

NEWS

of the LEPIDOPTERISTS' SOCIETY

Number 5

September/October 1977

EDITOR: Jo Brewer, 257 Common Street, Dedham, MA 02026 U.S.A.
Spreading Board: Dr. Charles V. Covell, Jr., Dept. of Biology, Univ. of
Louisville, Louisville, KY 40208, U.S.A.

ASSOCIATE EDITORS

Frances Chew
J. Donald Eff
Thomas C. Emmel
Thomas Franks

H.A. Freeman
Q. F. Hess
Robert L. Langston

Bryant Mather
M. C. Nielsen
K. W. Philip

Robert Robbins
John H. Shepard
E. C. Welling M.
William D. Winter, Jr.,

Attention Collectors & Researchers!

One of the joys of being a Lepidopterist is that something new is always bound to turn up, and here to prove it are two novel suggestions from Charles P. Kimball of West Barnstable, MA. 02668.

"Throughout the country there are many Agricultural Experiment Stations. Most of these run light traps in order to keep track of the appearance of species of economic interest and notify local growers thereof. In most instances, the mountains of unwanted material are thrown away. For many years I acquired this material from 3 Florida stations. Now I receive it, and have been for many years, from the one at East Wareham, MA. I am sure an ambitious moth collector could make an arrangement with a nearby Station to save the material, provided he would supply the containers for the catches and pick them up from time to time. For this purpose the heavy paper cylinders in which ice cream is packed are adequate, and they come in different sizes. Do NOT punch holes in them, or dermestids will get in. Mildew is seldom a problem except in humid areas, and very frequent pickups will obviate that. The great merit to all this is that the collector can get a continuous flow of material all season, and can also amass endless data which could be filed with the Station where it would be available to any interested parties."

And here is one for the Butterfly people:

"A letter from D. C. Tabb of Miami dated May 25, 1977, put an idea into my head. Tabb mentioned that in the late autumn of 1976, *Siproeta steneles* was very abundant in the Redlands-Homestead area of Florida, and that he saw as many as 100 specimens in a grove, whereas up to the date of his letter he had seen none this year; also that Glen Gibbs had seen only one since the severe cold of January 21. This species has been around for the past 40 years at least, but it has waxed and multiplied exceedingly in the past few. We have some indications that the severe cold of 1899 drove certain species back from the northern parts of the state, or even perhaps wiped them out. Now we have an opportunity to see what actually happened to *S. steneles*, as well as to several other rare species which have established themselves in Florida from the West Indies within recent years. Below is a list of the species:

Papilio androgeus, *Phoebis orbis*, *Eurema dina*, *Danaus eresimus*, *Marpesia eleuchaea*, *Eumaeus atala*, *Strymon simaethis*, *Electrostrymon angelia*, *Strymon limenia*, *Imolus azia*, *Goniurus dorantes*, and of course *Siproeta steneles* as well. I suggest that all who collected these species in Florida in 1976, make a list of where, when and in what numbers they were taken, and the approximate no. of sightings. Then if they collect again this year, especially at the same place & time, make a similar list. Maybe this will tell us something. Maybe not. But at least data will be made available for the benefit of future researchers."

Confusion of Collectors

The major portion of the Zone I Field Summary for 1976 was submitted in early Feb. 1977. As usual, there were several late contributions, so a supplement was prepared and mailed to the Editor in mid-March, to be published separately. However, these were combined, causing confusion for the "RL" citations. In general, it can be stated that the records from Arizona and from SOUTHERN California are those of Ron H. Leuschner. The climatological statements plus the records from Nevada and NORTHERN California are by Robert L. Langston. This notice seems necessary as I have had inquiries about some of the rare and "desirable" Heterocera turned up by Ron Leuschner. He does considerable blacklighting, and being a very knowledgeable moth taxonomist, seems to come up with many goodies. Credit should go where it is due!

Missing Nevada Moth

In Zone I Field Summary, 1976, under "NEVADA: ...MOTHS:" the Pyla subargentana citation should read: "Pyla nigricula (Pyrilidae) abundant, Slide Mtn. at 9200', Washoe Co., 5 July (R. Langston). Eana subargentana (Tortricidae), Mt. Rose -Slide Mtn. Jct., Washoe COUNTY & STATE, 5 July (R. Langston)'. There was no intention to create a new name combination, and the record should be set straight. The Pyla is not too important as it can be widespread and generally distributed in both California and Nevada. However, this may be the first published Nevada record for Eana subargentana Obratzsov. According to J.A. Powell, 1964 (Univ. Calif. Publ. Ent., 32, p. 128), "...probably widespread in high mountain areas of the northwestern United States and southwestern Canada, although records are lacking for Idaho, Nevada and Oregon."

Missing California Skipper

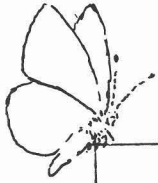
In the Zone I Field Summary, 1976, under "CALIFORNIA: ...BUTTERFLIES:" the pernigra citation and following should read: "E. pacuvius pernigra, Smith Grade se. of Bonny Doon, S. Cruz Co., 29 May (R. Langston). Systasea zampa, Pine Valley, San Diego Co., COASTAL slope of Laguna Mts., 8 May (R.W. Breedlove); Chino Cyn. Riverside Co., 5 Oct. (R.H. Vanderhoff); & more common than usual, Anza-Borrego Desert areas, 17, 31 Oct. (C.A. Sekerman)." The pernigra, although scarce, was taken within the southern part of its known range. However, zampa from Pine Valley is a rarity as this species is usually a denizen of the desert. The only ones I have personally taken on the coastal side of San Diego County were 25 years ago! To wit, 2 ♂♂ from near the base of a hill 2 mi. NE. of Lakeside, -15 May 1952. Subsequent searches there and in nearby areas were negative.

Robert L Langston, Kensington, CA.

COMPLETE STATE ABBREVIATION LIST

ALABAMA	AL	KENTUCKY	KY	OHIO	OH
ALASKA	AK	LOUISIANA	LA	OKLAHOMA	OK
ARIZONA	AZ	MAINE	ME	OREGON	OR
ARKANSAS	AR	MARYLAND	MD	PENNSYLVANIA	PA
CALIFORNIA	CA	MASSACHUSETTS	MA	(PUERTO RICO)	PR
COLORADO	CO	MICHIGAN	MI	RHODE ISLAND	RI
CONNECTICUT	CT	MINNESOTA	MN	SOUTH CAROLINA	SC
DELAWARE	DE	MISSISSIPPI	MS	SOUTH DAKOTA	SD
(DISTRICT OF COLUMBIA)	DC	MISSOURI	MO	TENNESSEE	TN
FLORIDA	FL	MONTANA	MT	TEXAS	TX
GEORGIA	GA	NEBRASKA	NB	UTAH	UT
(GUAM)	GU	NEVADA	NV	VERMONT	VT
HAWAII	HI	NEW HAMPSHIRE	NH	VIRGINIA	VA
IDAHO	ID	NEW JERSEY	NJ	(VIRGIN ISLANDS)	VI
ILLINOIS	IL	NEW MEXICO	NM	WASHINGTON	WA
INDIANA	IN	NEW YORK	NY	WEST VIRGINIA	WV
IOWA	IA	NORTH CAROLINA	NC	WISCONSIN	WI
KANSAS	KS	NORTH DAKOTA	ND	WYOMING	WY

Credits: p.3 Poem reprinted by permission; © 1943, 1971. New Yorker Magazine Inc.
p.4 Drawing by Henry B. Kane, 1967
p.9 Photograph by W. D. Winter Jr.
Volunteer typing done by Ms. Jane Williams.



IN MEMORIAM

On Discovering a Butterfly

I found it in a legendary land
all rocks and lavender and tufted grass,
where it was settled on some sodden sand
hard by the torrents of a mountain pass.

The features it combines mark it as new
to science: shape and shade - the special tinge,
akin to moonlight, tempering its blue,
the dingy underside, the checkered fringe.

My needles have teased out its sculptured sex;
corroded tissues could no longer hide
that priceless mote now dimpling the convex
and limpid teardrop on a lighted slide.

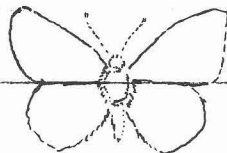
Smoothly a screw is turned; out of the mist
two ambered hooks symetrically slope,
or scales like battledores of amethyst
cross the charmed circle of the microscope.

I found it and I named it, being versed
in taxonomic Latin; thus became
godfather to an insect and its first
describer - and I want no other fame.

Wide open on its pin (though fast asleep)
and safe from creeping relatives and rust,
in the secluded stronghold where we keep
type specimens it will transcend its dust.

Dark pictures, thrones, the stones that pilgrims kiss,
poems that take a thousand years to die
but ape the immortality of this
red label on a little butterfly.

VLADIMIR NABOKOV
(April 23, 1899 - July 2, 1977)



During this past July I have been relaxing in my backyard for a few minutes several times a day trying to protect my vegetable garden from *Pieris rapae*. I should explain that I am now retired and thus can indulge in such seemingly useless pastimes. Over the past month I have netted and destroyed over two hundred cabbage butterflies, mostly females. The program appears to be a success, for now in mid-August the Brussels sprouts, broccoli, etc., have suffered only minor damage and are thriving. This method of control appears to be the only viable alternative to insecticides, which I decline to use.

An interesting observation is that my "eradication" program seems to have had a marked effect on the behavior of the species. Previously, both sexes seemed to behave rather similarly, coursing through the garden, hovering over the larval food plants, feeding on the zinnias, buddleia, etc. One could distinguish the sexes on the wing only with difficulty. Now, a month later, with most of the females removed from the area, the males dash through the yard, hardly ever stopping. Also, they are exceedingly wary and apparently can detect the net at twenty feet distance. They visit the buddleia less frequently, are very restless while feeding, and are difficult to approach. Perhaps this agitated male behavior is in response to the drastic reduction in the female population.

As I was relaxing in the yard the other day, a fresh, brilliantly colored *Colias eurytheme* male dashed over the tall hedge. He made a quick pass over the zinnias without stopping and vanished over the porch roof. The thought struck me that had this incident with the alfalfa butterfly occurred fifty years ago, I would have leaped three feet out of my chair, grabbed the net and dashed after the insect as fast as I could. For, back in 1926, in northeastern Pennsylvania where I lived and collected, *eurytheme* was unknown and a coveted prize.

By 1926 I had made a "boyhood" collection of about fifty species of butterflies of Lackawanna and surrounding counties. Among my scarcer and prized items were these singles: a good *Nymphalis j-album*, a very ragged *Speyeria idalia* female, a fair *Lethe anthedon* female, and a fair *Limenitis astyanax* female. Probably the scarcest item of all was a perfect *Euptoieta claudia* male.

During my summer vacations of the twenties, I regularly collected in a power line cut along the south side of a mountain just northwest of Scranton, Pa. In wet areas created by small brooks crossing the cut, I took series of the four lesser nymphalids:



Phyciodes tharos, *P. batesii*, *Melitaea harrisii*, and *M. nycteis*. *Polygonia progne* and *Nymphalis milberti* coursed through the cut all summer long, and at the city line at the foot of the mountain I usually paused to check a colony of *Lycaena thoe* in a low spot aside the cinder road.

Parenthetically, this area is now a prime example of the habitat destruction. The Northeast Extension of the Pennsylvania Turnpike cuts right through my old collecting area. But more important, the power line itself has apparently been so poisoned with herbicides that it supports only low ground cover and clumps of stunted laurel. Very little flies there now: *Pieris rapae*, some *Colias*, a blue or two, and that denizen of disturbed places, *Lycaena phlaeas*.

During the twenties, a pocket guide to the butterflies by W. J. Holland was my main source of inspiration as well as means of identification. A very abbreviated version of the Butterfly Book, this small volume illustrated in sometimes too vivid color a hundred or so common eastern butterflies, including *eurytheme*. Long accustomed to the very common *C. philodice*, I looked upon the brilliantly orange alfalfa butterfly as somewhat exotic looking, suggesting the exotic sulfurs I had seen in National Geographic Magazine. The range given by Holland led me to believe that I might encounter *eurytheme* almost anytime anywhere in my area.

What I did not know was that the species was then undergoing a northward range extension and except for occasional stragglers had not yet reached Pennsylvania. Clark in his "Butterflies of the District of Columbia and Vicinity" described the species as a late summer immigrant prior to 1926 and fully established in the District by 1929. Forbes in his "Lepidoptera of New York and Neighboring States" noted that it had become established at Ithaca in 1928 and in Massachusetts a year later.

One day in the summer of 1927 the threat of rain cut short my collecting on the mountain. As I was returning home on the dirt road at the foot of the mountain I spied a flash of orange drop into the herbage a short distance from the road. The moment I clamped the net over the spot I knew I had captured my first *Colias eurytheme*. It was a male, of average size and coloration. Its fresh condition suggested it probably was not an immigrant straggler from the south. Coincidentally, about a month later I took another rare first, an albinic female *C. philodice*.

These *Colias* record were to stand in my collection for a decade or so, for shortly thereafter I ceased my butterfly collecting activities. I resumed collecting in 1939, this time in Lancaster County in southeastern Pennsylvania. What brought me back into the field was a big hatch that year of *Speyeria idalia*.

That summer, scores of this large fritillary dotted the clover and alfalfa fields of the farm country. But, to my surprise, accompanying many fritillaries were scores of none other than *C. eurytheme*. At first I was astounded by the abundance of the alfalfa butterfly and also by the great variation in pattern. Before the widespread use of insecticides following World War II, I collected, almost casually, hundreds of this beautiful farm pest in all its forms. However, I never saw either a white or black male.

Ironically, *eurytheme* expanded into Pennsylvania (and even further north into Canada) during my long absence from the field. As has been variously reported, wherever it extended its range it tended to suppress the common sulfur *C. philodice*. From the forties on, I found *philodice* a lot less numerous than it was in the twenties, when it probably was the commonest butterfly next to *Pieris rapae*.

The abundance of *C. eurytheme* as I found it in Lancaster County certainly dulled the luster of that prize capture back in 1927. However, despite its commonness, an intensely orange male *eurytheme* is apt to give me a start even today. Perhaps my response simply represents a subconscious reminder of my boyhood, when every *Colias* was lemon yellow and every field harbored a prospective prize alfalfa butterfly.

Tigers Without Their Stripes

By David M. Walsten

THANKS TO NURSERY RHYMES and TV commercials, Mother Nature is commonly seen as a lady of caprice, if not malice. The fact is that animals hideous or bizarre enough to instill such superstition are sometimes created as the result of genetic mutation or by injury to the organism early in its development.

One such freak is the gynandromorph, which exhibits male as well as female characteristics. Accidents of this sort have been observed in a wide range of animal life, but are perhaps commonest among the insects. Those shown here are all specimens of the tiger swallowtail (*Papilio glaucus*), a common North American butterfly. In these butterflies the male-female difference occurs not just in the visible characteristics, such as wing pattern, but may also involve the internal organs of reproduction. In some gynandromorphs (also called gynanders) one side of the body may have a testis while the other side has an ovary.

The condition of gynandromorphism is ordained shortly after fertilization of the ovum, or egg, and such individuals always develop from a female egg; that is to say, one with two X chromosomes—a configuration known as XX. (Eggs destined to develop normally as males have an X chromosome and a Y chromosome—a configuration known as XY.) For reasons that are not fully understood, an accident of some sort may occur to one of the X chromosomes, resulting in an XO configuration. Such a cell gives rise to tissues with male characteristics. After a normal fertilized XX

cell undergoes its first division, the two resultant cells both have an XX configuration. If an accident occurs to an X chromosome in one of these two cells, the configuration of that cell becomes XO or, in effect, male, while the unaffected cell remains female. As embryonic development continues, all the cells from the XX cell inherit and transmit female characters; those from the XO cell inherit and transmit male characters. The resulting mature insect, known as a *bipartite* gynandromorph, is exactly 50 percent male and 50 percent female.

If the accident occurs to one of the cells during the four-cell stage, the resulting individual is 25 percent male and 75 percent female. The later the accident occurs, the less obvious are the male characters. Butterflies in which the accident occurs at the eight-cell stage or subsequently, may show a splattered, or "mosaic," effect in the wing pattern. The specimens illustrated here show the effect of that accident occurring at various stages in the early development of the embryo.

In some insects the fertilized egg may sometimes be *binucleate* (i.e., with two nuclei instead of the normal complement of one). If one of these two nuclei is female (XX), while the other is male (XY), the resulting individual will be gynandromorphic. This phenomenon has been observed particularly in adults of the commercial silkworm (*Bombyx mori*). The production of a greater number of gynandromorphs in certain wasp species has been artificially induced by subjecting the female insect to a temperature of 37°C.

The specimens shown here are from the Herman F. Strecker collection, acquired by Field Museum in 1908. Though not on public exhibit, the Strecker specimens have been much studied and photographed by geneticists and insect physiologists. □

Strecker's Look-alike

To the Editor:

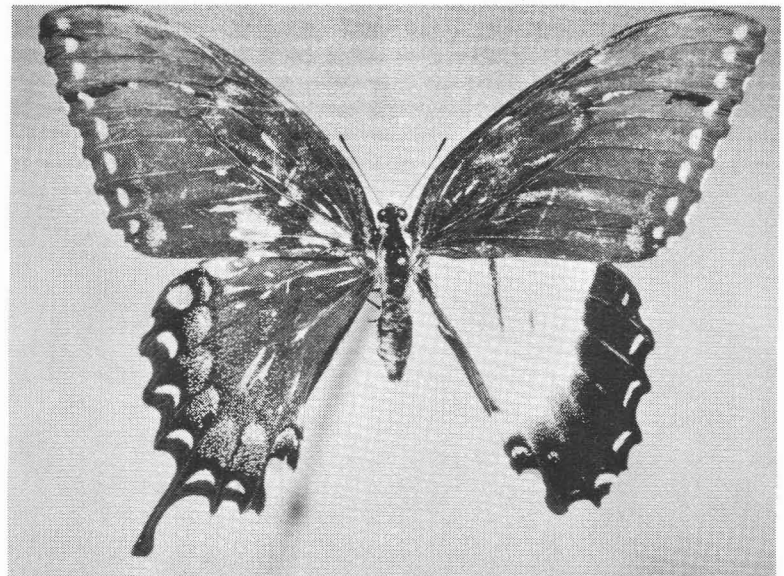
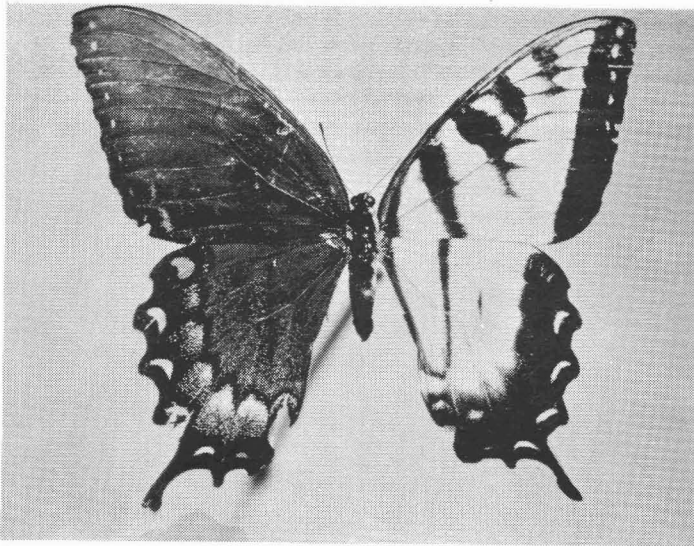
June 15 1977

As a fledging member of the Lep Soc I was pleased to receive my 1st copy of the NEWS yesterday and took special interest in your piece on melanics, particularly since the *P. glaucus* shown is nearly the spittin' image of one shown in my article on gynandromorphs in the Field Museum BULLETIN (May 1977). The group in the Strecker collection had been generally described as gynanders, and I more or less bodily picked them up and showed all of the more striking ones without questioning that label. But later it became apparent that some of those shown were examples of something else, notably that which could almost be the recto of your verso view. (see above). Two others look as if they may truly be "semi-melanic gynandromorphs" - "the world's rarest butterfly".

I'm a little dismayed that no Lep specialist called my error. Its always nice to get a little flak... means that folks are at least reading!

David M. Walsten, ed. BULLETIN
Field Museum of Natural History,
Roosevelt Road, Chicago IL 60605

(Reprinted from the Field Museum BULLETIN, May 1977)



The World's Rarest Butterflies?

more ripples

July 13 1977

Dear Ms Brewer,

I enjoyed your article on melanism in the recent edition of the Lepidopterists' Society NEWS. On June 9, 1968 I collected a specimen identical with your *Euphydryas phaeton* (Drury), ♂, in Central Valley, Orange, NY. I thought you might be interested in this.

Sincerely,

John J. Bowe M.D., P.A. Van Nest Medical Arts Center, 127 Union St, Ridgewood, NJ 07460.

July 14 1977

Dear M. Brewer,

I was interested to receive NEWS of the Lepidopterists' Society no.2 Mar/Apr 1977 and particularly to see on the front page "Nonconformist butterfly of the year. A semi-melanic *Papilio glaucus*" and the inside story on page 17. In the Lepidopterists' JOURNAL of 1962 vol.16 no.2, p.98 there was a report of a similar mosaic, and reference to earlier captures of the same type of insect. There was also a report of a striking melanic ♂ in the JOURNAL of the Lepidopterists' Society 1960 vol.14 no.2 ps.157-8. Furthermore, when I was in Chicago I saw several in the museum there. What interests me was the fact that in the butterfly reported in your Mar/Apr issue, it is said to be a ♀ but I wonder if this is true as I fancy that all of the other insects have been ♂♂. I think it is an unusual mutant, but which has certainly been reported previously. You will see that the photographs in the 1962 paper of the JOURNAL strikingly resemble those in your article. Perhaps you would pass this information on to Richard H. Smith Jr. of Reston, as I do not know his address.

Yours Sincerely,

Sir Cyril A. Clarke, High Close, Thorsway, Caldy, Wirrel, Merseyside L48 2JJ ENGLAND.

(Editor's note: As nearly as we can tell by looking at the pictures only, the Strecker series of aberrant *P. glaucus* contains 8♀♀, 3♂♂ (one of which appears at the top of the previous page), and 2 possible gynandromorphs. One of these seems to be a perfect bi-lateral (the LWs being those of a melanic ♀). The other is possibly "a semi-melanic gynandromorph - the world's rarest butterfly". It is our guess that Smith's specimen (NEWS no.2 '77) may be a gynandromorph. Dr. Rosier's candidate seems to be a melanic ♂ (NEWS no.4 '77.) Chief criteria in making these judgments were shape of abdomens & amount of iridescence on HWS.)

July 18 1977

Dear Editor,

I have captured an unusual butterfly for Michigan! On July 7 I caught a *Eurem mexicana* ♂ in Livingston Co, 5 m. south of Hartland MI. I also caught a semi-melanic *P. glaucus* this May in Brighton, MI, which is somewhat different from the others pictured in the NEWS. I have pictures of both species if you want to use them.

Yours truly,

Marc W. Grocoff, 1950 Cottrill Lane, Westland, MI 48185.

July 16 1977

Dear Jo Brewer,

In reference to the NEWS. I think you are doing a great job. After seeing Richard Smith's *glaucus* in NEWS #2 and Dr. Rosier's in News #4, I decided that I might as

well put in my two bits worth. Enclosed you will find a slide of one I caught in Salem VA in August 1975. I hope it may be of use to you.

Sincerely,

Fred Eichleman II 545 Howard Dr.Salem VA 24153

(Editor's note to all members of the Melanic Butterfly Cult: We will welcome any further input regarding melanic butterflies (data, info or pictures) with the expectation of an article thereon early next year.)

♀ ♂ ♀ ♂ ♀ ♂ ♀ ♂ ♀ ♂

July 6 1977

Dear Jo,

... I thought you might be interested in the stamp on this envelope. I went all out and bought 12 sheets (600 stamps) so that I would have a supply for the future.

Sincerely,

Ray Bracher.

July 2 1977

Dear Jo,

...After moving to Seattle where the collecting is very poor, I gave up collecting and presented part of my collection to the National Museum... Since I am also a philatelist I have plenty to do. I was much pleased to see that you had publicized the butterfly stamps in the last issue of the NEWS. I think the choice of *Papilio oregonius* to represent the Northwest was particularly good, as it ranges all up and down the Columbia River and some of its tributaries wherever the larval food plant, tarragon (*Artemisia dracunculoides*) grows.

As you undoubtedly know, I published a paper on the life history of *oregonius*, along with *indra* some years ago. (Journal of Research on the Lepidoptera 3-1: 49-54, 1964.) Others will have to judge whether the choices for the rest of the country were appropriate.

Very truly yours,

E. J. Newcomer, 1738 Naomi Pl. Seattle, WA 98115.

July 6 1977

Dear Jo:

... Note the stamp on this envelope. I went all out and bought 12 sheets (600 stamps) so that I would have a supply for the future. Other countries have issued many beautiful butterfly stamps. Finally the USA did something about it.

Sincerely

Ray W. Bracher, 17145 Cherokee Dr, South Bend, IN 46635.

1977 SEASON FIELD SUMMARY Preliminary Notice

Your Editor plans to continue on a strict schedule, and will publish the 1977 Field Summary in the 1978 Mar/Apr issue of the NEWS, in advance of most collecting seasons. PLEASE COOPERATE.

Deadline for Contributors' reports to Coordinators:

31 JANUARY (received)

Deadline for Coordinators report to Editor:

1 MARCH (received)

PLAN AHEAD !!! Details for revised & improved reporting procedures to simplify both your report and the work of the Coordinators will be published in the next issue of the NEWS.

Jo Brewer, Ed.

NOTICES

RESEARCH REQUESTS

SPECIMENS OF EGG PARASITES of the genus Telenomus (Hym., Scelionidae) which attack many species of Lepidoptera, Hemiptera, tabinids and chrysopids; also any information concerning hosts and distribution of these parasites. Norman Johnson, Comstock Hall, Cornell University, Ithaca, N.Y. 14853

EGGS OF PHOEBIS SENNAE EUBULE for rearing experiments. Also specimens or capture records from Cal., Arizona & New Mexico. John Brown, Entomology Dept., San Diego Museum of Natural History, P.O.Box 1390, San Diego, CA. 92112.

LOUISIANA LEPIDOPTERA. Substantial information needed of species records, adult flight data, localities, food plant records and actual specimens. Wanted for future publication. All contributors will be acknowledged. Vernon Brill, Rt. 1, Box 74, Edgard, LA 70049.

INFORMATION RELATING TO TRITANASSA TEXANA TEXANA and its southern subspecies T. t. seminole, for research to determine approximate distribution of T. t. seminole. Dates of capture, locality descriptions, flowers visited, numbers taken and any other pertinent information, including records from Louisiana, Alabama and South Carolina, and especially Georgia and Florida would be useful. Dave Baggett, 1146 Holmesdale Rd, Jacksonville, FL 32207.

INFORMATION ON A NUMBER OF EXOTIC BUTTERFLIES which have apparently established themselves in the southern part of Florida during the past ten years. (e.g. U. dorantes). We are fortunate that numerous records of these have been made which have either been published or at least are on file. As a result, there is an unparalleled opportunity to see what effect the severe cold of last winter may have had on these recent arrivals. It is to be hoped that all collectors resident or visiting will make every effort to make very complete records of all the johnny-come-latelies and also of the rarer butterflies this year in Florida. Complete data may be sent to me. It can then be more thoroughly digested. Any warrantable conclusions can then be drawn and a paper perhaps prepared for publication. I am asking this because I have a continuing file of all Florida records of any importance. Charles P. Kimball, West Barnstable, MA 02668.

PUBLICATION

Robert Dirig: LABELLING AND STORING AN INSECT COLLECTION, published by New York State College of Agriculture and Life Sciences. 4H Members' Guide M-6-7. \$1.25. 21 pages. Numerous photographs by Howard H. Lyon illustrating maps, pinning techniques, equipment as well as mounted specimens. Cover illustration in color (photo by Bill Mesner.) This is a thorough, lucid essay, covering all aspects of properly assembling, labelling and maintaining a collection of value to researchers. All but the hard core professionals should find this publication of great help. The last two pages are devoted to a picture essay of Lycaeides melissa samuelis Nabakov (the Karner Blue).

FOODPLANT IDENTIFICATION SERVICE

I will endeavour to name any adequately picked, pressed, and packeted dried plant specimens posted to me from anywhere in the world for the guidance of lepidoptera breeders. Adequate, well-presented flower and fruit material is essential with the leaves, with note of their original colours (if these changed in the drying process), plus collecting data, comprising date, place and habitat. Specimens of leaves only may not enable me to get further than the correct genus (fair enough, if that is O.K. for your purposes). I will not return the specimens, themselves, so please keep numbered duplicates for your own reference. Please enclose full return postage (ordinary air-mail letter rate from outside Europe). The conventional and acceptable Customs Declaration for such packages is "Dried Botanical Specimens for Study. No Commercial Value." Mark as "Gift".

Also, I will sell or exchange dried common N. W. European insects in quantity, or herbarium specimens for botanical study. Brian Wurzell, 47 Rostrevor Ave., Tottenham, London N. 15 6 LA.

NOTICE OF PRICE CHANGE

The Lyman Entomological Museum and Research Laboratory, Macdonald College, McGill University, Ste. Anne de Bellevue, P.Q CANADA HOA 1C0, announces that due to increased costs, it is necessary to increase the prices for Memoirs as follows:

THE ORTHOPTEROID INSECTS OF QUEBEC AND THE ATLANTIC PROVINCES OF CANADA by V. R. Vickery, D.E. Johnstone and D.K. McE. Kevan, i + 207 ps. \$5.00 per copy, includes handling and mailing. Published October 23, 1974.

LAND OF THE GRASSHOPPERS by D.K. McE. Kevan. (Verses & poems, ancient & modern on orthopteroid insects), 1x + 326 ps. No charge for memoir, \$1.50 for handling & mailing. Published Dec 31, 1974.

CHECKLIST OF BUTTERFLIES AND SKIPPERS OF CANADA by W.W. Gregory, i + 44 ps. \$4.00 per copy, includes handling and mailing. Published April 30, 1975.

\$¢\$¢*\$¢*\$¢*\$¢*\$¢*\$¢*\$¢*\$¢*\$¢



More about the Annual Meeting
in our next issue

NOTICES - Buy, Sell, Exchange

Members of the Lepidopterists' Society are invited to use this section free of charge to advertise their offerings in Lepidoptera. We cannot guarantee any notices, but all are expected to be made in good faith. By decision of the Board, prices of specimens offered for sale will not be published henceforth. Please be brief, clear, and check spelling. Notices will be limited to two appearances. The Editor reserves the right to alter or reject unsuitable copy.

- FOR SALE: Cocoons and papered specimens of several Saturniidae species including A. polyphemus, A. harti, R. forbesi, A. Sinensis, A. luna, S. pavonia, S. cynthia, C. promethea and others. Write for complete list and details. Will EXCHANGE for certain Saturniidae and Ceratocampidae. Glenn S. Morrell, 88 Brookside Dr., West Hartford, CT 06107 USA.
- FOR SALE or EXCHANGE: Rare Agrias: narcissus, amydon, amydon zenodorus, pericles steinbachi, pericles trajanus, phalcidon, paulus, stuarti, narcissus tapajonus, narcissus stoffeli, claudia varieties, sardanapalus and others. Free list with self-addressed stamped envelope. All correspondence answered. Robert E. Aronheim, P.O. Box 239, Middlebury CT 06762.
- FOR SALE: SEITZ MACROLEPIDOPTERA OF THE WORLD. French edition. Complete. 16 vol & 4 supplementary vol. about Fauna Palaearctica. Unbound. In very good condition. Uncut folios. Will be sold to the highest offer. Payment in advance requested. Postage and insurance not included. Write: Coffin Jacques, le Colombier no 3 30130 Pont St-Esprit (France)
- FOR SALE: Cocoons of Attacus caesar, Attacus crameri. European pupae. Write to: Andreas Gahr, Hagenschestr.61 4937 Lage-Lippe, West Germany.
- WANTED: Wall covering of vinyl (preferably) or wallpaper for a small wall area in my office, in a print showing beautiful butterflies. Surely butterfly wall covering is manufactured somewhere in the world, and I would be willing to order it from any source. Rows of butterflies preferred. Please send sample if possible. Paul P. Pfenninger, 1222 Broad St, Box 506, New Castle, IN 47326.
- WANTED: Edwards, BUTTERFLIES OF N. AMERICA: Scudder, BUTTERFLIES OF THE EASTERN U.S. & CANADA WITH SPECIAL REFERENCE TO NEW ENGLAND, 1889: Holland THE BUTTERFLY BOOK, 1931. Write to: Ann Dare, 13 Ritter Dr., Wappingers Falls, N.Y. 12590.
- WANTED: Out of print moth or butterfly books relating to North American Lepidoptera. John G. Manesis, M.D., Fargo Clinic, 737 Broadway, Fargo, ND 58102.
- WANTED TO BUY: Ornithoptera C. croesus ♂ & ♀ or good ♂. Please state condition, price. I am also interested in other Ornithoptera & papilios. Dr. George Barnett, 4950 Chicago Beach Dr., Chicago IL 60615.
- WANTED: Correspondence with members who would be interested in exchanging North American Lepidoptera. Send all offers to: Marc W. Grocoff, 1950 Cottrill Lane, Westland, MI 48185 USA.
- BUY/EXCHANGE: Ova, larvae or pupae/cocoons of the following species in season: American Sphingids, Saturniidae, especially R. jorulla, L. newara, B. wallici, R. fugax, S. atlantica, A. artemis, A. Leucane, C. sepulchralis, S. bicolor, R. forbesi, E. imperialis, E. calleta, D. japonica, C. angulifera, A. assamensis, R. aurota, R. orizaba, P. eglanderina. Rhopalocera: Exotic papilios, especially P. polytes, P. bianor, D. chrysippus, P. demoleus, P. alcinous, P. asterias, P. lowi. If you have any surplus Lepidoptera please write to: Ray Adams Carretera Principal 139, TAMARACEITE Las Palmas de Gran Canaria.
- EXCHANGE: French butterflies for Nearctic Papilionidae and Charaxinae of the world. Would also like to find correspondants in the U.S. Jean Hanus, Le Devenson, Allee des Pins, 13009 Marseille, France.
- EXCHANGE: I have single specimens of Proserpinus guarae, Perigonia, Phryxus caicus, Sphinx franckii, and S. luscitiosa (Sphingidae), and most North American Saturniidae to offer in exchange for Sphingidae and Saturniidae lacking or poorly represented in my collection. All inquiries will be answered; please include list of species of interest to you. Jim Tuttle 2691 W Temperance Rd Temperance MI 48182.
- EXCHANGE: Will trade butterflies with anyone anywhere in the U.S.A. Pat Purdy, 2825 Sand Rd N.E. Roanoke, VA 24012.
- EXCHANGE: Pair of Speyeria coerulescens ex pupa for equally desirable such as P.i. kaibabensis, etc. John M. Snider, 3520 Mulldae Ave, San Pedro, CA 90732.
- WANTED: Largest Praying Mantis or Mantises and Tarantulas in the world. Also wish to exchange moths and butterflies. Will send pre-mounted. A-1. J.M. Maverick, 98 Iowa St, Apt -D, Wheeling, WV 26003. U.S.A.
- EXCHANGE: Speyeria idalia from Missouri for Speyeria diana. Thomas J. Riley Dept of Entomology 1-87 Agriculture Bldg. Univ. of Missouri Columbia MO 65201.
- FOR SALE: Viable cocoons of Cecropia, Polyphemus and Luna. Prices on request. All correspondence answered. Bonnie Ravy, 1013 N. Lark, Oshkosh, WI 54901.
- FOR SALE: Many well preserved Coleoptera and butterflies from Celebes, Papua & New Guinea, Borneo, Burma and India. Also living rhinoceros beetles, Cerambycidae, Scarambycidae etc. where not contraband. Please write to: The Global Colosseum, Tanjong Pagar P.O. Box 11, Tanjong Pagar - Spore 2 SINGAPORE.
- WANTED: World-wide Parnassiinae and other arctic and alpine species. Will buy or exchange Colorado species. Joseph I. Minow, 1642 South Valentine Court, Lakewood, CO 80228 USA
- WANTED: Proceedings of the Boston Society of Natural History - Vol.34 no. 13, Vol.36 nos. 1, 2, title page & index, Vol.39 title page & index; Proceedings of the New England Zoological Society, Vols.2 & 4. Cyril F. dos Passos, Washington Corners, Mendham, NJ 07945.

CHANGES OF ADDRESS

Peter Anderson, The Global Colosseum, Tanjong Pagar P.O.Box 11, Tanjong Pagar - Spore 2, SINGAPORE
Joseph Belicek, Environmental Research & Engineering Ltd., 9345-98A St., Edmonton, Alberta, CANADA
T6E 3N2

Dr. James F. Burris, 4030 Calvert St. NW, Apt. 4, Washington DC 20007
Christopher C. Curtis, 14 Concord Ave. #824, Cambridge, MA 02138
Rev. Robert C. Eisele, Casilla Correo 38, 4500 San Pedro, Pcia. de Jujuy, ARGENTINA
Thomas B. Hanley, Apt 11228, Lima, PERU
Kenneth C. Hansen, 1030 Court St., #9, Redding, CA 96001
Jack L. Harry, P.O.Box 25752, Salt Lake City, UT 84125
Edward Jennejohn, 111 Lyford Lane, Minoa, NY 13116
Dr. Edward C. Knudson, 3333 Cummins St. Apt. 67, Houston, TX 77027
Roger M. Kuehn, 546 Jordan Circle, Colgate, WI 53017
Terence McKenna, 12400 Jonive Rd, Sebastopol, CA 95472
Gerald M. McWilliams, 1 Odell St., Union City, PA 16438
Dr. Bruce A. O'Hara, 28045 Robin Ave., Saugus, CA 91350
Arthur Joe Patterson, 282 Southerland Terrace NE, Atlanta, GA 30307
Jeffrey B. Robb, 2307 16th B, Lubbock, TX 79401
Dr. Jean Saric, 141 rue du Palais-Gallien, Bordeaux, FRANCE 33000
Dr. J. Mark Scriber, Dept. of Entomology, University of Wisconsin, Madison, WI 53706
Serials Librarian, Montana State Univ. Library, Bozeman, MT 59717
James Lee Smith, 127 Sleepy Hollow Drive, Lake Jackson, TX 77566
W. P. Sochor, 10299 Slater Ave., Apt. 202, Fountain Valley, CA 92708
Morris Spelman, 6505 Winfield Blvd., Apt. B-15, Margate, FL 33063
A. Thomas Vawter, c/o Dr. George Gorman, Dept. of Biology, University of California, Los Angeles,
CA 90024

* + * + * + * + * + * + * + * + * + * + * + * + * + * + * + * + * + * + *

NEW MEMBERS

Dr. Norman R. Campbell, 5901 Langport Circle, Huntington Beach, CA 92649
Eva Nydia Davila, Biology Dept. UPR-CAAM, Mayaguez, PUERTO RICO 00708
Carl Decker, 3261 Racoon Rd., Rt. 1, Box 285, Franktown, CO 80116
Wayne Duesterbeck, 2015 Second St., Eau Claire, WI 54701
Gerald L. Farmer, 151 35th Court, Apt. 2, Griffith, IN 46319
Mrs. Debra Green, Box 160, Rt. 15, Jericho, VT 05465
Yin-Rei Djuh Hicks, Route 1, Henryville, IN 47126
Dr. Janet G. Hickman, 1829 Front St., Apt. F-10, Durham, NC 27705
Mrs. Mary Ann Johnson, 304 Howard Ave., Apt. 3, Rockville, IN 47872
Dr. M. Ross Lein, Dept. of Biology, The University of Calgary, Calgary, Alberta, CANADA T2N 1N4
J. M. Maverick, 98 Iowa St., Apt. D, Wheeling, WV 26003
Gerald H. McCarren, 24 Wells Lane, Short Hills, NJ 07078
Mati Metsaviir, Inst. of Zoology and Botany, Vanemuise Str. 21, Tartu, ESTONIA 202400, USSR
Gunther Oswald, Dipl. Ing., Keferloherstr. 136, Munich, GERMANY
Jodie L. Paterson, 1810 East Colorado, #616, Victoria, TX 77901
Stephen C. Pickett, 202 Chelsea, Dumas, TX 79029
John M. Prescott, 369 East Gore Rd., Erie, PA 16509 (reinstated)
Jose E. Salinas, 3135 Roosevelt Ave., #4, San Antonio, TX 78214
Mrs. Samuel R. Sarinelli, 78 Sun Valley Way, Morris Plains, NJ 07950
Greg Schmitt, Box 224, Kirtland, NM 87417
Charles K. Swank, 500 N. 12th St., Mattoon, IL 61938
Anthony R. Spokas, 225 White Horse Pike, Atco, NJ 08004
Theodore N. Taft, 223 Seymour St., Fredonia, NY 14063
Allen Tom, 4115 Mackay Drive, Palo Alto, CA 94306
Mrs. Dian Visintini, P. O. Box 121, Roosevelt, NJ 08555
John B. Walty, 227 Wilfred Ave., Willowdale, Ontario, CANADA M2N 5E2

#####



from: The Lepidopterists' Society
Department of Biology
University of Louisville
Louisville, Kentucky 40208 U.S.A.

Forwarding and Return Postage Guaranteed

Non-profit Org.
BULK RATE
U.S. POSTAGE
P A I D
PERMIT # 19349
Auburndale, Ma.
02166

J. Donald Eff
445 Theresa Dr.
Boulder, CO 80303

AVAILABLE PUBLICATIONS OF THE SOCIETY

- MEMOIRS of the Lepidopterists' Society, No.1, 1964: A Synonymic List of the Nearctic Rhopalocera. C.F. dos Passos (with 3 supplementary articles). Unbound copies ONLY. \$5 (member); \$7.50 (non-members), sent postpaid.
- JOURNAL of the Lepidopterists' Society (and its forerunner, LEPIDOPTERISTS' NEWS), from Vol. 1 (1947) to date, \$13 per volume, postpaid. Individual numbers available at prices depending on how many were published in each volume (varies from 4-8). NOT available are: Vol.7, no.3/4 (combined in one issue), Vol.9, no.3/4, Vol.12, no.1/2, and Vol.21, no.1.
- NEWS of the Lepidopterists' Society. Some recent issues are still available at \$.25 per copy, postpaid. Inquire as to availability before sending money.

ORDER FROM: Dr. Charles V. Covell Jr., Memoirs Editor, Dept. of Biology, University 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. Change of address must be sent to him alone, and only when changes are permanent or very long terms.

Other information about the Society may be obtained from the SECRETARY, Julian P. Donahue, Dept. of Entomology, Los Angeles Co. Mus. of Nat. Hist., 900 Exposition Blvd., Los Angeles, CA 90007. 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, IL 61801, U.S.A. See inside back cover of a copy of the JOURNAL for editorial policies.