon. Ray Adams, Carretera Principal 139, Tamaraceite, Las Palmas De Gran Canaria.
- FOR SALE: Exotic Lepidoptera from Asia at \$150 per thousand. Includes airmail postage. Pascual Jardiniano, Real St., Boac, Marinduque 3801 PHILIPPINES.
- FOR SALE: 3000 plus species of insects from most orders. 140 page catalog for \$1.00 refundable with first order. Combined Scientific Supplies, PO BOX 1446 Ft. Davis, Texas, 70734. WANTED: Series of insect specimens from all Orders from anywhere in the world. Make reasonable offers. Will buy in large quantities. T.W. Taylor, PO Box 1446, Ft. Davis, Texas 79734.
- ✓ FOR SALE OR EXCHANGE: Butterflies of Africa, Madagascar, Paraguay, Malaysia, India, Philippines, Australia, Europe, list on request. WANTED: Butterflies from North America. Robert Keiser, Frederik van Eeden Plein 3 Box 34 B-2050 Antwerp, Belgium.
- FOR SALE: Butterflies of all groups, rare and common for collectors or art work, first and second quality. Also many other insects like beetles, large spiders, etc., from Peru. Mario Rojas Villegas, Apartado 119, Tingo Maria, Peru. Heldebrando Rojas Villegas, Apartado 46, Satipo, Peru.
- FOR SALE: Livestock and papered specimens from North America and around the world. Quality of all specimens guaranteed. Catalogue sent free upon request. wrote to K. Thorne, Mill St., Delaware, Ontario, Canada, NOL IEC.
- FOR SALE OR EXCHANGE: *A. lorquini*, \$5 each; *T. helena*, \$2 each; *St. camadeva*, \$3 each; *Lucanus cervus* ♀ \$3 ea., ova of *Catocala nupta*, 12 for \$2; and *C. fraxini*, 12 for \$4 (foodplant: Poplar). WANTED: Cocoons of all Saturniidae and pupae of all N.A. *Papilio*. Jurgen Kruger, Danziger Str. 14, 4020 Mettmann, W. Germany.

NOTICES - Buy, Sell, Exchange (concl.)

- EXCHANGE: Many *Parnassius*, *Colias*, etc. from Tien-Shan, Paniers, Altae, Caucasus, including many rare species. Want to have tropical Papilionidae (especially *Ornithoptera*), *Morpho* and *Saturniidae*, Dr. Lastochkin, Poste Restante, Kiev -Y-2, USSR.
- FOR SALE: Cornell Cabinet & drawers. Lepidoptera literature (Largely non-nearctic). List on request. R.A. Rahn, 3214 Springdale Ave, Wausau, WI 54401.
- FOR SALE: *Ornithoptera rothschildi* A1 pair \$670; very good A2 pair \$560; good A2 pair \$450; good A2 MALE \$380; *O. chimaera* A1 pair \$400; A1 MALE \$320; *Trogonoptera trojana* A1 pair \$150; A1 male \$15; *Troides magellanus* A1 male \$8; *Papilio chikae*, A1 male \$150; good A2 male \$120; *P. inopinatus* A1 male & 26; *G. codrus melanthus* A1 male \$50; good A2 male \$35; *Parnassius delphius koibaba* A1 pair \$120; A1 male \$57; good A2 pair \$87; good A2 male \$40; *Colias marcopolo afghanipolo* A1 pair \$65; *Hebomoia leucippe* A1 male \$15; *Charaxes solon lampides* A1 pair \$10, many butterflies from SE Asia. Sei Sato, PO Box 49217, Tucson, Arizona 85717.
- EXCHANGE: *H. critola festata*, *E. editha augusta*, *A. mormo "dialeuca"* and other uncommon sp. WANTED: western *Riodinidae*, esp. *A. mormo* sp. from California, spread or papered. Write for lists. Greg Forbes, Box 827, Pauma Valley, Cal. 92061.
- EXCHANGE: wanted for Eastern U.S. butterflies. Please send list of offerata and desirata. All inquiries answered. Mrs. Pat Purdy, 2825 Sand Rd. NE, Roanoke, Va. 24012.
- WANTED: Correspondence with anyone interested in Birdwing Butterflies of the World. Especially exchange of material, life history, distribution, and larval food plants. Gary Walter Simon, 118 Sunnybrook Rd., Cherry Hill, New Jersey 08034 U.S.A.
- WANTED: Rare Agrias. Will pay highest prevailing prices, or exchange for duplicate rare Agrias from my own collection. All correspondence answered. Robert E. Aronheim, PO Box 239, Middlebury, Conn. 06762 U.S.A.
- WANTED: *Papilio Deipylus* ♂ and ♀; *P. deipylus deipobus* ♂ and ♀; *P. deipylus deiphontes* ♂ and ♀ and other Molucca Islands Lepid. Will buy or exchange. William Thrasher, R.D. Route 1, Box 44, Garrettsville, Ohio, 44231, U.S.A.
- WANTED: Quantities of common, colourful, low priced North and South American papered butterflies for schools. A1 condition, please. Will buy or exchange European or African material. Brian Wurzell, 47 Rostrevor Avenue, London N 15 6 LA, England.
- FOR SALE: Fresh *Ornithoptera* species like *rothschildi*, *goliath*, *atlas*, *paradisea*, *arfakensis*, *tithonus*, and other equally rare items. Also butterflies from Sulawesi (Celebes) like *P. blumei* and *Troides hypolitus*, *O. trojana* from Palawan, and the lowest priced Malaysian butterflies in the market. Write for price lists. B.L. Gooi, PO Box 9, Tanah Rata, Cameron Highlands, Malaysia.
- WANTED: *Agrias phalaedon fourmurae* ♂ and ♀; ♀ *A. phalaedon viola* ♂, *A. pericles rubella* ♂♀ and *A. pericles xanthippus* ♂♀, all in 1A or IA condition. Will pay best prevailing prices. Stanley K. Dvorak, 2928 Union Avenue, San Jose, California 95124 U.S.A.
- FOR SALE: 1 pair *O. rothschildi* A1 quality. \$630.00 U.S., or will exchange for 1 pair *O. goliath* in good condition. Henry Hensel, 145 Belleview Str, Edmundston, N.B. Canada.

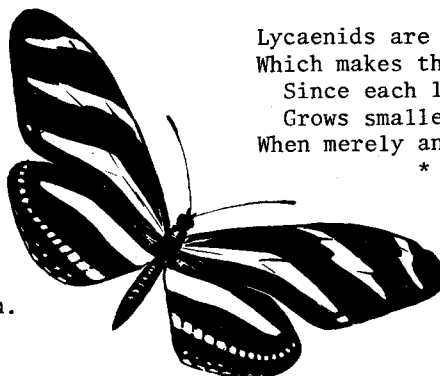
Research Request

ARCTIIDAE of Colorado: Information needed regarding species records, flight dates, localities, elevations, notes on habitats and food plant association. Wanted for Master's thesis. All correspondence will be acknowledged. Ira M. Heller, Biology Dent., Adelphi Univ., Garden City, NY 11530 USA.

Heliconius flits like a flash
In and out of the sublight and slash
The eggs it deploys
Are often decoys
Which predators readily smash.

The viable eggs in their turn,
If not eaten, will inwardly churn,
And a few little beasts
Will later make feasts
On the poisons that other types spurn.

* * *



Lycaenids are cannibalistic
Which makes them at best atavistic
Since each little crawler
Grows smaller --not taller,
When merely another statistic.

* * *

(We will accept high quality limericks for publication in the News - one to an issue. ed.)

1977 ANNUAL MEETING
ANNOUNCEMENT AND CALL FOR PAPERS

The 28th annual meeting of the Lepidopterists' Society, in conjunction with the 24th Pacific Slope Section meeting, will be held at the University of Colorado, Boulder, Colorado, 21 - 24 July, 1977.

The program, being developed by Clifford D. Ferris, Ray E. Stanford, Lee Miller and F. Martin Brown, promises to be varied, enjoyable and provocative. Symposia are planned on Biology of Rocky Mountain Lepidoptera and Nearctic Hesperioidea. Field trips will be planned at the time of the meeting.

PROGRAM OUTLINE:

Thu 21 July
Thu 21 July Registration 3-6 pm: Evening picnic
Fri 22 July Scientific sessions: Evening slide fest
Sat 23 July Scientific sessions: Evening banquet
Sun 24 July Business meeting: Field trips

PAPERS ARE SOLICITED on any aspect of lepidopterology, and an effort will be made to schedule all bona fide titles received by the 1 June deadline!!! Titles received after that date will be placed on the program as scheduling permits.

Please return the attached pre-registration form as soon as possible, and direct any questions to:

RAY STANFORD (chairman), 720 Fairfax Street, Denver, Colorado 80220

A pre-registration packet will be available by 1 May 1977, and will be sent to all persons returning the form before 1 July 1977.

♂♂ ♀♀ ♂♂ ♀♀ ♂♂ ♀♀ ♂♂ ♀♀ ♂♂ ♀♀ ♂♂ ♀♀ ♂♂ ♀♀ ♂♂ ♀♀ ♂♂ ♀♀ ♂♂ ♀♀ ♂♂ ♀♀ ♂♂ ♀♀

PRE-REGISTRATION: 1977 LEPIDOPTERISTS' SOCIETY MEETING

I will (definitely) (probably) (possibly) attend. Please send the pre-registration packet, to include information regarding:

- Motel accommodations nearby campgrounds
- public transportation available between Boulder & Denver
- maps of region (some free; some not; we'll send the packet if you're specific in advance)

NAME _____

ADDRESS _____ ZIP _____

I (DO) (DO NOT) wish to present a paper. Title: _____

(If you indicate DO, a worksheet will be sent for you to tell us in more detail the exact authors, Institutional affiliation, equipment required, etc. In general a 15 minute maximum will be imposed).

Return this form as soon as possible (BEFORE JULY 1977!!) to:

RAY STANFORD (chairman) 720 Fairfax St, Denver, CO 80220

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Louisville, Kentucky 40208 U.S.A.

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Memoirs of the Lepidopterists' Society, Number 1 (Feb., 1964)

A SYNONYMIC LIST OF THE NEARCTIC RHOPALOCERA, by C. F. dos Passos

Price:

Society Members, paper covers, Addenda et Corrigenda (revisions of Melitaeinae and portions of Lycaenidae supplied separately), \$5; non-members, \$7.50.

Send to MEMOIRS Editor Dr. Charles V. Covell Jr., Dept. of Biology, Univ. of Louisville, Louisville, Ky. 40208, U.S.A.

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 the full dues for the current year (\$13, U.S.A.) together with full address and areas of interest in Lepidoptera. Remittances in dollars (U.S.A.) should be made payable to The Lepidopterists' Society. All members will receive the JOURNAL (published quarterly) and the NEWS in even-numbered years. Back issues of the JOURNAL may be purchased from the TREASURER.

Information on membership may be obtained from the TREASURER, Dr. John M. Snider, 3520 Mulldae Ave., San Pedro, CALIF. 90732, U.S.A. Changes of address must be sent to him alone, and only when changes are permanent or very long-term.

Other information about the Society may be obtained from the SECRETARY, Dr. Lee D. Miller, Allyn Museum of Entomology, 3701 Bay Shore Rd., Sarasota, FLA. 33580, U.S.A.

Manuscripts for publication in the JOURNAL are to be sent to the Editor, Dr. George L. Godfrey, Illinois Natural History Survey, Natural Resources Bldg., Urbana, ILL. 61801, U.S.A. See the inside back cover of a copy of the JOURNAL for editorial policies.