THE LEPIDOPTERISTS' SOCIETY EST. 1947

NEWS of the LEPIDOPTERISTS' SOCIETY

No. 1 Jan/Feb 1982

Dave Winter, Editor
257 Common Street
Dedham, MA 02026
USA

Presidential Profile

Lincoln P. Brower, of the University of Florida in Gainesville, is currently serving as President of the Lepidopterists' Society. He was born in Summit, New Jersey, in 1931 and received an early impetus towards a career in lepidopterology from the late Charles Rummel, of Green Village, N.J., with whom he collected as a boy. At Princeton he earned an A.B. in Biology in 1953, followed by a Ph.D. in Zoology at Yale in 1957. After a year as a Fulbright Scholor in the genetics laboratory at Oxford University, he joined the faculty of Amherst College and by 1976 had become Stone Professor of Biology. Since 1980 he has been Distinguished Professor of Zoology at Gainesville.

His fields of interest have ranged over evolution, animal behavior, ecology, and riverine biology; his current major research focuses on the ecological chemistry and overwintering ecology of migrating populations of Danaus plexippus. Field research has taken him to Colorado, California, Trinidad, Costa Rica, the Dominican Republic, East Africa, and now, Mexico. There he spends parts of the colder months of the year quantitating the hazards, both natural and human, to which overwintering monarchs fall victim. Thus informed, he is working closely with the Mexican Government and other organizations to institute appropriate protective measures for the critical winter sites.

Dr. Brower is author or co-author of over 70 scientific papers; his five motion picture films on biology and flood control policy have won for him four international awards, and his work on cardenolides in monarch butterflies won him the coveted Esquire Magazine "Dubious Achievement Award", for defining the Blue Jay emetic unit!

Lincoln has served the Lep. Soc. as Vice President in 1970. He has also been President of the Society for the Study of Evolution and is a Fellow of the Royal Entomological Society of London.

Those who did not catch Lincoln on ABC News this past year, flushing clouds of monarchs in a Michoacan canyon, or gamboling through the glades, net in hand, can still have the pleasure of meeting him in Laramie this July.

Metamorphosis

ROBERT ELLIOT SILBERGLIED.....

The plane which went down in the Potomac River 13 January 1981 took with it the life of Bob Silberglied. The day before, he had been enjoying a reunion with his friends and associates at the Museum of Comparative Zoology and the Cambridge Entomological Club. He was returning to his work at the Smithsonian Tropical Research Institute in Panama at the time of his death.

Born 19 June 1946, Bob had earned his B.S. and M.S. degrees at Cornell University and his Ph.D. at Harvard; he was Associate Professor of Biology at Harvard and Associate Curator of Lepidoptera at the MCZ until 1981, as well as Staff Scientist at the STRI since 1977. His research interests had included study of ultraviolet reflectance patterns of butterflies and flowers, insect vision, and insect behavior, especially with regard to courtship, mating, and reproductive isolation.

Lepidopterology has lost a brilliant mind. The Lep. Soc. and all his other friends have lost a truly great guy.

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GEORGE F. PATTERSON.....

George F. Patterson, of Wellesboro, Pennsylvania, is reported to have died in the summer of 1981. His collection is at Pennsylvania State University.

Notices

ANNUAL MEETING UPDATE.....

As reported in the last issue of the NEWS, the 1982 Annual Meeting will be held at the University of Wyoming, Laramie, Wyoming July 15-18, with an optional all-day field trip on Monday 19 July. The program is now firming up and general sessions have been scheduled as follows: special workshop on the Noctuoidea organized by J. D. Lafontaine to be held on Thursday afternoon 15 July; general session of contributed papers, Friday morning 16 July; symposium on population biology of Lepidoptera, organized by Lincoln P. Brower (invited papers only), Friday afternoon 16 July; symposium on Rocky Mountain Lepidoptera (contributed and invited papers), Saturday morning 17 July; general session of contributed papers, Saturday afternoon 17 July; general session of contributed papers, and business meeting, Sunday morning 18 July.

The banquet and presidential address will be on Saturday evening, with an optional field trip and picnic scheduled for Sunday afternoon.

The tentative registration fee is $15.00. The banquet, group photo, picnic, etc., will be extra, and the costs will be set at a later date.

A preregistration form appears inside the back cover of this issue and includes space for submission of contributed paper titles if you missed the form in the previous issue of the NEWS. Paper titles must be submitted by 1 April 1982 so that the program can be finalized and the program brochure printed. Preregistration forms should be received no later than 1 June 1982 for those attendees not wishing to present a paper. Payment of fees should be made at the meeting.

A list of motels appears below. It is strongly suggested that you make reservations well in advance. In the past, the Best Western Wyo Motel has offered reduced rates to persons attending meetings at the University, but you must inform their office when you make reservations. For those with motor homes and RVs, there is a KOA campground on the north side of town, and four Forest Service campgrounds just east of Laramie off I-80 at the Happy Jack exit. Dormitory accommodations will not be available on the campus. Laramie does not have a public transportation system, although there is a local taxi service. Motels closest to campus are indicated by a (*).

Laramie Motels

*Best Western Wyo Motel, 1720 Grand Ave., 742-6633
Buckaroo Motor Lodge, 365 N. 3rd, 745-8828
*Circle S Motel, 2440 Grand Ave., 745-4811
Dollarwise Motel, 1161 N. 3rd, 745-9985
Downtown Motel, 165 N. 3rd, 742-6671
Foster's Country Inn (Best Western), I-80 at Snowy Range Exit, 742-8371
Gas Lite Motel (Best Western), 960 N. 3rd, 742-6616
Holiday Inn, I-80 at 3rd St. Exit, 742-6611
Lucky Way Motel, 769 N. 3rd, 742-7105
Motel 6, 621 Plaza Lane (I-80 at 3rd St. Exit), 742-0542
Motel 8, 501 Boswell Drive (I-80 at 3rd St. Exit) 745-4856
Outrider, I-80 at Curtis St. Exit, 745-8901
Ramada Inn, 1503 S. 3rd (I-80 at 3rd St. Exit) 742-3721
Ranger Motel, 453 N. 3rd, 742-6677
Silver Spur Motel, 1104 S. 3rd, 742-3741
Snowy Range Motel, 867 N. 3rd, 742-0185
Super 8 Motel, Curtis St. at I-80, 745-8901
Thunderbird Lodge, 1369 N. 3rd, 745-4871
Travelodge, 262 N. 3rd, 745-4853

Toll Free Numbers:
Best Western Reservation Service 800-528-1234
Travelodge 800-255-3050

The Laramie Area Code is 307, and the ZIP is 82070

Please send paper title forms, preregistration forms, and requests for additional information to:

Dr. Clifford D. Ferris
P.O. Box 3351 University Station
Laramie, Wyoming 82071

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DON DUCKWORTH ELECTED PRESIDENT OF ESA.....

Dr. W. Donald Duckworth, Special Assistant to the Assistant Secretary for Museum Programs at the National Museum of Natural History, Smithsonian Institution, and Curator, Department of Entomology at the Museum, was recently elected president of the Entomological Society of America for 1983. The ESA is the largest international association of entomologists, promoting the interests and science of entomology in all its subdisciplines.

Besides his position in ESA, Don is the Executive

Director for the Association of Tropical Biology; the Secretary Treasurer for the American Institute of Biological Sciences; and is on the Executive Committee for the Organization for Tropical Studies, among others. He has been a member of the Lepidopterists' Society for many years.

SOCIEDAD MEXICANA DE LEPIDOPTEROLOGIA.....

New officers of the Soc. Mex. de Lep. are President: Javier de la Maza Elvira; Vice-president: Gerardo Lamas Mueller; Secretary: Luis G. Lopez del Paso; Treasurer: Alberto Diaz Frances; and five voting "vocales", including Enrique Fuentes O., our correspondent.

The Sociedad welcomes new members from north as well as south of the border. Dues for 1982 are: active member, $16.00 U.S.; students (must be certified), $10.00; sustaining membership $25.00; life membership $200.00. Membership dues should be sent to the Treasurer, Sr. Alberto Diaz Frances, Berlin 105, Colonia del Carmen, Coyoacan, Mexico, D.F., MEXICO.

NORTH AMERICAN INVERTEBRATE SURVEY.....

Two projects for the incipient North American Invertebrate Survey have been initiated in the last two years and others are contemplated.

A pilot project to map butterflies in a 4 x 6 km area of northern Virginia using a 0.5 km grid was begun in the summer of 1980. To date, 76 species have been found in the areas and more than 1800 separate grip occurrences have been recorded. In one 0.25 km^2 grid 61 species have been found. It is hoped that a set of maps for this area will be produced in early 1982. These will be made available to local park groups and county palnning agencies.

A second project to record the county by county occurrence of 275 butterfly species in the eastern 31 states was begun in the fall of 1980. A set of maps should be available in early 1982. About fifty persons have contributed information thus far.

The U.S. geological Survey is producing a series of two maps of North America on the UTM (universal transverse Mercator) projection. These may be appropriate for the development of regional base maps. The should be available by the end of 1981.

For further information, contact Paul A. Opler, Acting Secretary, North American Invertebrate Survey, Fish & Wildlife Service, Washington, D.C., 20240

1980 SEASON SUMMARY, ZONE 3 CORRECTIONS.....

Ray Stanford has fine-toothed his last year's Summary and has furnished the following corrections of fact, just in time so that we/he may not do it again:

page 17, line 41: P. zelicaon dark female nitra read dark form nitra.
line 51: an entire line was dropped. The text should read ...C. sheridanii: MISSOULA, TOOLE (SJK). S. melinus: TETON; delete CHOUTEAU (RMP). C. tullia ampelos: POWELL (SJK--new for ampelos...
page 18, line 14: for calydon, male specimens read calydon 8 specimens.
line 32: for dark female clarki read dark form clarki.
line 60: after 20 June insert Paonia before (?Paonia's...
line 71: for Uncompahgre Park read Uncompahgre Peak.
page 19, line 5: for A. sara inghami read A. sara thoosa
line 14: for female pseudoamericus read form pseudoamericus.
line 15: for female nitra read form nitra.
line 23: for female heathii read form heathii.
line 48: for T. leanira fulvia read T. leanira alma.

PHOTOGRAPHY CONTEST ANNOUNCED.....

The American Mosquito Control Association will hold its annual Photo Salon in connection with the annual meetings in Sacramento, California 18-22 April 1982. There will be a Photographic Society of America-approved Insect Photo Salon and an AMCA Mosquito Photo Salon (which will cover all aspects of mosquitos and mosquito control). Both salons will be conducted according to PSA standards. A silver medal will be awarded for "Best of Show" in each salon. The competition will be open to all photographers. Entry fee is $3, closing date for receipt of entries 29 March 1982. Obtain entry form from John T. Barber, AMCA Photo Salon, Biology Dept., Tulane University, New Orleans, LA 70118.

BACK ISSUE ORDERS.....

The procedure for ordering back issues of the NEWS and the JOURNAL will be found on page 74 of the NEWS for 1981 (Nov/Dec issue).

If you are a new member and therefore did not receive the NEWS in 1981, please write me (SASE to Dave Winter, Editor, address on front cover) and I will send you a copy of the back issue notice which indicates prices and availability.

Please DO NOT WRITE TO CHARLIE COVELL for anything related to Lep. Soc. publications any more. He can no longer supply you with back issues, or with the Commemorative Volume, or even the Catalogue/Checklist; he cannot effect your address change; he cannot even deposit your dues!

All these functions are handled by RON LEUSCHNER, Treasurer. See the back page of this issue for his address and further details.

RESEARCH REQUESTS.....

❖ WANTED: correspondence with persons having information regarding the identity and distribution of species of the genus Hemihyalea (Arctiidae). I have specimens from southern Arizona that are neither labecula nor edwardsi. Stephen Miller, 14821 Uren Street, Nevada City, CA 95959.

❖ I am finishing a revised list of butterflies and skippers on each Caribbean (Antillean) island, and would appreciate unpublished records from any island.

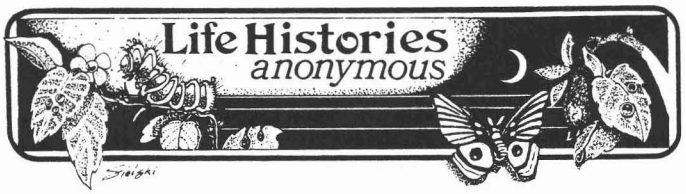
I would also appreciate records of Pieris sisymbri north of southern B.C. and southern Alta. to ascertain whether Yukon and Mackenzie District records are valid. Dr. James A. Scott, 60 Estes St., Lakewood, CO 80226.

❖ A comprehensive work on the moths of British Columbia is now in preparation. Records with complete data are sought for species of the following families: Sphingidae, Saturniidae, Euchromiidae, Nolidae, Arctiidae, Notodontidae, Liparidae, Lasiocampidae, Thyatiridae, and Drepanidae. Additional data concerning abundance, larval host plants, and adult associations are also needed. Would also appreciate collections with British Columbia material or literature concerning B.C. moths being brought to my attention. All correspondence is welcomed and contributions will be fully acknowledged. Dr. Ken-

neth Neil, Dept. of Biological Sciences, Simon Fraser University, Burnaby, B.C., CANADA V5A 1S6.

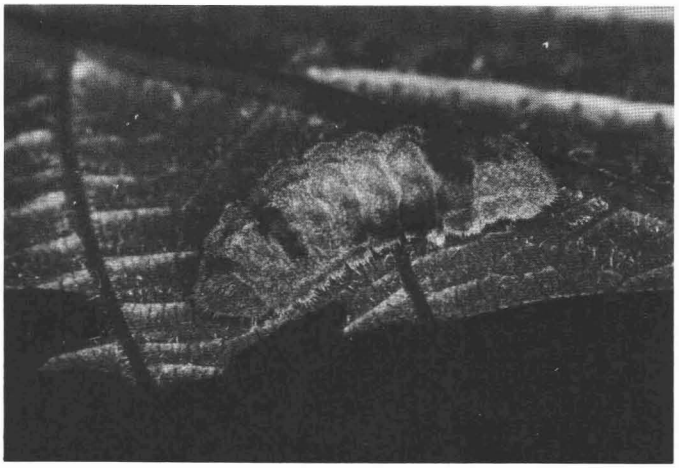
The NEWS has been receiving numerous comments from members expressing questions or differences of opinion about various species illustrated in Bob Pyle's Field Guide to North American Butterflies. Rather than print these comments as received, it has seemed appropriate to forward these communications to him for his personal consideration and for review by such experts as he may select.

It is expected that from time to time he will furnish us with appropriate emendations for publication here.



ERORA LAETA.....

The lycaenid Erora laeta (W. H. Edwards), captured near Manchester, Bennington County, Vermont, 20-23 May 1981, oviposited on beaked hazelnut and willow leaves and on the netting of the breeding cage. The larvae, which emerged in about 7 days, were easily raised to maturity on willow and beaked hazelnut leaves. One of two larvae given white oak, which is common in the valley but could not be found on the mountain where the adults were taken, formed a small deformed pupa, but the other died in the 4th (last) instar. Attempts to raise larvae on beech, paper birch and black birch failed. The literature cites beech and beaked hazelnut as probable foodplants, but the use of willow and oak appears new. The first of the larvae pupated 29 days after emergence, and the first of the adults, both ♂♂ and ♀♀, emerged 12 days after pupation. The 4th instar larva is illustrated here. A brief description of the immature stages follows:



4th instar larva of Erora laeta

Ova: when viewed with the naked eye, the less than 1 mm. pale green ova have the appearance of a smooth sphere with a dimple above; they are laid singly and turn gray-white before emergence of the larvae.

First instar larva: length 1-2 mm.; almost transparent uniform pale yellow, covered with fine hairs; head light brown; some eat the egg-shell.

Second instar larva: length 3-5 mm.; color variable; specimens on willow tended to be green, while those on beaked hazelnut tended to have a peppery, rusty appearance; most of the body is covered with fine hairs, and the hairless dorsal line has a series of greenish dots; legs and prolegs green; head light brown.

Third instar larva: length 6-8 mm.; "furry" body; appearance varies widely from light green with prominent red "horns" on first thoracic segment and dark spots dorsally on the 6th abdominal segment, to both green and rusty patterned specimens where the above spots are barely visible; posterior to head, green dorsal line is hairless and bears a series of circles with dark center and dark outline; legs and prolegs green; head light brown. This instar shows the first signs of other spots which appear in the 4th instar.

Fourth instar larva: length 11-12 mm.; basic color varies from pale green to rusty brown; pair of reddish spots dorsally on first thoracic segment; upper two-thirds of 3rd thoracic segment is a dark green patch culminating in reddish spots similar to spots on first thoracic segment; lateral green patch marginally along 3rd-6th abdominal segments, broader on 4th and 5th segments; large rusty to dark brown patch dorsally on 6th abdominal segment, smaller on 7th; legs and prolegs a little more brownish than in 3rd instar; head light brown.

Pupa: usually glued to a leaf; length 6 mm.; width 3 mm.; height 2.5 mm.; overall color rust, speckled with dark brown spots when fresh, becoming more uniform brown with aging.

A detailed note on the biology of E. laeta has been submitted to the JOURNAL. (William B. Wright, Jr., 18 Clinton Place, Woodcliffe Lake, NJ 07675.)

COENONYMPHA TULLIA INORNATA.....

(The following notes, from W. J. D. Eberlie, were received along with Ontario Season Summary material two years ago. They are included in an attempt to assist those who may be trying to rear inornata as it spreads into southern New England and elsewhere.)

Work on the rearing of this species continues. The majority of the larvae from June 1978 ova produced adults in August 1978, but a few larvae grew much more slowly and continued feeding desultorily until at least the end of October, when they hibernated. Six larvae successfully hibernated and produced five adults in June 1979, one larva dying.

Many larvae had been obtained from August 1978 ova and were last seen feeding 5 November 1978, but only eight survived the winter. These started feeding again about the middle of April 1979, pupated in early June, and produced six adults at the end of June; two of the pupae died.

Successful overwintering of these insects would appear to depend on them having thick mats of dead grass in which to hibernate outdoors.

These rearing results seem further to confirm that the June and August insects are one and the same species.

The preferred feeding plant for the larvae has been determined for me by Paul Catling as Kentucky Bluegrass, Poa pratensis.

EARLY STAGES OF INCISALIA FOTIS FOTIS.....

Joel M. Johnson, in "Utahensis", writes of observing many adult Incisalia fotis fotis perching on upper branches of Cliff Rose (Cowania mexicana) in mid-April at 5200-5800' in the Wasatch foothills in northern Utah. In late May he collected dozens of late-instar larvae, by beating, from the Ciff Rose blossoms, then in early bloom.

"Most of the fotis larvae were nearing maturity. They showed a great variation in color from light yellow-green to dark green, and some had brown shading. Some of the dark green larvae had yellow markings resempling check marks along their sides. At least half the specimens were of plain green shades without the markings. Some of the larvae took on a decided reddish cast as they neared pupation.

"The fotis larvae seemed to feed exclusively on the blossoms and more mature flower buds. When starting on a blossom, they first ate the stamens and anthers, and then the petals, leaving only the sepals and empty calyx cup.

"Most of them pupated in early June, crawling under and into folds of paper towel in the bottom of the rearing box to form a small brown naked chrysalis, some with a little green shading. In nature they probably pupate under the leaves and rubbish or in the soil at the base of the foodplant." (with permission, Utah Lepidopterists' Society)

HESPERIA JUBA WINTERING STAGE.....

This species has two broods in Jefferson County, Colorado, the first having a statistical average flight date of 14 June, which is consistent with the date of flight of the first brood of the species known to overwinter as a half-grown or mature larva in this area (based on a paper by J. Scott and M. Epstein on area butterfly phenology), the second brood appearing in September. Hesperia immatures, from person experience, take 2-3 months from egg to adult, and there is plenty of time from mid-September to October, and from April to June, for the immatures to grow.

If the California adults appear near receding snowbanks, this must be due to their flights from lower altitudes, accounting for their wing-wear in spring also.

H. juba is a vagile species, which was not known from the Colorado Front Range until recently.

(Dr. James Scott)

LARVAL FOODPLANT FOR EUPHYDRYAS CHALCEDONA CHALCEDONA....

Last summer while botanizing in the Santa Monica Mountains (California) I discovered several butterfly larvae crawling about on a truck trail and adjacent grasses. Several more similar larvae were discovered on a Penstemon bush; the larvae were observed long enough to ascertain that they were feeding on it. When reared to maturity they proved to be Euphydryas chalcedona chalcedona.

This host plant is Penstemon cordifolius Benth. According to "The Butterflies of Southern California" by Emmel & Emmel, this butterfly was only known to utilize Penstemon antirrhinoides Benth. in the Orange county area of southern California. Both Penstemons are of the woody type now reclassififed as Keckiellia.

As this nymphalid utilizes several species of Scrophulariaceae, it can be speculated that it may use other woody Keckiellia species besides the two mentioned. On numerous field observations I have never found the larvae on the herbaceous annual or biennial species of Penstemon, which are still classified as Penstemon. (Stephen W. Austin. These observations were submitted to the Xerces Society, which forwarded them to us. They reinforce observations in Orsak's "Butterflies of Orange County".)

EREBIOLOGY.....

I have realized in my revisionary studies of the world's Erebia the necessity to establish a new discipline — Erebiology — to promote the study of the genus Erebia (Lepidoptera: Satyridae).

Linnaeus in 1758 erected the species concept. One hundred years later Darwin in 1859 widened the investigation of Nature by his "Origin of Species" into the theory of evolution. Another hundred year step ahead, in 1956, the late H. de Lesse and the present honorary life member Prof. Dr. Z. Lorcovic made a tremendous work in lepidopteran genetics — especially in Erebia — by studying their chromosome numbers.

Determination of Lepidoptera depends on various features. In Erebia these are chiefly genitalia, androconial scales, and the chromosome numbers.

Up to now the chromosomes of these Erebia are known, in haploid numbers:

aethiopella: 7
calcarius: 8
cassioides, tyndarus: 10
epipsodea, medusa, polaris, nivalis, flavofasciata: 11
hevitsoni: 11-12(?)
mnestra, gorgone: 12
meolans, oeme: 14
callias: 15
triarius: 16(?)
epiphron: 17
alberganus: 17-18(?); claudina: 18(?); serotina: 14-17, 18(?)
pluto, pharte, pronoe, niphonica: 19(?); melampus: 19(?)
gorge, melas, aethiops: 21
lefebvrei, scipio, stirius: 22
neoridas, styx; rondui: 21-23; 24-23
montanus: 24
hispania: 25
pandrose, sthennyo, epistygne: 28(?); discoidalis: 28(?), 28
disa, eriphyle, ligea, manto (ssp. constans): 29
ottomana: 40
iranica: 51-52

Siberian "callias"from Mondy by Lorcovic (1975): 14-16. For fifty per cent of the total species. mainly for the Asian ones, chromosome tests are lacking.

This table substitutes for an expensive book, "Lepidoptera Genetics", by Robinson (1971), 687 pp. In that book are given 1000 entries: among those over fifty percent have chromosome numbers 29-30. This may be a useful generalization, but Erebia are less consistent.

Calman (Warren 1936, p.2) said in 1930: "The confusion will grow steadily worse unless systematists come to realize that the mere description of a new species is a far less important thing than the putting in order of those that are supposed already to be known..."

Hodges (1976): "A yet larger percentage of the names represent nearly nothing to an individual trying to make identifications... I contend that the base of our science is very weak, with much of the literature nearly worthless... Also, the first needs are for general studies covering the higher categories through the generic level for the world. If done for smaller zoogeographic areas, the revisions must take into account the genera of the world. From this point others can revise genera for the world or smaller areas. I feel that a broad audience should be made aware of the poor foundation of systematic entomology."

R. Gray (pers. comm. 1973): "... The amount of material that is available here in the USA of Soviet Satyridae is miniscule... This has led to a great deal of error here in the Nearctic, about Palearctic taxa...

"As an example, take the name Erebia avinoffi W.J. Holland 1930. This is based on a holotype female from Kotzebue Sound, Alaska, and an allotype male and two paratype females collected on Cape Tschukotski on the Bering Strait. I consider avinoffi to be a synonym of Erebia facsiata semo Gr.-Grschimailo.

"... it shows that lack of properly attributed and documented series has caused difficulties in both sections of the Holarctic by workers considering only the Palearctic or Nearctic without reference to the other half of the fauna..."

John A Legge (pers. comm. 1971): "... I had been limiting my collecting to western North America but several years of collecting convinced me that many of our things are circumpolar and may be the same species (though going under different names in Siberia and northern Europe)... I had a similar experience in western Yukon in 1970 where I took a female of E. semo and two males of erinnyn..."

(Sic!).

Let us look at the development of the literature and the present situation from the standpoint of Erebia. Hodges said even more, that the literature before 1940 is partly worthless. I would say: "In many cases this is true up to now."

Warren (1936) treated in his monograph 69 species. At present about 100 species of Erebia are known. Notwithstanding that Warren's Monograph has been "out of date" a score of years already, it is still the most useful manual on Erebia. All the other guidebooks on butterflies are of little value for Erebia. For example, Higgins & Riley (1970), printed in 400,000 copies, color plates, distribution maps, in short — a good book. But even there are drawbacks: no genitalia, no chromosomes, androconia treated incorrectly, etc. Besides, it covers only the western part of Europe. Similarly, other guidebooks treat only the local faunas.

Warren died on 22 January 1979 at the age of 92. His long awaited supplement to his Monograph appeared posthumously in 1981. All data in it are closed by 1972. There are treated ca. 25 species plus subspecies from various groups, several top-rarities. The Supplement includes a new review of the tyndarus group.

The late Warren has said in his introductory sentences: "... new species and races have been described, some species divided and names changed." The following comments explain the most important changes and additions. They have been kept as short as possible and often contain little more than references to recent literature in order to help readers.

1. E. inuitica Wyatt: one ♂ specimen, Alaska, 28 June 1965. The holotype is the only specimen known up to now; full original description and photograph of the genitalia.

2. E. ludlowi Warren: two specimens from Tibet at 15,500'; genitalia photograph.

3. E. nikitini Mori & Cho: This is not an Erebia at all. It belongs to another genus, Atercoloratus alini.

4. E. sudetica: separated from E. melampus. Very good genitalia.

5. E. semo Gr.-Gr.: separated from E. fasciata (some remarks later).

6. E. mackinleyensis Gunder: from Alaska; genitalia photograph for the first time. Warren: "... the position of the insect still remains uncertain." (remarks later).

At last a compliment to the English respectability and politeness. In corrections to the original book, p. 387: "The statement that Mr. F. Martin Brown was the collector of the specimens from Ft. Churchill in 1934 is a mistake. The collection was made by Miss Marjorie Heydmiller of Cornell University." Nearly half a century later Dr. Brown enjoys still his old age. Let us hope the same for "Miss" Marjorie. Her grand-grand-grandchildren will read this correction with pleasure.

Linnaeus started started with the term "species" actually in 1746 with Papilio Alexis, synonymized it in 1758 to Papilio ligea which in 1816 was taken by Chapman as the type-species for the genus Erebia. Since "Alexis" over two hundred years have elapsed, but even at present to separate E. ligea from E. euryale is nearly impossible.

To rectify in part the statement I mention the meeting of Estonian Lepidopterists in Tartu 19 February 1977 where I gave a paper on:

1. E. rozhkovi: sp. nova from Ussuriland, very similar to E. ligea, without androconia and the genitalia very different.

2. E. semo: has androconia, while fasciata lacks them. In the supplement is a small slip: avinoffi was taken in Siberia and it is a real semo. But the question is still open. In America is a form with androconia and in Eurasia a form without androconia. Both of those forms may constitute good species. Chromosome tests are needed.

3. E. tsvetajevi: this is a renaming of E. erinna Stg. In Asia the name erinnyn is unknown up to now. E. mackinleyensis Gunder 1932 was taken by American authors as a subspecies of E. magdalena. Dr. Philip suspected these might be good species some years ago. E. tsvetajevi has no androconia, the genitalia are different, and the juxta is peculiar.

In summary, about the main topic: Erebiology. We shall give in Erebiology a "manual part", 200 pages or so, where there will be discussed all the relevant topics of importance to the genus Erebia at large. O.D. (original description), author's name, type species, and type locality will have greatly diminished importance.

Emphasized instead of O.D. will be — data: name, male and female in black and white or color plates, drawings, chromosome numbers, androconia, distribution maps, altitude, flight period, early stages, and various other ecological and behavioral notes, etc. A sweeping revision of the genus Erebia.

Erebiology will be published in three volumes: the first North American, as the smallest total of Erebia, about 15 species or so, together with the manual part. The second will be European, and the third, the Asian one.

I owe many thanks to a lot of people, but their help will be fully acknowledged in the fundamental work.

Welcome to criticism, proposals, questions, and to every kind of help alike.

All letters will be answered promptly and with the greatest pleasure.

All best wishes to fellow Erebiologists!

Jaan Mihkelson
Tallinn 23, Vana-Keila mnt.6
200 023 Estonian SSR, USSR

(Thanks to Ken Philip for editorial assistance.)

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MORE ON THE ALASKAN HAUL ROAD.....

Ken Philip writes, in follow-up on his note of last year, that the North Slope Haul Road (now renamed the Dalton Highway) is now open to the public from the Yukon River to Dietrich Camp from 1 June to 1 September each summer. North of Dietrich Camp travel is limited to permit holders, and permits are normally issued only to industrial/commercial users and residents. Note that facilities are very limited: gasoline and minor repairs are available at the Yukon River and Coldfoot only. It is 211 miles from the Elliott Highway/Dalton Highway junction to the Department of Transportation checkpoint at Dietrich Camp. The Camp is south of Atigun Pass, although it is well within the Brooks Range, and there is no easy access to arctic tundra from the open section of the Dalton Highway.

Maintenance of the Dalton Highway is spotty, and traffic can be heavy at times. People planning to collect along this road should be prepared to travel slowly and make minor repairs.

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FLORIDA COLLECTING, AND THE SCHAUS SWALLOWTAIL.....

The Florida Game & Fresh Water Fish Comission has just completed a two-year study of the two federally listed threatened species here, Heraclides (Papilio) aristodemus ponceanus and H. andraemon bonhotei. The recent studies indicate that the status of the Schaus Swallowtail may be upgraded to endangered and that the Bahaman Swallowtail will probably be delisted in the near future, based on questionable residency in this state. Many lepidopterists may be unaware of the Florida laws and regulations regarding these species.

The Florida G&FWFC is planning to initiate a recovery program for the Schaus Swallowtail in 1982, and during this operation request the cooperation of lepidopterists in refraining from collecting this species. The current field studies have demonstrated that the populations of this butterfly are critically low (too low even

on the Elliot Key sanctuary to facilitate mark-release-recapture studies, with data indicating a 95% mortality rate between the egg and adult stages). Steps are being taken to ascertain the biological/ecological requirements of the subspecies, which ultimately will lead to repopulation attempts in suitable areas. The investigators feel it will take up to five years to complete the recovery program. All lepidopterists should support these research efforts.

Florida state law regarding collection of threatened species differs from federal law; collection of any threatened species without a permit is expressly prohibited (refer to 39-27.02, Rules of the G&FWFC). The entire Florida Keys system is regarded as a wildlife sanctuary, designated as such because of the wide array of plant and animal life present. However, most of the land is privately owned, and there has been little attempt to enforce protection of wildlife in the Keys except on special preserves. One may not collect on any Florida state park or preserve without a permit issued for research purposes through the office of the state naturalist. Many Florida counties also control collecting privileges on the respective county parks; permits can be sought through the local recreation departments. These restrictions at the local level supplement federal law, which in the case of threatened species makes it illegal to remove immatures or to collect for purposes of exchange or sale. It is illegal to collect Schaus Swallowtail anywhere without a permit.

Commencing in 1982, general collecting permits will no longer be issued simply to allow personal collecting, but only for reasons beneficial to the park service or to the Florida G&FWFC, such as the preparation of checklists or for research regarding a certain taxon. Past abuses with regard to collecting insects and plants on state parks, refuge areas, etc., are in part responsible for making it increasingly difficult to obtain permits. Often the abuses come at the hands of tourists and residents who are not aware of the restrictions. Look for more enforcement of the local rules and regulations, beginning in 1982, especially those pertaining to the Schaus Swallowtail. Do not be surprised if you are asked for a permit while collecting in the Keys, or if asked to see your catch. The same penalties for fish and game violations apply to plant and insect violations. In part, the data obtained from such inspections will be used to evaluate collecting pressure and to note violations. It will be prudent to apply for a permit and to abide by the restrictions imposed.

With the new Keys water pipeline spur being constructed, it is anticipated that a great deal of developmental pressure will be exerted on the Florida Keys and additional pressure on the butterfly species in south Florida.

Two other species are curretly being investigated in Florida, Eumaeus atala and Chlorostrymon maesites, both of which are severely restricted in terms of available habitat, and both are under consideration for the threatened category at the state level. Please respect these species in your Florida activities. Bear in mind that designation as a threatened species is a critical step toward protecting the habital vital for survival of that species.

All lepidopterists are asked to provide any data they may have regarding the Schaus Swallowtail to the Florida G&FWFC: sex of specimen, date and place of capture, collector, owner at present, etc. They wish personal accounts of past or present experience regarding changes in habitat, especially since the early 1970's. All information will be kept confidential and used only by the Commission in its evaluations. Forward data to Don A. Wood, Endangered Species Coordinator, Florida Game & Fresh Water Fish Comission, 620 South Meridian Street, Tallahassee, FL 32301.

Many of you have already responded, and gratitude is expressed. The success of the endangered species program will be proportional to the interest shown, and the information provided, by field lepidopterists. (Dave Baggett, 14406 N. 22nd St, #169, Lutz, FL 33549. Dave is Zone 6 Season Summary Coordinator.)

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KEEPING VIRGINS ON ICE.....

For several years I have kept newly emerged virgin female butterflies, as well as males, in the dark at 2-3^{o} C. for possible future use when mates are not immediately available. Although different species respond differently to this treatment, it works very well for many pierids and also for parnassians. Usually it is not necessary or even desirable to feed the animal first. Generally one can count on a week or ten days of usability for mating under these circumstances. Often the animals live much longer than that. A month is perfectly standard for various Pieridae, and two months occasional for the genus Tatochila from the Andes and Patagonia. My all-time champion is a male of the winter form of T. vanvolxemii from Bahia Blanca, Argentina, which eclosed on 7 May 1981 and died 22 July, 77 days later. He never fed, and, alas, never mated either. The most extraordinary tale, however, is of a female of the same species which eclosed on 4 June,was immediately refrigerated, taken out of the fridge on 21 July and mated ten minutes later, and produced 100 fertile eggs! She died 25 July at the advanced age (for recent motherhood) of 51 days.

The moral of this, I suppose, is that a virgin kept on ice will really get hot to trot. (Arthur M. Shapiro)

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ROYAL ENTOMOLOGICAL SOCIETY BUTTERFLY SYMPOSIUM.....

Butterflies were very much in evidence in September at the British Museum and the Royal Entomological Society of London as rhopalocerists converged on London for the eleventh RELS Symposium, "The Biology of Butterflies". Dedicated to Professor E. B. Ford, whose germinal work on Lepidoptera has stimulated amateurs and professionals alike, the conference also celebrated the centenary of the British Museum and coincided with Britain's "Butterfly Year". Co-conveners Dick Vane-Wright and Phillip Ackery organized sessions focusing on the behavior, ecology, and population biology of butterflies. Unlike previous RESL Symposia, which have focused on topics such as "abundance", "diversity", and "cytogenetics" in insects of all orders, this meeting focused primarily on butterflies (although a few moths were raised to the status of "honorary" butterflies). Some 200 delegates represented Africa, Asia, Australia, North America, and Europe.

During the four-day "residential" symposium (out-of-town delegates were hospitably housed at Imperial College) 16 speakers reviewed current works on a number of topics: structure and dynamics of butterfly populations (Paul R. Ehrlich); structure in butterfly communities (Larry Gilbert); hostplant relations (Mike Singer); chemical defenses (Loncoln Brower); natural enemies of butterflies (Jack Dempster); aphytophagous butterflies (Kit Cottrell); visual communication and sexual selection (Bob Silberglied); egg-laying in butterflies (Francie Chew & Bob Robbins); ecological genetics of quantitative characters (Paul Brakefield); mate selection (David Smith); mimicry and its evolution (John Turner); polymorphism and speciation (Charles Remington): migration and dispersal (Robin Baker); evolution of seasonal polyphenism (Art Shapiro); butterfly conservation (Jeremy Thomas).

Contributed papers covered work on various topics. These included butterfly toxins (M. Rothschild and N. Marsh); ancestral larval foodplants of danaids (J. Edgar); enzyme polymorphism in danaids (I. Kitching); butterfly abundance (E. Pollard); heliotropic behavior in Euphydryas larvae (K. Porter); mutualistic ant-lycaenid relationships (N. Pierce); habitat vs. foodplant selection (S. Courtney); automimicry in danaids (D. Gibson); ectoparasite midges in butterflies (R. Lane); mark-recapture estimates (A. Morton); polyphenism in Precis (L. MacLeod); sex ratios (Sir C. Clarke); pseudosexual selection (D.

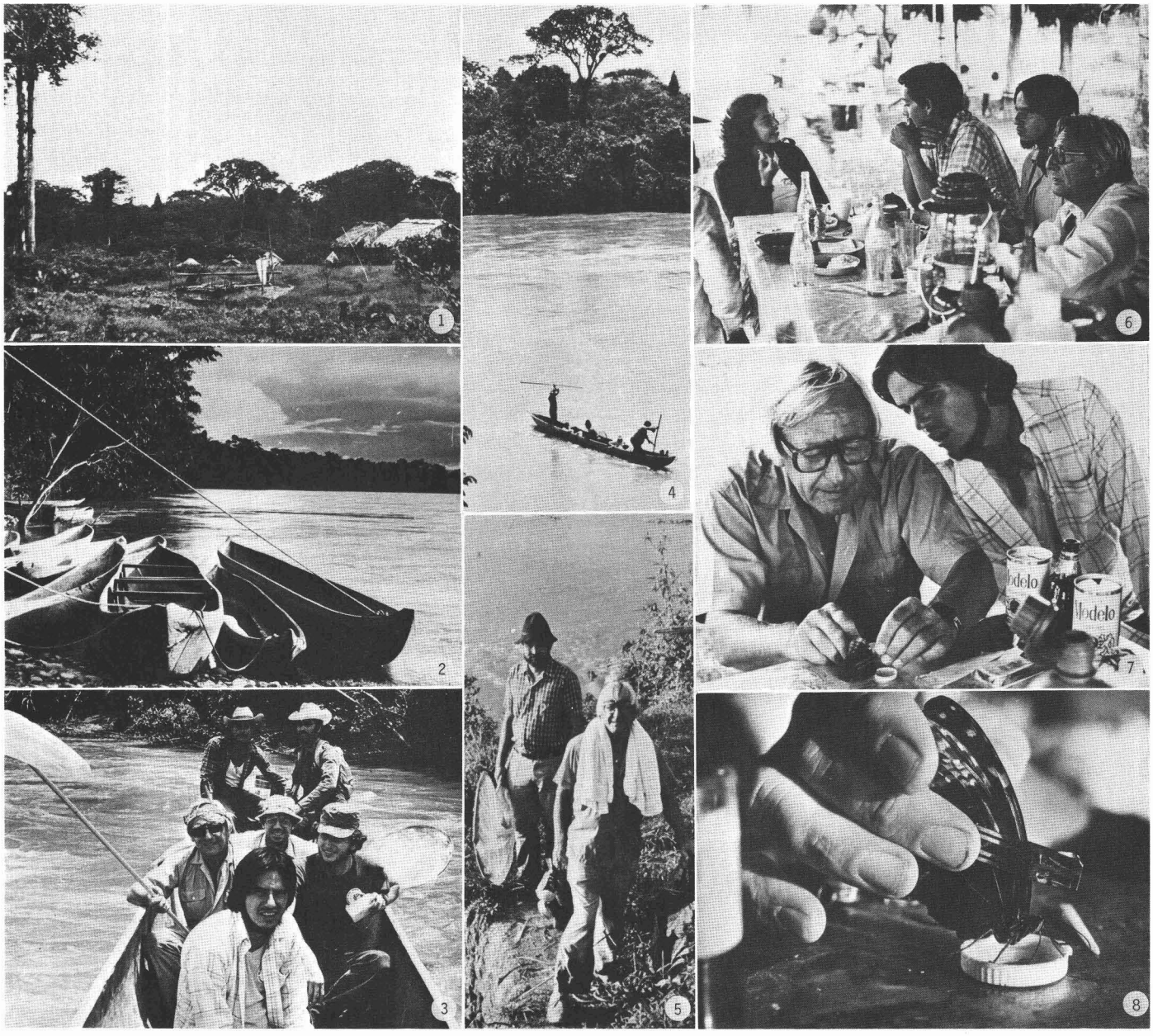
Vane-Wright); mimicry and speciation in Acrea (I. Gordon); seasonal polyphenism in Pieris (O. Yata); mate selection in Papilio glaucus (A. Platt); effects of vulcanism on butterfly populations (R. Pyle).

The papers, developed from both the invited talks as well as the shorter ones, will be published in 1982 as the eleventh Symposium of the RESL. The co-conveners (and editors of the volume) report that they hope to see the volume published at reasonable cost, perhaps in a paperbound edition. (Inquiries may be made c/o Butterfly Symposium RESL, 41 Queen's Gate, London SW 7, ENGLAND.)

Several excellent films contributed to the program, as did a number of poster displays reporting very recent work on butterflies, and several book exhibits.

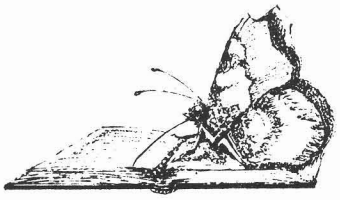
One of the high points of the meetings (and there were many) was having the chance to meet so many fellow lepidopterists. In many cases, people who had corresponded for years, and had never seen each other, had a chance to meet and talk in person for the first time. Many of these encounters took place in some of the many pubs in the area, such as the Norfolk or the (appropriately named) White Admiral.

The varied interests of the delegates, united under a common interest in butterflies. provided an excellent vehicle for communication. This, combined with the superb efforts of Dick Vane-Wright and Phil Ackery, produced an outstanding symposium, which will be remembered for a long time to come. (Francie Chew and Deane Bowers)



CHIAPAS ADVENTURE: (1) The camp at Guacamayas Chis. (2) Canoes at the Lacantun River, Chiapas. (3) front to rear: Javier de la Maza, Paul Pfenninger, Tom Rosko, Izzy Shakad, and guides. (4) Afloat on the Lacantun. (5) Jeff Baier and Paul. (6) Monica & Enrique Fuentes, Javier, Paul. (7) Preparing to feed Morpho peleides moctezuma. (8) Moctezuma close up.
(Photos by Luis G. Lopez del Paso.)

The photographs above were intended to accompany the Chiapas Collecting Trip article by Paul Pfenninger on page 59 et seq. of the NEWS for Sept/Oct 1981. They arrived too late for inclusion in that issue, and were crowded out of the next by other priorities. Our apologies to all concerned. Ed.



Books

Butterflies of the Neotropical Region, Part 1, Papilionidae & Pieridae, by Bernard D'Abrera, 1981. Lansdowne Editions, East Melbourne, Australia; 172 pages. Distributed by E. W. Classey, Ltd., Farringdon, Oxon., England. Price $185.00 US.

As a non-specialist on Neotropical fauna, I anxiously awaited the publication of this D'Abrera volume, since the pre-publication notices about the Neotropical volumes have led one to believe that they will be reference standards akin to Seitz and Godman & Salvin. As any amateur lepidopterist knows, identification of Neotropical species is difficult, since there is no current and complete reference work for the region. One must sift through various regional works, obscure journal articles, catalogues, checklists, and the like. This is a time-consuming and often frustrating process. Hopefully, the D'Abrera volumes treating the Neotropics were to alleviate these problems while providing an update of the Seitz treatment.

This first volume which treats the Papilionidae and Pieridae is a vast disappointment because of many omissions. The statements on the dust jacket lead the reader to believe that here at last is the long awaited definitive and standard reference work for the Neotropics. On the other hand, in the foreword the author has penned a disclaimer citing expense and other reasons for restricting his treatment to material in the British Museum (N.H.) primarily. Consequently the book would be better titled "An Illustrated Catalogue of the Neotropical Butterflies in the British Museum (N.H.)".

The book includes a "select bibliography" which lists most of the standard reference wroks on the Neotropics, although a few key books are omitted. The reader wonders, however, whether D'Abrera actually consulted any of these references in order to develop a checklist of species to be included in his book. If he had done so, perhaps many of the omissions would not have occurred. Since he was associated with the British Museum, one would think that he could have obtained loan material to photograph from other museums. Apparently he elected simply to ignore species not included in the British Museum holdings.

For example, none of the many forms of Papilio polyxenes is shown, nor does the name appear in the index, yet this species occurs in Cuba, Mexico, Central America, and at least to Colombia. Colias cunninghami from the Andes is omitted, and there are many other such omissions.

D'Abrera should at least have examined the holdings of the Allyn Museum of Entomology and the American Museum of Natural History in this country. The latter institution has maintained tropical field stations for many years. Dr. William Beebe, a former staff scientist now deceased, wrote two books in which he eloquently described the Rancho Grande station in Venezuela. Museum collections in France and Germany are also rich in Neotropical species.

I am sure that whoever reviews this book for the JOURNAL will comment on the taxonomy and distribution data, as well as the omissions, and I defer to that reviewer on such matters. The book is best described as lavish. It is an "art-book" with half-page and full-page full-color habitat photographs, complete with full-color dust jacket. The $185 Price-tag reflects those niceties, which could well have been dispensed with to bring the cost down. This is by far the most expensive volume in the series. The second edition of the Australian Region was 21¢ per page, the Afrotropical Region volume was 25¢ per page. This most recent volume is a whopping $1.85 per page!

The technical merit of this book does not, in my opinion, reflect its exorbitant cost. The book is priced out of reach of all but the wealthy. In view of its deficiencies, the casual collector is well advised to use the available and much less expensive regional references. (C. D. Ferris, P.O.Box 3351, Univ. Station, Laramie, WY 82071)

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"PAPILIO", NEW SERIES.....

This is a revival of the journal "Papilio" published from 1881 to 1884. Its editor, Dr. James A. Scott, indicates that it "... appears irregulary, and is intended for rapid publication... There is no subscription..." and copies are requested directly from the authors of each number, enclosing the advertised price. Printing is arranged by and at the expense of the authors, an approach which is intended to eliminate publication delays and printers' errors.

"Papilio" #1: "New Papilionoidea and Hesperioidea from North America" is available at $1.00 (postpaid to US and Canada) from James A. Scott, 60 Estes Street, Lakewood, CO 80226, USA.

For further information about the publication, its review policy, and instructions to authors, contact Dr. Scott.

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"BUTTERFLIES IN THAILAND".....

Vol. 1: Papilionidae & Danaidae,	$10.00
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All prices include the postage. The 4th volume deals with 345 species of Lycaenidae, 8+216 pages; more than 300 species illustrated in 36 color plates.

Order from Bro. Amnuay Pinratana, St. Gabriel's College, Bangkok-3, THAILAND.

BUY — SELL — EXCHANGE: POLICY STATEMENT.....

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

Therefore, it will be our policy to print notices which seem to meet the above criteria, just as in the past, without quoting prices (except for those of publications or lists). Notices which seem by their listing of offerata/desiderata, or by an organizational title, to be commercial in nature, will be entered in a separate section as "commercial notices", listing only name, address, and a brief indication as to material offered/desired.

The Society, as always, expects all notices to be offered in good faith and takes no responsibility for the integrity of any advertiser.

FOR SALE: live cocoons of luna, promethea, and polyphemus. Write for prices to Daniel Bantz, 12524 7½ Mile Road, Caledonia, WI 53108.

EXCHANGE ONLY: a few A+ pairs of S. diana for other material I can use from western US & Canada. Send offers toFrank Bodnar, Box 52, Spring Church, PA 15686.

WANTED: travelling companion to Costa Rica, to share expenses, ideas, etc., for May or June 1982. Brian Harris, 13692 Berkshire Way, Garden Grove, CA 92643.

FOR SALE: cocoons of A. luna, A. polyphemus, H. cecropia, and A. io, form coloradensis. Some A-1 papered mater-

ial from breeding program, saturniids and a few H. lineata. SASE for list. Carita Hamblyn Bates, P.O. Box 3133, Eldorado Springs, CO 80025.

WANTED: cocoons of H. gloveri. Please state whether reared or wild-collected, number available, and asking price. Will purchase or trade. Carita Hamblyn Bates, address above.

FOR SALE OR TRADE: wild-collected cocoons of H. cecropia, discounts on orders of 100 or more. For trade only: wild-collected cocoons of A. io coloradensis, ova of H. gloveri. Steve Stone, 755 Parfet St., P.O.Box 25287, Denver, CO 80225.

WANTED: cocoons, pupae, & papered material of Calosaturnia, Agapema, Colorida, Automeris io ssp., Anisota (esp. oslari & consularis pupae), Hylesia, Hemileuca, Sphingicampa, Eacles imperialis ssp., Hyalophora nokomis, H. kasloensis, papered Catocala from the Mississippi west. SASE to Steve Stone, address above.

FOR SALE: pupae of E. imperialis, A. io, A. polyphemus, A. luna. Send for prices, or will trade for pupae of any species of leps I need: inquire. John M. Coffman, Rt. 1, Box 331, Timberville, VA 22853.

EXCHANGE: pupae of C. regalis, E. imperialis, A. polyphemus, and C. angulifera for other Saturniidae or Sphingidae. Want correspondence with others rearing and handling livestock. Bill Babcock, 1192 W. Sunsetview Dr., Akron, OH 44313, USA.

FOR SALE: Cat. of N. A. Butterflies: Weidemeyer 1864; The Entomologists Exc. News: 1937-42; An Annotated List of the Butterflies & Skippers of Cuba: T. Y. Callejas, 1954; Explorations in the Darien Gap: PAHC 1957; Rev. of ... Theochila & Tatochila: Herrera & Field, 1959; Proc. of Ent. Soc. of Ontario: 1937-68; Butterflies of NW Ohio: Price 1970. M. C. Nielsen, 3415 Overlea Dr., Lansing, MI 48917.

FOR SALE: Oeneis, Erebia, Parnassius, Boloria, and other Montana butterflies. Write for price list. Steve Kohler, Box 38, Florence, MT 59833.

WANTED: monograph of the genus Erebia by Warren. To purchase, or in exchange for specimens. Steve Kohler, address above.

FOR SALE: limited number of wild-caught Florida specimens of Protambulyx strigilis. SASE to Dr. W. L. Adair, 810 Gascon Pl., Temple Terrace, FL 33617.

FOR SALE: Manitoba butterflies and moths and a few exotics. Some specialties are O. daura alberta, Catocala manitoba, Lycaena dione, Nymphalis j-album, Lycaena dorcas ♂♂ only, Colias interior, Boloria chariclea grandis. Price list on request to C. S. Quelch, 20 Highgate Rd., Toronto, Ontario, CANADA M8X 2B2.

✓ FOR SALE OR TRADE: Ornithoptera victoriae reginae ♂♂ & ♀♀ from old private collection, 10 specimens, some A1. Will trade for rarer tropical species; Morpho cypris ♀, also Parnassius. Anthony Ortegon, M.D., 1619 N. Greenwood St., Pueblo, CO 81003.

FOR SALE: large quantities of cocoons/pupae of A. polyphemus, A. luna, and E. imperialis. Catherine Hartman, 25903 CR 24 W, Elkhart, IN 46517.

WANTED: any nearctic Colias except eurytheme and philodice. Brian Dunleavy, 2040 Grubbs Mill Rd., Berwyn, PA 19312, USA.

FOR SALE OR TRADE: wild-collected H. cecropia cocoons. Wanted: ova lists of Saturniidae available this year, especially E. imperialis and C. regalis from larvae reared on staghorn sumac. James C. Romer, 7991 East Hampden Circle, Denver, CO 80237.

WANTED: "Butterflies of the West Indies" by Norman D. Riley. Needed immediately; have many unidentified butterflies from Dominican Republic; also going to Jamaica this June. Gasper Danish, 1017 Second Ave., Altoona, PA 16602.

WANTED: ova of C. regalis and C. sepulchralis, preferably in mid-July. To buy, or in exchange for papered worldwide or Pennsylvania material. Want Catocala ova, and to buy or exchange worldwide Lycaenidae. Gasper Danish, address above.

FOR SALE: living cocoons/pupae of H. cecropia, C. promethea, E. imperialis: imperialis net-reared on pine, others wild-collected this year, mostly from "seeded" shrubs. Bruce C. Pulsifer, 163 Main St., Gorham, ME 04038.

MEMBERS' COMMERCIAL NOTICES.....

W. BRYCE RICHFIELD, 170 Magnolia, No. 202, Goleta, CA 93117, USA: selling world Papilionidae, Lycaenidae, & Saturniidae; wants Alaskan Parnassius eversmanni.

MIGUEL SERRANO, 4520 North Matanzas Ave., Tampa, FL 33614 USA: tropical butterflies mainly from the American region available for collectors; send for list.

JEFF McCABE, P.O.Box 442, Grand Marais, MN 55604: Cornell Drawers (new), w/o stain or varnish, $20 plus shipping. (Brother of member Tim McCabe, Albany, NY.)

DAVID W. BOUTON, It's Nature All, #217 NYPENN TRADE CENTER, 435 Main Street, Johnson City, NY 13790 USA: specimens, collection and study equipment, books, breeding supplies. Expeditions for collectors and researchers.

CHRISTOPHER J. FARRELL, Apartado # 103, Tingo Maria, PERU, S.A.: selling South American butterflies, beetles, and assorted insects, including many rare species; enquiries from collectors and dealers welcomed; wholesale discounts.

New Members

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MORAG, EYAL: No. 9 Hakayal St., Ramat Hasharon, 47222 ISRAEL

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Time Required: ____ 15 min; ____ 20 min; ____ 30 min; ____ other (specify) _____

Please list any special requirements for audio/visual aids other than a standard 2 X 2 slide projector and screen:

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If you are bringing family or friends with you to the meeting, please indicate the total number in your party:

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Deadlines: Paper title and preregistration 1 April, 1982; preregistration only 1 June, 1982.

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UNDERCOFFER, JERRY: 919 Hickory Rd., St. Marys, PA 15857
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WARREN, ROBERT J.: 2127 N. 11th, McAlester, OK 74501
WHITE, DR. ADOLFO: Elena No. 182, Colonia Nativitas, Mexico 13 D.F., MEXICO
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DEADLINES: Material submitted for inclusion in a specific issue of the NEWS should reach the NEWS EDITOR no later than the 15th of the preceding even-numbered month. Reports for the SEASON SUMMARY must reach the ZONE COORDINATORS (listed on front cover of this issue) no later than 31 January.

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INFORMATION ABOUT THE SOCIETY.....

Membership in the Lepidopterists' Society is open to all persons interested in any aspect of Lepidopterology. Prospective members should send the TREASURER the full dues for the current year ($18.00 US), together with mailing address and a note about areas of interest in Lepidoptera; student membership (must be certified) $12; sustaining membership $25. Remittances must be in US dollars, payable to the Lepidopterists' Society. All members will recieve the JOURNAL (published quarterly) and the NEWS (published bimonthly). A biennial membership list will comprise the last issue of the NEWS in even-numbered years.

Information on membership may be obtained from the TREASURER, Ron Leuschner, 1900 John St., Manhattan Beach, CA 90266, USA. Changes of address must be sent to the TREASURER, and only when the changes are permanent or long-term.

Other information about the Society may be obtained from the SECRETARY, Julian P. Donahue, Natural History Museum of Los Angeles County, 900 Exposition Blvd., Los Angeles, CA 90007, USA. Please notify him of any additions or changes in areas of interest for publication in the membership list.

Manuscripts submitted for publication in the JOURNAL are to be sent to the JOURNAL EDITOR, Dr. Thomas D. Eichlin, JOURNAL of the Lepidopterists' Society, Insect Taxonomy Laboratory, 1220 N Street, Sacramento, CA 95814, USA. See the inside back cover of a recent issue of the JOURNAL for editorial policies.

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AVAILABLE PUBLICATIONS OF THE SOCIETY.....

CATALOGUE/CHECKLIST OF THE BUTTERFLIES OF AMERICA NORTH OF MEXICO (Memoir No. 2), Lee D. Miller & F. Martin Brown: includes references to original descriptions and location of type specimens. Members and subscribers, $10 cloth, $5 paper; non-members, $17 cloth, $8.50 paper, postpaid. Order from Ron Leuschner, Treasurer, 1900 John Street, Manhattan Beach, CA 90266, USA.

COMMEMORATIVE VOLUME,1947-1972: a 25-year review of the Society's organization, personnel, and activities; biographical sketches; JOURNAL 25-year cumulative index by author, subject, and taxon; clothbound. Members and subscribers, $6; non-members, $10, postpaid. Order from Ron Leuschner, Treasurer, address above.

BACK ISSUES of the JOURNAL and of the NEWS of the Lepidopterists' Society: order from Ron Leuschner, Treasurer, address above. A list of the available issues and their cost, postpaid, is in the NEWS for Nov/Dec 1981, page 74.