The Lepidopterists' News

THE MONTHLY NEWSLETTER OF THE LEPIDOPTERISTS' SOCIETY
P. O. Box 104, Cambridge 38, Massachusetts, U. S. A.
Editor - C. L. REMINGTON • *Assoc. Editor* - J. E. REMINGTON
Volume II May 1948 Number 5

A REPORT ON THE WAR DAMAGE TO LEPIDOPTEROLOGY IN EUROPE

by Sergius G. Kiriakoff
Zoological Laboratories
University of Ghent, Belgium

The editor of the NEWS has asked me to give a short account of war losses in Europe with reference to lepidopterists killed or deceased during the hostilities, damage to or loss of public or private collections, etc. As everyone knows, present conditions in Europe are by no means normal. The whole eastern portion of the Continent is cut off from the rest of the world by the Iron Curtain, and even in the remaining parts of Europe communications are not always easy and it is difficult to get sufficient data.

The study of the Lepidoptera has always been particularly well-developed in Germany, and German lepidopterists, professional as well as amateur, have, even in the last pre-war years, outnumbered those of the other European countries, with the possible exception of the British Isles. As Germany has suffered very heavily during the war, it is of particular importance to know the extent of her losses with regard to Lepidopterology. I have asked Dr.W. Forster, of the Bavarian State Zoological Collections, Munich, to give such information as he could gather. This first part of my report comprises the information Dr. Forster has kindly sent me. I thank him very much indeed and I know that the readers of the NEWS will feel grateful to him for this information, the first of its kind, as far as I am aware, since the end of the war. A report of war losses to science in Germany has appeared in NATURE for 1946, but without special reference to Lepidoptera.

1.- LEPIDOPTERISTS KILLED OR DECEASED.- Killed in action: Wilhelm Koehler, Munich. Deceased (no further details are given; some may have been killed in air raids): Dr. h.c. Fr. Phillipps, Cologne; Dr. Schawerda, Vienna; Dr. Kurt von Rosen, Munich; J. Röber, Dresden; Dr. H. Zerny, Vienna; Dr. Przegendza, Nürenberg; Dr. H. Duerck, Munich; Prof. Dr. von Stubenrauch, Munich; H. Freiherr von der Goltz, Coblenz; Colonel von Bartha, Budapest, Hungary; Willy Schultze, Toelz (formerly of Manila, Philippine Is.); Dr. C. Bosch, Heidelberg; Dr. von Sterneck, Carlsbad; Dr. Kremky, Warsaw, Poland. This list includes such authorities as Röber, Zerny, and Von der Goltz.

2.- COLLECTIONS DAMAGED OR DESTROYED.- Completely lost: Those in the Museums of Hamburg, of Stettin and of Augsburg. Partially lost: That of Dresden Museum. The following very important collections have been preserved from destruction, entirely or for the greater part: Koenig Museum, Bonn; Senckenberg Museum, Frankfurt; Vienna Museum and Linz Museum, Austria; the Deutsches Entomologisches Institut, Berlin-Dalhem; Museums of Munich, Stuttgart and Berlin. The premises of the last four institutions have been wholly or partially destroyed. Fortunately, the collections were carried to safety in time to escape destruction.

Among the private collections, most have not suffered any damage owing to the measures of precaution which have been taken by the owners. Dr. Forster tells me that he knows of two of the larger private collections that have been completely lost: viz. those of Phillipps, Cologne, and of Draudt, Darmstadt; in addition, the Prack collection, Frankfurt, has been very badly damaged.

I am writing to another German lepidopterist whose address has been kindly supplied by Dr. Forster, and hope to be able to report later on some further data, especially on what regards the Russian zone. The report on losses suffered by the West European countries will be sent in later.

Dr. Forster writes me that although a very important and valuable portion of the German collections has been saved, there still is great danger threatening further damage or even destruction: there is no equipment such as boxes and cabinets, no preserving means; and as a result of the urgent economy measures there are mostly only skeleton staffs present. Besides, many of the premises are heavily damaged without means of repair. As an example, the Bavarian State Museum, Munich, needs at least 10,000 insect boxes along with the corresponding cabinets and there is no hope whatever for a solution, as financial possibilities are nil. Most of the cabinets, says Dr. Forster, have been destroyed by fire, as is the case with many other museums. The only hope of the German lepidopterists rests with foreign aid. If I may make a plea, I think, that for science's sake, a campaign should be launched among the American universities, to try to save what can be saved. It is my earnest hope that this appeal shall not remain unanswered.

PRINCIPLES OF TAXONOMY - III.

After the new impetus to taxonomic biology resulting from Darwin's explanation of evolution in the 1850's there remained a need for an understanding of the mechanism of the inheritance of physical characters, before the full explanation of the evolutionary process was possible. Early workers wrote that the germ plasm of the individual was modified by the environment and that this modification was fixed and was passed on to the offspring. For example, a dark Catocala living in white birch surroundings would become slightly lighter and transfer the paleness to its offspring, which would, in turn, become slightly paler, and so on until a white species would result after numerous generations.

Gregor Mendel, a monk, was probably the first to discover some of the basic principles of heredity now known as the science of GENETICS. However, Mendel's work is only of historical interest, since he published his results in such an obscure way that the discoveries were made independently and almost simultaneously by three outstanding biologists who immediately placed their work before the field, some time before Mendel's unknown papers were found. These real fathers of genetics were De Vries, Correns, and von Tschermak. Even these men did not reveal the physical site of hereditary events. It was T.H. Morgan and his students who showed that the hereditary units ("genes") are located in structures known as chromosomes occurring in the nucleus of all the living cells of the body and that slight changes ("mutations") in one of these genes will change the physical character controlled by that gene. For example, one gene controls the presence of the white ground-color so common in females of the genus Colias. If a stray X-ray strikes the gene in a dividing sex cell of an adult yellow ♀ Colias, it may modify that gene so that some or all of the ♀ offspring of the X-rayed ♀ will be white females.

However, most of these gene mutations are not so radical. Instead, with the dark Catocala moving to a birch region, a mutation will appear giving a few more white scales on the wings. Even a slight paleness will give some protection from enemies, so that the paler individuals survive and have offspring more often than the darker moths. This process continuing for very many generations eventually produces whiteness in the species. It is generally accepted among biologists that the mutation for paleness is merely a random accident and that others for redness, blackness, etc. occur just as often but are discriminated against by "Natural Selection", since these do not contribute to a better chance for survival. Modern geneticists believe that evolution is the result of an accumulation of these beneficial "micromutations" and that a species divides when different populations become separated by barriers so that interbreeding ceases and then each population goes its own diverging, random way in changing according to its environment.

C.L.R.

DEFINITIONS OF COMMON LATIN TERMS

Lepidopterists who use taxonomic literature regularly encounter many latin expressions which have become the specific shorthand for certain meanings in papers in all languages. In continuation of our series of brief aids to the untrained worker, we present here, with definitions, some common terms.

1. species nova (sing.) The designation to be placed immediately after the name given in the original paper for a previously undescribed(unnamed) species. Correctly abbreviated sp.nov. or sp.n. (not n.sp.)
2. genus novum (sing.). The designation for a new genus, abbreviated gen.nov.
3. nomen novum. The designation for a new name for a previously described (named) species, genus, etc., usually used when the former name is found to be a homonym; often abbreviated nom.nov. or n.n.
4. nomen nudum. A specific name without a recognizable original description or a generic name without an included species which can be type. (nom.nud.)
5. nomen conservandum. A name, which would fall into synonymy according to the Law of Priority, but which has become universally used and whose abandonment would cause too great confusion, may be preserved by a ruling of the International Commission on Zoological Nomenclature and receives this designation. (plural - nomina conservanda)
6. nomen inquirendum. "Questionable name"; a name whose status is uncertain.
7. auctorum. Literally, "of authors"; a term used following a specific or generic name to designate previous usage (not believed correct) of that name. (Nearly always written auct.)
8. lapsus calami. Literally, a "slip of the pen"; refers to an accidental misspelling, especially of a scientific name. It has been claimed that modern usage should be "lapsus digiti"("slip of the finger"),since modern manuscripts are typed, but this view does unnecessary violence to a firmly established, universally understood term.
9. in statu nascendi. "In the state of being born"; referred to a species which is so close to its fellow species as to be considered either a race or a distinct species, the decision being arbitrary; the assumption is that it is becoming distinct.
10. emendatus. "Amended"; placed after a name when the original spelling has been corrected. (emend.)
11. sensu lato. "In the broad sense"; example- Papilio sens.lat. would mean the broadest current interpretation of the genus (see below). (s.lat., s.l.)
12. sensu stricto. "In the narrow sense"; example- Papilio sens.strict. (or s.strict., s.s.) would mean the restricted group of species of the genus, not Battus, Iphiclides, or other genera separated by "splitting" authors.
13. ex-ovo. "From egg"; reared from the egg.
14. ex-larva. "From larva"; reared from a larva.
15. ex-pupa. "From pupa"; reared from the pupa. These three expressions should be used on the labels of reared specimens.

C.L.R.

NOTES ON THE GENUS EUREMA (PIERIDAE) IN THE UNITED STATES

by Alexander B. Klots
College of the City of New York

Eurema is one of the more imperfectly known of our butterfly genera, as a result of which misidentifications and misapprehensions are particularly rife concerning many of the species. In part this stems from several errors made by Holland in the Butterfly Book; some arises from the as yet little understood relationships of the forms in the jucunda - daira complex; and one widely followed error in the nomenclature must be attributed to the present writer.

The purpose of this short paper is twofold. First, it may help to clarify some of the puzzling points; and second it may, by pointing out some of the major gaps in our knowledge, stimulate work to fill those gaps. In this respect the writer would like to enter a plea for the loan of study material and for information. Ever since his revision of the Eurema of the New World in 1929 (Entomologica Americana Vol. IX (n.ser.) pp.99-171, 4 pl.) he has maintained a particular interest in this genus. He hopes to be able some day to prepare a thoroughgoing revision of at least the North American species.

Eurema mexicana (Boisduval) presents no major problems. We need more data about the northern and western limits of its range. I have taken it in southern Wyoming, and in central Colorado at 10,000 ft. breeding and well established in the Canadian Zone. There is some ground for suspicion that the North American population constitutes a valid, though not very distinct race. Life history work is needed.

Eurema proterpia (Fabricius) occurs widely in southern Arizona. I have a few Texas records, but none from New Mexico. It is well known from Cuba and Mexico, so that it may well occur along the Texas gulf coast and in Florida. There is a suspicion that proterpia and the next species, gundlachia, may really be conspecific. Life history work is needed.

Eurema gundlachia (Poey) occurs in Arizona, as well as in Mexico and Cuba. Perhaps it will be found in New Mexico, Texas and the Southeast. Holland (Butterfly Book) figured a ♂ gundlachia (Pl. LXXIII, fig.25) and a ♀ as longicauda Bates (Pl. XXXVII, fig.25), a synonymous name. Life history work needed.

Eurema salome limoneus (Felder) figured by Holland (Pl.XXXVII, fig.9-10) as E. damaris (Felder) is the Mexican race of a widespread and common tropical species. I have seen specimens labelled "Texas" but none with trustworthy data. There is one apparently authentic record from Garces, Ariz., June. It may occur widely along our southern border. Any life history data would be extremely valuable.

Eurema boisduvaliana (Felder) figured by Klots, 1929 (loc.cit. Pl.II, fig.51-52), not uncommon in Mexico and known from Cuba, is known to occur sparingly in Florida, Texas and Arizona. The writer would like to study all available specimens. Life history data are very badly needed.

Eurema nicippe (Cramer) is a well known, widely distributed species which presents no special problems, although more detailed life history data are needed. Some noticeable aberrations are known, such as the yellow one ("flava") that has been confused with E. boisduvaliana. A fairly frequent variation has the underside of the hindwing brown to red-brown.

Eurema lisa (Boisduval & Leconte), like nicippe, presents no special problems, although much detailed work remains to be done on the life history and the number and variation of the broods in various localities.

Eurema nise nelphe (Felder) has frequently been misidentified and misnamed. It is figured as E. nise perimede Prittwitz in Klots, 1929 (Pl.IV, fig.93-94). The name perimede was there unfortunately applied to this race of nise by a misprint, so that this name, which is really based on South American specimens and is not at all applicable here, has crept into the literature. Edwards gave the name linda to specimens of this species taken in Mexico near the Arizona border. Unless the contrary can be demonstrated by good series of specimens we should use the racial name nelphe, based on Mexican specimens, for our North American nise, with linda as a synonym. This species has been frequently misidentified as lisa; and I have seen females misnamed jucunda. It is well established in southern Florida where at least three, and possibly four, broods occur annually. Life history work is badly needed. I would like the opportunity of studying all specimens.

Eurema dina westwoodi (Boisduval), figured by Holland (Pl.XXXVI, fig.11) is supposed to occur in the United States. Since it is a common species in Mexico this is not unlikely. I have not, however, seen authentic specimens. The nymotypical race, E. dina dina (Poey) is Antillean; this might occur in Florida.

Eurema messalina (Fabricius), figured in Klots, 1929 (Pl.II, fig.41-42) is a small, white species common in Cuba and the Bahamas. It has been recorded from Florida on the basis of an old record of Maynard's from Sanford, Oct. 1, 1887, and of some specimens of very dubious authenticity labelled "Chokoloskee" by a dealer. Unless some absolutely authentic North American records turn up the species should be dropped from the North American list. Blakei (Maynard) applies to a Bahaman race. Gnathene (Boisduval) and gnatheme auct. are synonyms of messalina.

Eurema daira (Godart) [delia (Cramer)] and jucunda (Boisduval & Leconte) are the chief United States members of a complex which presents an extremely puzzling situation. In-

volved are also the Antillean E. palmyra (Poey) and the Central American E. lydia(Felder) which resembled jucunda in being white or very lightly marked beneath but have the hind wings of the male and both wings of the female white above; and the Antillean E. ebriola (Poey) and the Central American E. eugenia (Wallengren) which resemble daira in being marked or tinted with brown or reddish underneath but, like palmyra and lydia, have the hind wings of the male and both wings of the female white above. In some localities(chiefly southward) one finds nearly every possible intergradation and combination of these characters in such a way as to show that there can be no definite species lines. In other localities (chiefly northward) the jucunda and daira "types" appear to keep quite consistently separate. Haskin (Ent. News, 1933, vol.44, p.121) published the results of some rearing work in Auburndale, Fla. This strongly suggests the likelihood of jucunda being a hot season form and daira a cold season form of the same species. Specimens intermediate between them in season showed a high percentage of intergrading in appearance. This idea is borne out by field observations of my own in central Florida, and by the study of large series of specimens from the United States, Cuba and Central America. However, we cannot be even reasonably sure of anything until someone, preferably in Florida, rears adequate series of these forms from known parents under natural seasonal conditions; and, if possible, carries out controlled breeding experiments. Such work will be of the greatest general biological as well as entomological value. Northern records are needed in both the Eastern coastal plain and the interior.

Eurema palmyra (Poey) [or E. lydia (Felder)], mentioned above as members of the daira - jucunda complex, occurs in a limited area in southern Florida. I have seen only a few specimens, not enough to determine the exact affinities. These forms are figured in Klots, 1929, Pl.1, fig.11-13. More material for study is badly needed; so are life history data.

Eurema elathea (Cramer) was recorded by Holland as occurring in "Florida, Mexico and the Antilles". However, the specimen figured by Holland (Butterfly Book, Pl.XXXVII, fig.12) as elathea is really E. ebriola (Poey) as the grey, not black, bar on the fore wing unmistakably shows. I have never seen an authentic North American elathea; nor have I ever seen an authentic North American specimen of either ebriola or of the closely related eugenia (Wallengren) of Central America. Apparently Holland not only had a specimen with inaccurate data but also figured it under the wrong name.

For the convenience of students a short key to the "barred" forms follows. Be it reiterated that this must be used with caution. No attempt has been made in it to evaluate the specific or subspecific status of the forms.

1. Males; usually with clear cut, dark bar along inner margin of fore wing above.....2

1. Females; usually without this bar, or with the bar diffuse.....12

2. Bar deep grey, usually wide.....3

2. Bar true black, usually narrower....elathea

3. Both fore and hind wings above yellow.....4

3. Hind wings above white.....9

4. Marginal border of hind wings above largely confined to an apical patch.....5

4. Marginal border of hind wings above extending broadly well below apical patch, sometimes solid to anal angle.....7

5. Hind wings beneath brown to brick red-brown, thoroughly dusted with fuscous scales.....daira

5. Hind wings beneath whitish, yellowish or light pinkish-brown.....6

6. Hind wings beneath whitish or yellowish-white, sometimes considerably dusted with fuscous scales....."delioides"

6. Hind wings light pinkish or brownish-tinged below; mostly in autumn broods in U.S.A.; dominant in Mexico.....cepio

7. Hind wings beneath pearly white, more or less lightly dusted with fuscous scaling..8

7. Hind wings beneath white heavily dusted with fuscous scales, or light brownish or pinkish-brown. Intermediate forms to daira; most common in spring and autumn broods in southern Florida and Mexico, rare northward.

8. Marginal borders of wings very wide; Mexico.....sidonia

8. Marginal borders of wings narrower; Mexico and southern U.S.A. .....jucunda

9. Marginal border of hind wings above largely confined to an apical patch; hind wings beneath typically brown or brownish-red.....10

9. Marginal border of hind wings above extending well beyond apical patch, sometimes solid to anal angle; hind wings beneath typically white or yellowish-white.....11

KLOTS: NOTES ON EUREMA (cont.)

10. Antillean; bar and border of fore wing and apical patch of hind wing above narrower.....ebriola

10. Mainland; bar and border of fore wing and apical patch of hind wing above wider.....eugenia

11. Antillean; bar and border of fore wing and border of hind wing above narrower.....palmyra

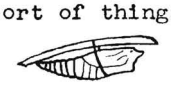
11. Mainland; bar and border of fore wing and border of hind wing above wider.....lydia

12. Females not keyed out in detail, too much information being lacking. In general, females follow the same pattern lines as the respective males. Two important exceptions are:

    a. In ebriola, eugenia, palmyra and lydia, the forms with yellow fore wings and white hind wings in the males, the females have both pairs of wings white above.

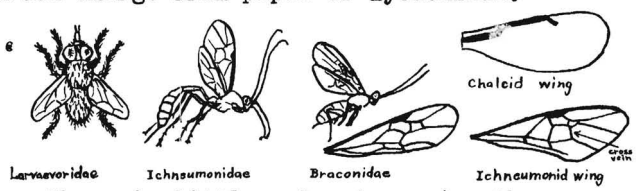
    b. In daira, jucunda, etc., the forms with both fore and hind wings yellow in the males, the females are typically similarly unicolorous. Some jucunda females, however, may have both fore and hind wings white above, or have fore wings yellow and hind wings white above, or have fore wings white and hind wings yellow above. Some daira females may have both fore and hind wings white or yellowish-white above.

In conclusion may I note that the working out of the racial affinities of many of the Eurema, and particularly of the "barred" species, is a very difficult task. At the American Museum are series of hundreds of specimens, including large numbers from many localities in the tropics; yet, even with such material available for comparison we cannot be sure of major points. It is very much to be hoped that workers will refrain from "snap judgments" based on comparatively small series of North American specimens and will, before publishing local lists or similar papers, make sure of the proper identification of their material. It is also hoped that workers will take every precaution to safeguard the accuracy of their data. Many inaccuracies have been recorded in the literature, and very many weary days have been wasted because of specimens from the Antilles, Central and South America that have been labelled "Texas", "Florida", "Chokoloskee, Fla.", etc. I have positive evidence that some of this has been caused by dealers wilfully mislabelling material so as to sell it to collectors. Let us hope that this sort of things will not recur.



DETERMINATION OF PARASITES OF LEPIDOPTERA

The exact identification of parasites is an important aspect of the biology of Lepidoptera. It seems likely that nearly all species are parasitized in some stage of their life cycle. Most insects which parasitize Lepidoptera fall into four groups. The two-winged flies (Diptera) are mostly LARVAEVORIDAE (formerly Tachinidae); the larvaevorids lay enormous numbers of tiny eggs scattered around the food-plant of the host butterfly or moth, those which are eaten with the leaves hatching and attacking the insides of the caterpillar. There are three common parasitic groups of the narrow-waisted four-winged flies (Hymenoptera). The ICHNEUMONIDAE are often very large, sometimes tiny, and have relatively numerous wing veins. The BRACONIDAE are often very small, occasionally large, and differ most obviously in lacking one cross-vein which is present in ichneumon-flies; the common swarms of tiny parasite larvae which emerge and attach white cocoons to sphinx larvae are braconids. The CHALCIDOIDEA are distinctive in being very small (some parasites of eggs are hardly visible) and in having the wing venation almost entirely absent; many chalcids are brilliant iridescent green or blue and some of the largest chalcids, distinctive for huge ("swollen") hind leg bases, often emerge from pupae of Lycaenidae.



There is little value in saving these parasites unless the species of the lepidopteran host is definitely known. If the identity of the parasitized egg, larva, or pupa is known, the parasites should be carefully preserved, with locality, emergence date, and host clearly noted on the label. Medium and large parasites may be mounted on fine insect pins. Tiny species may be kept between layers of cellucotton in pill boxes or match boxes.

At present no authority has been found to identify chalcids reared from Lepidoptera, but for North American specimens of the other groups, identifications will be provided for Lep. Soc. members as follows:

LARVAEVORIDAE.....Curtis W. Sabrosky
ICHNEUMONIDAE.....Henry K. Townes
BRACONIDAE.....C.F.W. Muesebeck

Address for each: Div. of Insect Identification, Bureau of Entomology & Plant Quarantine, c/o U.S. National Museum, Washington 25, D.C.

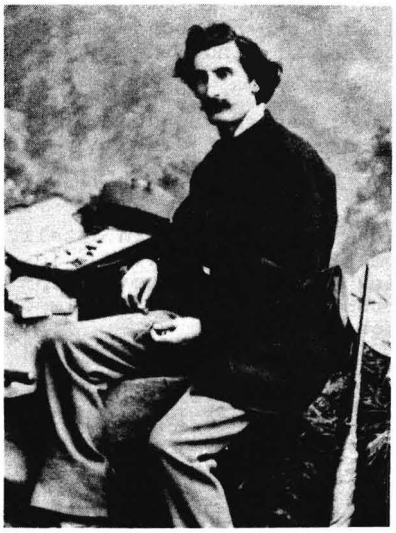
Members submitting specimens should offer to have the parasites placed in the National Museum collections. The NEWS will publish all new records of parasites reared from Lepidoptera. When extensive material has been accumulated it may be possible to publish separately a systematic list of Lepidoptera and all parasites reared from them.

C.L.R.

BRIEF BIOGRAPHIES. 13. PORTRAITS.

On this page are portraits of four of the lepidopterists of whom biographical sketches appeared in Vol. I of the NEWS. All of these photographs were previously unpublished. Those of Edwards, Packard, and Riley were kindly loaned by Dr. A.B. Klots of New York. The Scudder portrait is from the files of the Museum of Comparative Zoology in Cambridge.

William Henry Edwards (1822-1909)



Charles Valentine Riley (1843-1895)

Samuel Hubbard Scudder (1837-1911)

Alpheus Spring Packard, Jr. (1839-1905)

BOOK REVIEWS

8. The Butterflies of the Eastern United States by G. H. French*

Previous to the last decade of the nineteenth century the North American lepidopterist had few reference works with which he could identify the specimens in his collection. There were no manuals like Holland's, Comstock's and the many others which we today consider indispensable. He may have had a copy of Emmon's Insects of New York, the miserable plates of which would have helped to identify some of the commoner species. Or, he may have had Harris' Insects Injurious to Vegetation, the third edition of which contained a few illustrations of butterflies and moths.

Prof. French realized the need of a moderately priced manual for the identification of our butterflies. For a number of years he had been using analytical tables of the butterflies of Illinois which he had prepared for the use of his classes. Encouraged by the popular demand for these tables he elaborated upon them and, with additional material, issued them in book form in 1885 under the title "Butterflies of the Eastern United States". The book is a small octavo volume of 408 pages containing some 93 text figures of butterflies or their preparatory stages. The text begins with a brief account of the anatomy and metamorphosis of the butterflies. An "accentuated list of the butterflies of the Eastern United States" shows 201 species recognized as occurring within the territory covered. The "Analytical Key for the Determination of the Butterflies of the Eastern United States", which takes up about 25 pages, is followed by a brief account of the butterflies, their varieties and life histories as far as known. This occupies the balance of the book with the exception of a brief glossary.

Holland said of this book, "It is an admirable little work, with the help of which the student may learn much in relation to the subject; but it greatly lacks in illustration, without which all such publications are not attractive or thoroughly useful to the student". Colored plates, at the time of the first appearance of this book, were produced either by lithography or hand coloring, the expense of which would have detracted from the usefulness of the book at which Prof. French aimed. According to the subtitle the work was published "for the use of classes in zoology and private students". The author undoubtedly expected his students to study their specimens for descriptive characters, which would be of more value than to depend wholly upon comparative likenesses. That this work fulfilled the need of the student of the Lepidoptera for many years is evidenced by the fact that it passed through four editions. It is still worth rescuing from the shelves of the second hand book stores.

Edwin P. Meiners

*1st ed. Philadelphia, 1890; 2nd ed. 414pp. 1896; 3rd ed. 425 pp. 1900; 4th ed. 429 pp. 1914.

NOTES ON COLLECTION & LIBRARY CARE

Dr. E.P. Meiners, for decades one of the most constructive amateur entomologists in America, specializes in Lepidoptera and Coleoptera and the history of entomology. He has a very extensive library and large collection of original letters from great and lesser American entomologists. He recently sent several useful comments on material in the March NEWS, which we are quoting.--

The creosote method of fumigation "was first advocated by Dr. George Bock of St. Louis and you will find it written up in Ent. News Vol. 18, p. 443, 1907. Dr. Bock used thimbles, to which he had soldered short pins so that he could pin them in his boxes, as containers for the creosote. I saw his collection some years ago and thought it looked rather messy since, whenever the fluid spilled out it stained the lining of the trays. . . . . A few years after Bock announced his method the Kny-Scherer Co., who were then one of the foremost suppliers of entomological needs, manufactured a small, globular, glass container into which a strong pin was fused. This had some advantage over the thimbles in that the opening at the top was necessarily smaller than the body of the container and therefore, prevented spilling to some extent. . . . . I always add a little PDB in my relaxing box and am never troubled by mold, even when specimens are left for an unduly long time. Several years ago I had a correspondent who sent me specimens in tight tin containers. These specimens were usually still fresh when sent and not thoroughly dry. The first box I received I found all of the specimens had developed mold. Thereafter, at my request, my correspondent placed a little naphthalene in the box and this never again happened, although the papers were sometimes quite damp. . . . . On the other hand, PDB draws out resin from the wood of some boxes, especially when such wood as cypress is used, causing unsightly staining of the paper lining. Apparently we have not yet found an ideal preservative. . . . .

"Another comment on the preservation of books. As for protecting leather bindings- I usually treat leather bindings once a year or two with a preparation of equal parts of lanolin and neat's foot oil. This should be applied until the leather no longer soaks up the oil and then wiped dry with a clean cloth. Using this method I have brought back a fair degree of pliability to old and dry bindings if there has not been much damage to the leather.

"I like the idea of the exchange of ideas and experiences in the NEWS. The publication can become very valuable in this way. I am sure many collectors have little tricks which they would be glad to share with others. The early numbers of the Bulletin of the Brooklyn Entomological Society were full of such ideas and I think it is too bad that no future journal has followed up this plan. Nearly everyone has his own little trick in baiting, capturing, and preserving his specimens in the field. Also in relaxing, mounting, labelling, etc."

160. An Old Moth Hunter, "The Oak Prominents." Ent.Rec. & Journ. Variation, vol.60: pp.15-19. Feb. 1948. On Drymonia ruficornis.

161. Berjot, E., "Le D.D.T. dans la lutte contre les Anthrènes." (In French). Rev. franç. Lépid., vol.11: pp.62-64. Mar.1947. Mentions that naphthalene and creosote are weak fumigants for collections and paradichlorbenzene is good, but short-lived. Suggests DDT as best protection.

162. Betz, J., "Chasses aux lépidoptères en juin, en Kabylie." (In French). Rev. franç. Lépid., vol.11:pp.53-58. Mar. 1947. Field notes, mostly on butterflies, of Algeria.

163. Boursin, Ch., "La classification du Dr. C. Börner." (In French). Rev.franç.Lépid., vol.11: pp.65-78. Apr. 1947. Summarizes Börner's (1925, 1939, etc.) overall classification of Lepidoptera, with suborders MONOTRYSIA and DITRYSIA, latter with superseries HETEROCERA and RHOPALOCERA.

164. Brown, S.C.S., "Caloptilia Hübn.,a Genus of Tineina." Proc. & Trans. S. London Ent. & N.H. Soc. 1946-47: pp.157-167, 2 pls. 12 Dec.1947. Descriptions, life history notes, and key to British spp., with fine color plate of 15 of the 16 spp. Gracillaria Haw. and Gracilaria Zell. said to be synonyms of Caloptila Hübn.

165. Bull, G.A., "Notes on Collecting in Kent, 1946." Proc. & Trans. S. London Ent. & N. H. Soc. 1946-47: pp.168-169. 12 Dec. 1947.

166. Burkhardt, V.R., "Collecting in West Surrey - 1947." Ent. Rec. & Journ. Variation, vol.60: pp.20-21. Feb. 1948.

167. Carpenter, G.D.Hale, "Three Interesting Pseudacraea(Lep.,Nymphalidae)." Ent.Monthly Mag., vol.84: pp.1-2, pl.B. Jan. 1948. Color figures of P. boisduvali sayonis.,P. eurytus victoris, P. ruwen zorica, the latter a copy. Reproduces original description of sayonis. Brief discussion of the mimics and models: Pseudacraea and Acraea.

168. Cockayne, E.A., "Aberrations of British Macrolepidoptera." Ent. Rec. & Journ. Variation, vol.60: pp.9-10. Feb. 1948. 4 moth aberrations very formally named!

169. Corbet, A. Steven, "Papers on Malaysian Rhopalocera. III: The Butterflies of Singapore Island." The Entomologist,vol.81: pp. 9-14, figs.1-6. Jan. 1948. Describes as new: Pratapa deudorix ingeni(Singapore; also Penang & Sumatra). Notes on 31 spp. of butterflies,collected and reared by F.C. van Ingen while a Japanese prisoner of war. Figures ♂ and ♀ genitalia of Pratapa mantra & deudorix. Gives 2 tables of distribution.

170. Corbet, A. Steven, "Papers on Malaysian Rhopalocera: IV. A New Satyrid Butterfly from Malaya." The Entomologist, vol.81: p.37. Feb. 1948. Describes as new race hislopi (N. Kedah) of Ethope diademoides.

171. de Lesse, H., "Contribution a l'étude du genre Erebia." (In French). Rev. franç. Lépid., vol.11: pp.97-118. May 1947. Describes as new: E. epiphron mackeri "race" fauveaui (w. Pyrenees), E. epiphron pyrenaica "race" cebennica (Mt. Aigoual), E. melampus tigranes "race" lioranus (Lioran), E. gorge gorge "race" crollensis (Dent de Crolles). Gives records and notes on others. These "races" would be "microraces" in the usual sense, since a "subspecies" is either a geographical or ecological race (see Kiriakoff, Lep.News 2: 3-4, 15).

172. Esaki, Teiso, "A list of the known gynandromorphs of Japanese, Korean and Formosan butterflies (Third report)." (In Japanese). Zephyrus (Japan), vol.9: pp.231-237, pls. 18, 19. June 1947. Annotated list of 29 specimens, mostly Pieridae. No European language summary. Fine photos of specimens of Papilio bianor dehaani, Everes argiades seitzi, Erynnis montanus.

173. Fremlin, H.S., "Entomological Reminiscences." Proc. & Trans. S. London Ent. & N.H. Soc. 1946-47: pp.170-172. 12 Dec.1947.

174. Goddard, M.J., "A Mixed Pairing: Colias hyale x Colias croceus ab. pallida." The Entomologist, vol.81: pp.20-21. Jan. 1948. Hyale ♂ and croceus ♀ found copulating and others seen courting.

175. Hackray, J., "Contribution a l'étude de la faune belge." (In French). Rev. franç. Lépid., vol.11:pp.19-24. 23 June 1947. Numerous new records for Belgium, including 5 spp. of butterflies,56 moths(22 Eupithecia!).

176. Haggett, G., "Lepidoptera Taken At Arundel in 1947." The Entomologist, vol.81: pp.30-34. Feb.1948. Very detailed records.

177. Harrison, J.W. Heslop, "The Pleistocene races of certain British insects and distributional overlapping." Ent. Rec. & Journ. Variation, vol.59: pp.141-145. Dec. 1947.

178. Harrison, J.W.Heslop, "Lepidoptera in the Inner and Outer Hebrides during the Year 1947." The Entomologist, vol.81: pp.1-6. Jan. 1948. List & notes of 79 spp.(12 butterflies), representing unusual records.

179. Harrison, J.W. Heslop, "The northern distribution of Pararge aegeria L. (Lep., Satyridae)." Ent. Monthly Mag., vol.84: pp.40-41. Feb. 1948.

180. Haynes, Raymond F., "Some Notes on Observations of the Rhopalocera of Southern Italy (1944-45)." Proc. & Trans. S. London Ent. & N.H. Soc. 1946-47: pp.151-156. 12 Dec. 1947. Interesting field notes.

181. Hemmingsen, Axel M., "A chrysalis stridulating by means of instrument on inside of cocoon." Ent. Meddelelser, vol.25: pp. 165-173, 4 figs. 15 Nov. 1947. In N.China found the noctuid, Eligma narcissus Cram., making cocoons on twigs. Inside of cocoon has rasp and pupae have "scraper organ" on abdomen. This organ is rubbed on rasp when cocoon is disturbed, as by egg-laying parasite, and rhythmic, clearly audible sound results. Structures figured.

182. Herbulot, C., "Remarques à propos de l'article de Mme et le Dr Loritz intitulé: 'Notes zoogéographiques'." (In French). Rev. franç. Lépid., vol.11: pp.49-53. Mar. 1947. Refutations of Loritz paper, on Catocala fraxini and Brenthis ino.

183. Huggins, H.C., "Variation in British Insects." The Entomologist, vol.81: pp.35-36. Feb. 1948.

184. Ito, Syusiro,"Drei Ypthima-Arten von den Ryūkyū-Inseln (Lepidoptera,Satyridae)." (In Japanese). Zephyrus, vol.9:pp.272-278, pl. 23, 3 figs. June 1947. Describes as new Y. masakii. Gives notes on Y. riukiuana & Y. yayeyamana. Photos of all 3 spp. The lack of any European language description or distribution of masakii is regrettable.

185. Jolivet, Pierre, "Une méthode pratique pour la conservation des Chenilles: le montage à la gélatine." (In French). Rev. franç. Lépid., vol.11: pp.91-94. Apr. 1947. Reviews a method of preserving larvae given by Harry Andison in Canadian Entomologist.

186. King, Harold, "Sex Attractant Principles of Moths." Proc. & Trans. S. London Ent. & N.H. Soc. 1946-47: pp.106-108. 12 Dec.1947. Reports on work of Haller in U.S.A. and Butenandt in Germany which has proved that sex attractant principle is chemical substance rather than electric or sound waves, that it is one or more of the alcohols and is soluble in fat solvents. An incredibly small amount could be detected by males.

187. Legrand, H., "Une Phycide nouvelle pour la faune française Ephestia moebiusi Rebel. (Crambidae Phycitinae) Mais est-elle réellement nouvelle?" (In French). Rev.franç. Lépid., vol.11:pp.33-49, pl.3, 3 text figs. Mar. 1947. Records E. moebiusi, shows its distinctness from E. elutella and retains it as distinct from E. mistralella. Figures ♂ genitalia of moebiusi and elutella; clear photos of moebiusi and mistralella.

188. Le Marchand, S., "Nouvelle note sur quelques Lithocolletis (Lép. Lithocolletidae)." (In French). Rev. franç. Lépid., vol.11: pp.28-31, 4 figs. 23 June 1947. Gives supplement to his key to French spp.to include 2 n.spp. (of Rebel); corrects former error in key; describes new aberration fractifasciella of L. kleemannella. It is a surprise to find so busy an authority as M. Le Marchand naming aberrations!

189. Lowe, J.H.B., "Collecting Butterflies in India." Proc. & Trans. S. London Ent. & N.H. Soc. 1946-47: pp.109-114. 12 Dec.1947. Entertaining popular account. A preferred resting spot of famous Leaf Butterfly (Kallima inachus) was on large boulders, where they were conspicuous instead of protected.

190. Manny, J., "Race nouvelle de Zygaena achilleae Esp. en Charente-Maritime." (In French). Rev. franç. Lépid., vol.11:pp.95-96. Apr. 1947. Not given new name; said to be identical with form bitorquata Mon.

191. Morimoto, Tarô, "Note on an aberrant form of Papilio xuthus Linné from Korea." (In Japanese). Zephyrus, vol.9: p.280, 1 fig. June 1947. Recorded and figured, but no new name given.

192. Morley, A.M., "Lepidoptera of Folkestone." Proc. & Trans. S. London Ent. & N.H. Soc. 1946-47: pp.173-182. 12 Dec. 1947. General notes on various moths and butterflies.

193. Murayama, S., "Eine neue Aberration von Neozephyrus aurorinus Oberthür aus Japan." (In Japanese). Zephyrus, vol.9:p.279, 1 fig. Describes, figures and names(!) aberration.

194. Muspratt, V., "Observations des Migrations en 1946." (In French). Rev. franç. Lépid., vol.11: pp.78-85; 120-127. Apr., May 1947. Author, a leading authority on migration, summarizes for 1946:Pieris brassicae, Leucochloe daplidice, Colias hyale & croceus, Vanessa atalanta & cardui & antiopa, Issoria lathonia, Lampides boeticus, Everes argiades, Laphygma exigua,Phytometra gamma, Herse convolvuli, Macroglossum stellatarum, Celerio euphorbia , Nemophila noctuella, Plutella maculipennis.

195. Nobel, G., "L'Hespéride Gegenes pumilio Hffsgg." (In French). Rev. franç. Lépid., vol.11:pp.118-120. May 1947. Notes on occurrence in France.

196. Picard, J., "Qu'est-ce que Hesperia caïd Le Cerf?" (In French). Rev. franç. Lépid., vol.11: pp.61-62. Mar. 1947. Places caïd as a (spring) form of Muschampia mohammed.

197. Picard, J., "Nouvelles notes sur Pyrgus (Scelotrix) cacaliae Rbr." (In French). Rev. franç. Lépid., vol.11: pp.94-95. Apr. 1947. Describes new race pyrenaeus from Pas de la Case in Pyrenees, differing from typical race (Alps).

198. Puységur, K. de, "Note sur un accouplement entre Zerynthia polyxena-creusa Meig. et Z. rumina-medesicaste Ill." (In French). Rev.franç.Lépid., vol.11:pp.10-15. 23 June 1947. ♂ Z. polyxena-creusa found copulating with ♀ rumina-medesicaste. An abnormal meeting, since flight periods hardly overlap.

199. Rungs, Ch., "Les Cimeliidae du Maroc." (In French). Rev. franç. Lépid., vol.11: pp.86-90, pl.4. Apr. 1947. Describes as new:Cimelia margarita atlasica(Moyen Atlas) & form paupera, C. vaulogeri thamii (S.W. coast of Marocco) & form pudibunda. Photos of types of thamii,atlasica,pudibunda; of ♂ genitalia of thamii, C.margarita andalusica.

200. Russell, S.G. Castle, "A Short Account of 'The Bright Bequest' of Aberrations and Varieties of British Lycaenidae with Biographical Notes on the Collector." Proc. & Trans. S. London Ent. & N.H. Soc. 1946-47: pp.1-4, 1 pl. 12 Dec. 1947. Collection left to S. London Ent. & N.H. Society.

201. Sabrosky, Curtis W., "Winthemia citheroniae,new species, with notes on the correct name of W.cecropia(Diptera,Larvaevoridae)." Proc.Ent.Soc.Wash., vol.50: pp.63-67. March 1948. These parasitic flies occur,the latter in larvae of Platysamia cecropia,and the former n.sp. in pupae of Citheronia regalis.

202. Seok, D.M., (Title in Japanese). (In Japanese). Zephyrus, vol.9:pp.281-282, 1 map. June 1947. List giving(new?) records of butterflies in Korea.

203. Seok, D.M., "The study on the variation of Everes argiades Pallas of Korea." (In Japanese). Zephyrus, vol.9: pp.283-285. June 1947. Entirely in Japanese.

204. Sevastopulo, D.G., "An Abnormal Brood of Leucania irregularis Walker." The Entomologist, vol.81: pp.38-40, figs.1,2. Feb. 1948. Reports 4 larvae with abnormal 4th abdominal segment-- probably genetic. Note by C.N. Hawkins.

205. Shirôzu, Takashi, "Description of a new species of the Genus Favonius Sibatani et Ito, 1943, from Honshu, Japan (Lycaenidae, Theclinae)." (In Japanese & English). Zephyrus, vol.9:pp.238-244, pl.20. June 1947. Describes(in English) F.yuasai as new, comparing it with related spp. Good photos of yuasai,F.orientalis,Neozephyrus brillantinus.

206. Shirôzu, Takashi, "Notes on two allied species of the genus Hasora Moore in Formosa and the Loochoo group (Hesperiidae)." (In Japanese). Zephyrus, vol.9: pp.245-255, pl.21. June 1947. Extremely detailed synonymy and notes on status and distribution of H. chromus inermis and H. taminatus vairacana. Excellent photos of both.

207. Shirôzu, Takashi, "Notes on Phengaris daitozana Wileman and its allied species P. atroguttata formosana Matsumura in Formosa (Lycaenidae)." (In Japanese). Zephyrus, vol.9:pp.256-264, pl.22. June 1947. Detailed synonymy of both spp. P. matsumarai Sonan sunk as synonym of formosana. Forms, aberrations dropped into synonymy. Fine photos of both spp.; figs. of ♂ genitalia.

208. Shirôzu, Takashi, "Notes on three species of the Genus Celastrina Tutt described from the Far East (Lycaenidae)." (In Japanese). Zephyrus, vol.9: pp.265-269, 2 figs. June 1947. Sinks formosana Baker and postimacula Mats. under C. puspa myla. Places C. ishigakiana as race of C. puspa. Discusses C. sachalinensis. Figures holotypes of postimacula and ishigakiana.

209. Shirôzu, Takashi, "Note on Bibacis (!) argenteola Matsumura recently described from Formosa (Hesperiidae)." (In Japanese). Zephyrus, vol.9: pp.270-271. June 1947. Dropped as synonym of Epargyreus tityrus.

210. Smith, F.W., "Notes on the occurrence of Herse convolvuli L. and Pararge aegeria L. (Lep.) in Scotland." Ent. Monthly Mag., vol.84: pp.39-40. Feb. 1948.

211. Thompson, J. Antony, "Some Preliminary Observations on Pieris napi (L.)." Proc. & Trans. S. London Ent. & N.H. Soc. 1946-47: pp.115-122. 12 Dec. 1947. Many detailed observations of reared broods. Fertility of eggs laid was surprisingly low (43%). ♂♂ each fertilized several females successfully. Copulation longer than 2 3/4 hrs. always meant a mishap and no fertile eggs resulted. ♂♂ would never pair with fertile ♀♀. Buff or green pupae had either color independently of background. It is disappointing to find an investigator with genetic interest and apparent scientific background naming five new aberrations in the full taxonomic sense. What if the thousands of carefully studied and accurately described mutants of Drosophila melanogaster were to be so named!

212. Tilden, J.W., "Aestivation in larvae of Arachnis picta picta Packard." Pan-Pacific Ent., vol.24: p.31. Jan.1948. Larvae feed on Lupinus spp., are dormant (aestivate)from April- September, then pupate; adults emerge in October.

213. Turner, A. Jefferis, "New Australian Species of Boarmiadae (Lepidoptera)." Proc. Roy. Soc. Queensland, vol.58: pp.71-112. 27 Oct. 1947. New genera: Peratodactyla, Apheloceros, Hypochariessa, Macqueenia, Haploceros, Stinoptila, Allophyla, Heterogena, Cryphaea, Liometopa, Middletonia, Crypsiphila, Threneta, Lacistophanes, all monotypical, types listed below in capitals as n.spp., except Cryphaea(type C.xylina Turn.) and Hypochariessa (type H.ochrophara). N. spp. are: Diastictis genialis; PERAT. RUTILA; Ectropis dicranucha, fragilis, loxoschema; Symmectroctena mesopsamma, leucoprosopa; APHEL. DASCIODES; Psilosticha oresitropha, barypasta, argillea; Boarmia metapolia, catephes, polysticta, odontosticha, loxosticha, prionodes, leucanthes, acclinis, coloba, cymatomita, mesochra, pansticta, atactopa, gravis, platyleuca, phlaeopa, tessaramita, odontocrossa, harmodia, phricomita, aellographa, virescens, cymatias, spodochroa, eucrypta, conspersa, baryspila, phaeopasta; Syneora speciosa, sinuosa, piperata; Cleora hemichroma, pachydesma, chionospila, phaeocala, gypsochroa, dolichoptila; Tigridoptera leucoplethes; Epidesma aetheria; Metrocampa pyrrhophanes; Lomographa sciara; Casbia eutactopis, didymosticta, idiocrossa, leptorrhoda, ammophila, ereutha, adoxa, pallens, celidosema, tanaoctena, coniodes, plinthodes; Orsonoba diplodonta, stramenticea, euctista; Picrophylla rhabducha, rubea; Idiodes rhacodes, gerasphora; Planolocha hyposema, lactea; MACQ. CHIONOPTILA; Stathmorrhopa aphotista; HAPL. SPHENOTYPA; STIN. ACONTISTICA; Ciampa stenoptila; Chlenias chytrinopa, ochrocrana; ALLQ. SPECIALIS; Stibaroma habrostola, astrepta; HET. EXITELA; Amelora anthracocentra, conia, belemnophora, ceraunia, anepiscepta, thegalea, adusta; Mnesampela macroptila, smyriodes, idiograpta; LIO. RECTILINEA; MIDDL. SUAVIS; CRYP. ATMOPHANES; THR. PELLOPHANES; LAC. HACKERI. Authaemon stenonipha sunk as synonym of A. poliophara. Fairly thorough descriptions, but no figures, unfortunately.

214. Ureta R., Emilio, "Nuevos Ropaloceros (Lep.) de Chile." (In Spanish). Bol. Mus. Nac. Hist. Nat. (Chile), vol.23: pp.47-61, 2 pls. 1947. Describes as new: Teriocolias atinas kuscheli (Putre), Thecla wagenknechti (Rio Los Choros), Pyrgus fides form haywardi (Vicuña). Also describes and discusses: Phulia nysias (with P. nysiella as synonym), Tatochila microdice macrodice, Thecla dissentanea, T. sapota, T. davara joannisi, Hemiargus ramon (with H. martha as synonym), Itylos speciosa, Hylephila phylaeus. Poor photos of all 11 forms.

215. Viette, P., "Une localité interéssante: Saint-Jean-de-Losne(Côte d'Or)." (In French). Rev. franç. Lépid., vol.11:pp.58-61. Mar. 1947. Locality for Lepidoptera on plants near and in water beside Saône River:Nymphula,Schoenobius,Hydroecia,Lycaena dispar,etc.

216. Williams, Carroll M., "Physiology of Insect Diapause. III. The Prothoracic Glands in the Cecropia Silkworm, with Special Reference to their Significance in Embryonic and Postembryonic Development." Biol.Bull., vol.94: pp.60-65, figs.1-3. Feb. 1948. Reviews literature, gives diagrammatic figures of gland which controls diapause in Platysamia cecropia and describes morphology and histology of gland.

217. Williams, Harold B., "Angerona prunaria L.: Its Variation and Genetics." Proc. & Trans. S. London Ent. & N.H. Soc. 1946-47: pp.123-139, 3 pls. 12 Dec. 1947. Very little factual genetics in spite of title. Describes and figures many new and known aberrations of this geometrid moth. Beautiful plates, one in color.

218. Worm-Hansen, J. G. & Sv.G.Larsson, "Semasia krygeri Rebel (Lep.Tortr.). Morphology and biology." Ent. Meddelelser, vol.25:pp. 174-195, 2 pls., 4 figs. 15 Nov. 1947. Detailed account by Larsson of external morphology of all stages. Notes on biology by Worm-Hansen. The moth is gallmaker on Artemisia in Denmark. Numerous drawings.

NOTICES BY MEMBERS

LARGE STOCK OF HIGH GRADE INSECT PINS from Czechoslovakia available at 65¢/100, $6/1000. R.G.Wind, Rt.1, Box 145, Livermore, Calif.

ALL SPECIES OF EUREMA desired, esp. mexicana, proterpia, arbela, gundlachia, damaris, xanthochlora and others. Cuban butterflies offered in exchange. Dr. S.L.de la Torre y Callejas, Playa 75½, Matanzas, CUBA.

FOR SALE: All NYMPHALIDAE of Rhodesia and S. Africa, except Charaxes p. pelias. In good condition. Write: R.H.R. Stevenson, Selukwe, Southern Rhodesia, AFRICA.

BELGIAN CONGO BUTTERFLIES. About 40 named spp. available. Desire in exchange North American Papilionidae (Incl. Parnassius) and Pieridae, in papers. S.G. Kiriakoff, 14 Universiteitsstraat, Ghent, BELGIUM.

EXOTIC AND LOCAL LEPIDOPTERA & INSECTA- Buy and sell. Exchange in some genera. I have contacts in remote regions in various countries. Will supply material for specialists or artwork or for general collections and museums by arrangement. R.F. Sternitzky, Star Route, Laytonville, Mendocino Co., Calif.

E. Jammoulle,2 rue Ernotte, Watermael, BELGIUM, will be pleased to help Lep. Soc. members obtain Belgian Microlepidoptera on an exchange basis.

WANTED: Tingidae ("Lace Bugs") of world in alcohol. Give name of plant host and as much other ecological detail as possible. Will collect in exchange any local Lepidoptera(or other insects) you specify. N.S. Bailey, 16 Neponset Ave., Hyde Park 36, Mass.

WANTED: Papilionidae from any part of the world. Best prices paid for rare species. Robert G. Wind, Rt.1, Box 145, Livermore,Cal.

PHALAENIDAE(Noctuidae), NOTODONTIDAE, SPHINGIDAE of U.S. and Canada wanted in exchange for these families of New Jersey Pine Barrens area. Will collect in limited numbers in these and other families of Lepidoptera for exchange or sale. Correspondence invited. J.W. Cadbury 3rd, Spung Hollow, R.D. 1, Pemberton, N.J.

Would like to correspond with collectors interested in Speyeria and Saturniidae. Have good exchange for these,needed for my collection. E.J. Frederick, 5508 E.Gage,Bell,Calif.

"TRANSPAR MOUNTS": The material for starting a collection in Transpar Mounts is available in the "Transpar Mount Butterfly Collection Kit". This contains 116 mounts of all sizes, five display panels and tools; price $32.50. Additional packages of mounts and individual display panels can be ordered separately. Further information on request. Otto Ackermann, 639 Walnut Street, Irwin, Pa.

FOR SALE: Boloria, Oeneis, & Erebia from the Far North. R.J. Fitch, Rivercourse P.O. via Lloydminster, Saskatchewan, CANADA.

LIVING MATERIAL

NOW AVAILABLE: LIVING COCOONS from Indo-Australian Fauna- Antheraea mylitta, Attacus cynthia, Attacus edwardsi. Otto H. Schroeter, 613 Williams Street, New London, Conn.

Specimens & cocoons of SATURNIIDAE of the world desired. Correspondence invited. F.E. Rutkowski, St. Bede College, Peru, Illinois.

Wanted for determination, exchange, or purchase: HEMILEUCAS from the U.S. & Mexico. Wish to urge collectors to search for larvae in spring, egg masses in fall & winter. Information regarding H.sororius greatly desired. D.L. Bauer, P.O. Box 469, Yuma, Arizona.

Wanted: CATOCALA EGGS, esp. of Crataegus (Hawthorn) feeders. Will exchange for other Catocala material. Sidney A. Hessel, 8 Woodmere Blvd. S., Woodmere,New York.

GENERAL NOTES

NOTES ON THE DISAPPEARANCE OF POLYGONIA GRACILIS AT RANGELEY, MAINE, IN 1947.- Polygonia gracilis appears to be a very rare and local butterfly. Some years ago I was fortunate enough to discover a colony at Rangeley,Maine. Each year, along a narrow gauge railroad track a small series of specimens was taken.

Two other Polygonia occurred also in the same general area, but not at the precise spot where gracilis was taken. These are faunus and progne. They always were more abundant than gracilis.

The spring of 1947 was very wet at Rangeley. It rained almost continually from the time of my arrival there, early in June, until the latter part of July. This proved to have a very serious effect on the Polygonia species. Since they hibernate as imagoes it is essential that there be some warm, sunny days in the spring for them to fly around, mate, and oviposit. A rainy spring seriously interferes with all of this. Even if a few adults survive and eggs are laid, the subsequent emerging larvae risk being destroyed by the dampness.

Last summer when the season for the imagoes to be on the wing finally came around, I was anxious to see what I would catch, but not a single gracilis appeared although I hunted for them every warm and sunny day just where I had taken them for a number of years. Stranger still, not a single faunus or progne was to be seen. Perhaps these colonies have been destroyed and the species will have to be reintroduced. I doubt, however, whether there will be a colony of gracilis again at that particular locality, because while faunus and progne appear to be common throughout Maine, I know of no other colony of gracilis within a great many miles.

- Cyril F. dos Passos, Mendham, N.J.

PLEASE NOTIFY THE NEWS EDITORS
OF CHANGES OF ADDRESS PROMPTLY

A few copies have been returned recently.

QUESTIONS AND ANSWERS

Q. "Where can I find any information concerning Hemileuca sororius? Particularly a good description and any localities where it has been taken?"

A. Original description: Henry Edwards, Papilio, I: 100, 1881. Figured (photo of type) Packard, Monogr.Bombycine Moths, pt.3:p.131, pl.63,fig.14; also reprints original description and Dyar's Key. Compared with related species: Dyar, Proc.Ent.Soc.Wash. 13, 5 ff., 1911. Bibliography: Lepidopterorum Catalogus fasc.58: p.454. I think all data are based on the original type specimen; material from Lower-California is very rare in collections.

Q. "I have heard quite a bit about a species of skipper which possesses the frenulum in one sex. Could you tell me its name, where it is found, and any other important facts which you might know about?"

A. Euschemon rafflesiae McLeay is found only in Australia, and the specimens I have seen come from Queensland. It is a normal skipper except for the frenulum, and has a normal skipper caterpillar and pupa, much like those of our silver spotted skipper. It feeds on Wilkiea (Monimiaceae), and is figured in all three stages in Tillyard's "Insects of Australia and New Zealand". The butterfly is black, with yellow patches, blue or green shades and orange end of abdomen; it varies somewhat locally, and has been divided into three races.

W.T.M. Forbes

Q. "Is there any other way of distinguishing between Colias philodice and eurytheme besides ground color and size? Since I am partially color blind I have a lot of trouble with these species."

A. The differences between these species are quantitative only, so that in any case absolute identification is most difficult and sometimes impossible. However, one character that is usually more than 80% accurate for the northeastern United States is the size of the spots in the female border melanic band, being proportionally larger in eurytheme than in philodice. All characters are modifiable by the fluctuations in weather conditions during larval growth and this one is no exception. Also, hybridization has resulted in the partial blending together of the characters of each. Unfortunately, no single visible characteristic can be used to separate the two without question but with practice combinations of other minor characters will be apparent which will lead to nearly accurate identifications; preliminary aid may be required of someone who is not color blind. Fuller information may be obtained from the writer.

W. Hovanitz

(In view of Dr.Hovanitz' long study of Colias this question was sent directly to him.- Ed.)

TABLE OF CONTENTS

NEW MEMBERS

Butterfly World Supply House, 289-291 E. 98th St., Brooklyn 12, N.Y.
Doudoroff, Prof. Michael, Dept. of Bacteriology, Univ. of Calif., Berkeley, Calif.
Duhlmeier, William, 2535 Indian Mound Ave., Norwood 12, Ohio.
Fales,J.H.,1917 Elkhart St.,Silver Spring,Md.
Ghani, M.A., Fernald Hall, Univ. of Mass., Amherst, Mass.
Hellman, Geoffrey T., The New Yorker, 25 W. 43rd St., New York 18, N.Y.
Jablonski, Raymond, Med.Det. 13th F.A. Bn., APO 24, Unit 4, c/o P.M.,San Francisco,Cal.
Kistner, David H., 5031 N. Kolmar Ave., Chicago 30, Ill.
May, Edward E., Caixa Postal 176, Rio de Janeiro, BRAZIL.
Minor, W.C., P.O. Box 62, Fruita, Colo.
Phillips, L.S., Loyola Univ. Medical School, 706 S. Wolcott Ave., Chicago, Ill.
Phillips, W. Levi, 985 S. Third East, Salt Lake City 4, Utah.
Preston, F.W., 712 Dewey St., Ann Arbor, Mich.
Rice, Harold E., Rt.2, Box 272, Eugene, Ore.
Richard, R.E., 1832 N.Gulley Rd.,Dearborn,Mich.
Romine, Ray, 954 Westwood Dr., Marion, Ohio.
Sala, Frank P., 528 Monterey Rd., South Pasadena, Calif.
Shappirio, D.G., 306 Greene House, East Quadrangle, Ann Arbor, Mich.
Shirozu, Takashi, Entomological Lab., Dept. of Agriculture, Kyushu Univ., Fukuoka, JAPAN.
Thomas,E.S.,Ohio State Museum,Columbus 10,Ohio.
Williams, Mrs. Evelyn G., North San Juan, Nevada Co., Calif.

* * *

CHANGES OF ADDRESS: Pearson, H.R., Caixa Postal 5151, Rio de Janeiro, BRAZIL.
Wren, G.R., 5806 Drexel Ave., Apt.2A, Chicago 37, Illinois.
Vogel, H.A., 9121 Kresge St.,Detroit 13, Mich.

THE LEPIDOPTERISTS' NEWS is the monthly periodical of The Lepidopterists' Society. Membership is open to anyone interested in the study of butterflies & moths. The 1948 dues,including subscription to the NEWS,are $1.50 for Regular Members and $3.00 or more for Sustaining Members. Please make remittances payable to : Charles L. Remington. Address all Society correspondence to: P.O. Box 104, Cambridge 38, Mass., U.S.A.