

LEPIDOPTERA NEWS

September 1997

No. 3

KILLER CATERPILLARS CLAIMING LIVES IN BRAZIL



They pack more poison than cobras

By LINDA TOPPOR

BEWARE! Killer caterpillars are coming to America — and YOU or someone you love may be the next victim.

Newspapers around the world are reporting that the creepy, dark green insects have already claimed the lives of dozens of innocent people in Brazil, and U.S. scientists are terrified that the deadly pests are steadily marching our way.

"Over the past week one

farmer died and there have been 16 people hospitalized," warns Roseli Simone, a spokeswoman at Santa Terezinha Hospital in the Brazilian town of Cruz Machado.

The crawlers, whose scientific name is *Lonomia obliqua*, are 2 inches long and

covered with hundreds of tiny hair-like spines that act like hypodermic needles to secrete lethal venom, more than a deadly cobra.

They like to wait for their prey on tree trunks and walls, and lots of times the victims don't know they've been at-

tacked until after the deadly poison has been injected into their bloodstream.

Simone says that if caught in time, "most people can be treated with anti-hemorrhagic medicine.

"The farmer waited two days before seeking treat-

ment, and went into a coma."

Left unattended, the tiny wounds will first cause serious burning, which will then lead to high fevers, internal bleeding, bleeding from the nose and ears and, eventually, an excruciating death.

"Be on the alert! Avoid contact with these caterpillars!" radio broadcasters blast around the clock in Brazil, desperately trying to stop the deaths from the lethal pests.

Now, American authorities are gearing up for battle against the coming invasion.

SCIENTISTS ISSUE GRIM WARNING: THEY'RE HEADING FOR U.S.

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So much for tabloid journalism! This headline and article appeared recently in one of the Florida newspapers, generating the kind of scare already started with the "killer" Africanized honey bees, also coming north from Brazil.

The previous news we had about this unusual phenomenon (see March and June 1996 *News* issues) noted that the caterpillars in

question are of the genus *Lonomia*, family Saturniidae (C. Lemaire, pers. comm.). It seems the moths and their caterpillars are still going strong. As noted previously, there are a number of species of moths, in several families, that have poisonous larvae. The more sensitive a person is to some of these, the greater the allergic reaction can be.

1998 ATL Photo Contest: entries due by March 15, 1998. Revised, now \$750 in cash prizes!

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EXPEDITIONS:

VENEZUELA (Maracay, Barquisimeto, Merida): expected Aug 1998

TO OUR READERS

83 Life Members: that is how many of you have taken advantage of this level of ATL membership! It shows broad support for our journals. Our other sponsoring members are equally thanked, since the society still needs your general support, in addition to such special projects as those in Lepidoptera conservation and research. We still have only limited funds to support unaffiliated authors and their page charges, and the journals take up most of our budget.

Members should note that although our financial statement has large sums, most of these monies refer to back stocks of journals and books awaiting sale; thus, these sums represent future potentials and not current cash. So, please continue donating as much as you can to support our journals. Additionally, very few members have submitted any outstanding color photos for our journal covers: there is no charge for this and we would welcome more photos to select from, especially for *Holarctic Lepidoptera*.

J. B. Heppner
Executive Director

NOTES

1. **1998 Annual Meeting:** April 17-19, in Gainesville.
2. **1998 Annual Photo Contest**

Do not forget to get your best photos ready for the 1998 ATL Photo Contest! Members are welcome to enter up to 4 photographs (8x10 in) in each of three categories: butterflies, moths, and immatures. We now accept photos of temperate or tropical species. Prizes now total \$750 (\$150 first place, \$75 second place, \$25 third place), plus an added special Grand Prize for the top point winner. Winners are announced at the Annual Meeting and published in *Tropical Lepidoptera* or *Holarctic Lepidoptera*. Deadline is March 15, 1998. Entry fees are \$1 per photo to cover return shipping and handling.

Note that photographs must be of living specimens (not posed dead specimens), of correct size (9x12 size will be cut down to 8x10 inches), data sheet must be attached to the back of each entry, and a 3x5 inch photo must also be included for each entry (not 2.5 x 4 inches!). Outside of the USA, use photo sizes as close to American standards as possible.

3. DUES

The dues structure remains the same for members making timely payment (before the end December for the next year): still at \$65 for both journals. Single journal (either *Holarctic Lepidoptera* or *Tropical Lepidoptera*) dues remain at \$40 per year. It is \$75 only as our cover price and for members not paying on time. Please help us out by paying on time this autumn! Donations are always appreciated (your canceled check can be used to verify donations). Life membership is also available: you get both *Holarctic Lepidoptera* and *Tropical Lepidoptera*, plus all supplements, at no further cost (including airmail for members outside of the USA!).

4. **Credit Cards:** ATL accepts all major credit cards (Master Charge, VISA, and American Express) for payments from **non-USA members only**. The one exception is for life membership payments, so now USA members can also pay for a life membership with a credit card.

5. **ATL Home Page:** internet ATL Home Page was revised as of May 15, 1997. See it at <http://www.troplep.org>. Check on the latest information on ATL and our publications. Also, find numerous links to other Lepidoptera web resources and information about museums, societies, book dealers, publishers, and suppliers, as well as ATL book series.

Contents summaries (with abstracts) for each issue of the ATL journals, from 1990 on, will be added to the ATL website in the near future, with a color figure of each cover photo.

Scanning of covers is being done by ATL member William A. Harding, of Sedona, Arizona.

6. **Literature Summary - 1996:** the annual literature summary will appear in the December 1997 newsletter rather than the December 1996 issue, and likewise each year hence, so inclusion is more complete.

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The Bishop Museum has a rich history of entomological research in the Pacific and Southeast Asia. It has large collections from New Guinea, Borneo, the Philippines, as well as mainland Asia, and has a strong commitment to ongoing research programs aimed at documenting and analyzing the biological diversity of these areas. Regions that are especially well represented are: Philippines, Borneo, Vietnam, Laos, Cambodia, Hong Kong, and New Guinea (extensive collections, partially identified, from both Irian Jaya and Papua New Guinea). New Guinea material is especially rich due to the activities at the former Bishop Museum field station in Wau, Papua New Guinea (now independent as the Wau Ecology Institute).

Bishop Museum did not have a staff lepidopterist prior to 1986 (Otto Swezey had an honorary appointment and worked on the collection in his spare time), and thus the holdings of Lepidoptera are the weakest among the major insect orders. However, the collection does include material of substantial research interest: over 950,000 Lepidoptera, with 25,000 from the Hawaiian Islands, and 250 primary types (from Hawaii and Pacific Islands). Type data is available via the Bishop Museum home page at: www.bishop.hawaii.org/bishop/ento/entodbhome.htm.

The collection includes material assembled by O. H. Swezey and F. X. Williams (formerly at Hawaii Sugar Planters' Association collection), E. C. Zimmerman, J. H. H. Szent-Ivany, and others. J. C. E. Riotte curated the collection as a volunteer for 20 years starting in 1974. Scott E. Miller joined the staff in 1986, although he currently spends most of his time in administration.

Except for the older and Hawaiian material, most of the collection has been accumulated in general surveys since 1952, and is unidentified. With the 1989 National Science Foundation funded move into compacted storage, the collection was reorganized to promote accessibility and further curation. Over the next few years thereafter, further NSF funding supported general sorting and curation. For further information contact:

Dr. SCOTT E. MILLER, Chairman

Dept. of Natural Science, Bishop Museum, 1525 Bernice St., Honolulu, HI 98617.

BUTTERFLY / INSECT MUSEUM LA CEIBA, HONDURAS

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DEMISE OF THE ENTOMOLOGIST

After 116 volumes, the well-known British journal, *The Entomologist*, is being discontinued by the Royal Entomological Society of London. A recent notice stated the journal was losing money and had few articles to print. Yet, a 1996 financial report of the RESL showed a profit of £2000 for the journal.

BOOK REVIEW

A Critical Review of *The Butterflies of the West Indies and South Florida*

This much needed publication, authored by David Spencer Smith, Lee D. Miller and Jacqueline Y. Miller (1994), replaces Norman D. Riley's (1975) *A Field Guide to the Butterflies of the West Indies*. All students of West Indian butterflies will find it very useful. My own experience with West Indian butterflies is limited to Hispaniola, therefore the following comments apply chiefly to that island. While any negative criticisms toward this good book may seem to be a product of an ingrate, most of my comments arise from the author's ignoring my own work and therefore it seems to be my peculiar responsibility to make note of it.

The authors set out to make this book more than a field guide and less than a full-blown text. The result is more appreciated by one expectant than another. I, myself, would have wanted complete literature citations to the original descriptions. While the taxonomic checklist does give dates for each name, these dates are lacking in the text.

The chapter on biogeography and statements on that subject in the text show the unfortunate continuance of preoccupation with West Indian "vicariance" and seem to this reviewer to move the true science of biogeography further toward, rather than away from, a science of speculation. In actuality, there exists no compelling evidence for West Indian "vicariance" in its original sense! And in as much as biological evolution is a history of accidents, it seems futile to brain one's way through explanations of possible speculations based on no convincing evidence whatsoever.

The chapter on history presents much data for each of the major islands and island groups. My quarrel with it is that it is not "collector oriented" but "publication oriented." For Hispaniola, only 10 of the 17 major collectors (of new taxa) are mentioned. The same degree of insufficiency also applies to the other islands or island groups. The authors seem to have been unaware that this subject (on collectors) has been covered quite comprehensively by the present writer (see titles of an historic nature in the literature cited: Wetherbee, 1985a,b,c,d, 1986a,b,c, 1991b, beyond).

As the present reviewer is less of a lepidopterist than a vertebrate zoologist, he might, in passing, note that the text is indicative of the fact that the scorn now exhibited by vertebrate zoologists toward subspecies recognition has not yet reached Lepidopterology (even though the treatment of *Anaea* and *Memphis* seems to resemble the sometimes desperate attempt to salvage some infra-specific forms as full species).

As Thomas Turner of Jamaica provided a wealth of data used in this publication on early stages, one wonders whether he was not deserving a place (P. H. Grosse-like) on the title page. Colonialism is not yet dead?

The taxonomic checklist uses the traditional families rather than the more progressive broadening of butterfly families. Even within the "old" presentation, some breakdown into tribes, etc. would have been useful. The opportunity for tabulation of geographic data (of which Riley was a master) is neglected.

In a recent publication, Wetherbee (1996) has noted numerous omissions of available published data (usually my own) in the Smith, Miller and Miller (1994) text. For these the reader is here

referred to the following species in Wetherbee (1986d, 1987a,b, 1988a, 1989, 1991a,b, 1992) papers: see accounts under *Choranthus schwartzi*, *Phocides pillion*, *Heraclides* spp. (*H. aristodemus* should have a Hispaniola type-locality), *Phoebis philea* (type-locality should be Georgia!), *Anartia jatrophae*, *Junonia geneveva*, *Archimestra teleboas*, *Dynamine egaea*, *Hamadryas amphichloe*, *Lycorea cleobaea*, *Erynnis zarucco*, *Brephidium exilis*, *Vanessa virginicensis*, *Memphis verticordia*, *Hypanartia paulla*, *Anetia vantherata*, and *A. briarea*.

For *Calisto*, the authors follow the traditional "splitter" (rather than "lumper") course. Unfortunately, 9 of their Hispaniolan *Calisto* are not illustrated (as though, perhaps, they might have had some reservations about the validity of them as valid taxa?). The authors often use the wrong gender for the genus: *Callisto elelea*, *C. hysia*, *C. lyceia*, and *C. tragia* are rendered in the masculine. In this regard, the authors mention that Kaye in Jamaica named a new skipper after Miss Lilly's father, but in the text they use the feminine "*perkinsae*". Several other discrepancies in gender between names as used by Smith, Miller and Miller (1994) contrasted to those used by Schwartz (1989) are: *celidus aibonito*, *Nesiostrymon*; *charitonius churchi*, *Heliconius*; *cybirus*, *Strymon columella*; *limenius*, *Strymon*; *memula*, *Eurema leuce*; *paulla*, *Hypanartia*; and *phylea*, *Hylephila*. It is safest to follow Schwartz on this subject. Schwartz also uses "*bicolor*" (not "*bicolora*") for *Phocides pigmalion*. *Wallengrenia druryi* of Schwartz seems to me to be the correct form, not "*drury*."

What "progress" does Smith, Miller and Miller (1994) show over Schwartz (1989)? They change *Astrartes chrystyi* to *A. xagua chrystyi*; *Achylodes papinianus sagra* to *A. mithridates sagra*; *Oarisma stillmani* to *Copaeodis stillmani*; *Eurytides zonarius* to *Protesilaus zonarius*; *Priamides pelaus* to *Heraclides pelaus*; *Eurema lucina priddyi* to *E. priddyi*; *Phoebis thalestris* to *P. philea thalestris*; *Thereus abeja* to *Rekoa abeja*; *Tmolus azia* to *Ministrymon azia*; *Tmolus victoria* to *Ministrymon victoria*; and *Hemiargus thomasi noeli* to *Cyclargus thomasi noeli*. They add *Junonia evarete*, *Choranthus maria*, and *Appias punctifera*.

I am not happy with their type-localities for Hispaniola. Wetherbee (1991b) published proper type-localities for the butterflies of Hispaniola. The unevenness of treatment of early stages points to our present lack of knowledge at a diagnostic level. In the appendix it is unfortunate that the list of plant genera was not made into an index and then expanded into a taxonomic botanical list in order to further our knowledge of this important subject (as in Wetherbee and Schwartz, 1996).

Everyone should be delighted with the 33 colored plates. The only negative aspect of these illustrations is the stereotyped, unmarked, dead bodies. The book is well indexed. The binding lacks durability.

This publication should serve the West Indies longer than did the old Riley field guide. Smith, Miller and Miller (1994) are to be congratulated upon the successful completion of a difficult task.

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1985c. *Zoological Exploration of the Bahamas for Endemic Species*. Shelburne, Ma. 59pp.

1985d. *Zoological Exploration of Jamaica for Endemic Species*. Shelburne, Ma. 212pp.

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1987b. *Life Stages of Hamadryas amphichloe diasia in Hispaniola*. Shelburne, Ma. 11pp.

1988a. *Larval Host-Plants, Newly Determined of Several Hispaniolan Butterflies and Notes on Early Stages*. Shelburne, Ma. 20pp.

1989. *Sixth Contribution on Larvae and/or Larval Host-Plants of Hispaniolan Butterflies, with Notice of "Neotony"-like Pupa of Pyrgus oileus*. Shelburne, Ma. 12pp.

1991a. *Seventh Contribution on Larvae and/or Larval Host-Plants of Hispaniolan Butterflies, and Nocturnal Activity of Adult Hypanartia paulla*. Shelburne, Ma. 13pp.

1991b. *Two Centuries of Exploration for Hispaniolan Butterflies*. Shelburne, Ma. 82pp.

1992. *Eighth Contribution on Larvae and/or Larval Host-Plants of Hispaniolan Butterflies. The Butterfly/Larva Flora, with a Theory of Calisto (Satyridae) Origin and Endemicity*. Shelburne, Ma. 173pp.

1996a. Ninth contribution on larvae and/or larval host-plants of Hispaniolan butterflies, with explanation of *Ascia* migrations at Monte Cristi, and pupal mimicry of lizard modality by *Hamadryas*. In D. K. Wetherbee, *La Xaiba Prieta and La Xaiba Piñita (Epilobocera, Decapoda) in Hispaniola, and 20+ Further Contributions on Hispaniolan Fauna*, 255-309. Shelburne, Ma. 465pp.

Wetherbee, D. K., and A. Schwartz

1996. Summary of reputed host-plants of Hispaniolan butterflies. In D. K. Wetherbee, *La Xaiba Prieta and La Xaiba Piñita (Epilobocera, Decapoda) in Hispaniola, and 20+ Further Contributions on Hispaniolan Fauna*, 403-437. Shelburne, Ma. 465pp.

DAVID KENNETH WETHERBEE

Restauración, Prov. de Dajabón

Dominican Republic

WOODLANDS SWALLOWTAIL

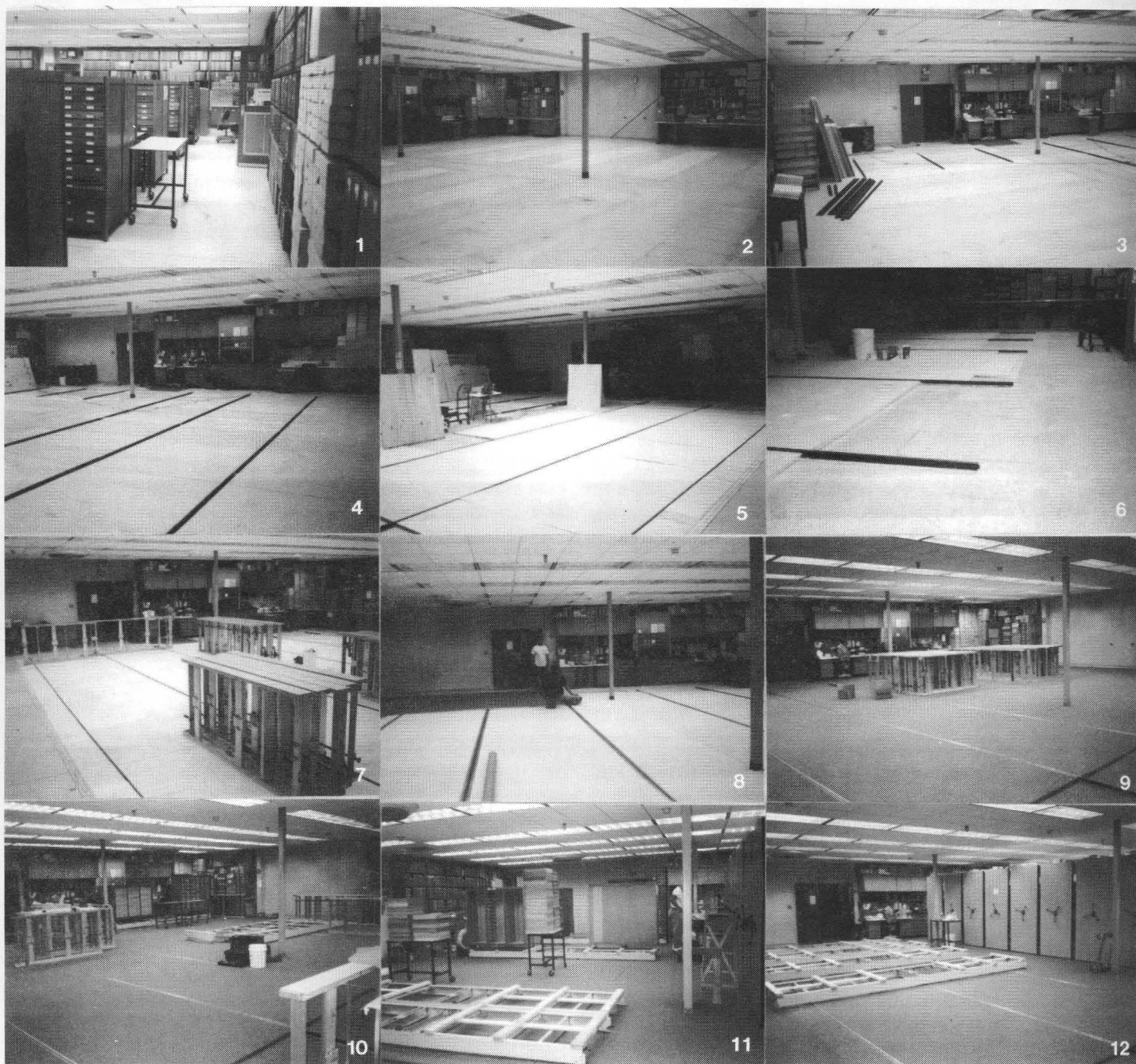
Recent common name lists of North American butterflies still use the name "Palamedes Swallowtail" for *Papilio (Heraclides) palamedes* Drury (Papilionidae). This swallowtail is most commonly seen in open woodlands in the southern U.S. It seems appropriate to propose a new common name, the "Woodlands Swallowtail" for this species, rather than continue just using a conversion of its Latin name.

J. B. HEPPNER

Florida State Collection of Arthropods, FDACS, DPI, Gainesville, FL

FLORIDA STATE COLLECTION OF ARTHROPODS:

How to Build a Compactor in 12 Easy Steps



Do you have \$72,000 and a 50 x 50 foot room? Then you too can build a compactor system to house cabinets for about 9,000 insect drawers. This is what was done at the Florida State Collection of Arthropods, Gainesville, Florida, in late 1995, to refurbish one of the collection rooms housing Diptera, Hemiptera, and part of the Lepidoptera collection. The photographs above show the sequence of events from the old cabinet arrangement, with 2,848 insect drawers, to their removal to the hallways, and the construction of the compactor system. The space thusly made available provides room for over 8,950 insect drawers within the same walls of this collection room, more than a three-fold increase in drawer capacity. The FSCA opted for mechanical units, rather than less reliable motorized units, yet each unit can

be moved literally with one finger, even though there may be more than a ton of weight on the unit.

As reorganization is completed, there will be more space for each of the insect orders housed in this room, plus the North American moths. Another room at the FSCA currently houses the remainder of the Lepidoptera collection (all exotic species and North American butterflies, plus Spingidae and Saturniidae), as well as Coleoptera, Hymenoptera, Neuroptera, Orthoptera, and Odonata. Plans continue for a near doubling of FSCA collection space so all backlog Lepidoptera can be properly curated and added to the main collection, since about 20,000 drawers will be needed to accomplish this for the 1.3 million specimen FSCA worldwide Lepidoptera collection. J.B.H.

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SHIPPING HANDLING: \$2 first book, \$1 each added book (outside USA, add another \$1 for each book).

Lepidopterorum Catalogus only: \$2 for first 80 pages (e.g., 5 parts each with viii+8 pp. = 80pp), \$1 each added 40 pages (outside USA, add \$1 for first 80pp and another \$1 for each added 40pp) [NOTE: Fasc. 124 ships at bookrate of \$4, for 3 volumes].

BOOK NEWS

BUTTERFLIES OF COSTA RICA and Their Natural History.

Volume II: Riodinidae

by P. J. DeVries. 1997. 288pp, 25+3 color pl. Princeton Univ. Press

Following the excellent coverage of the larger butterflies in vol. 1, the author continues the documentation of Costa Rican butterflies in this volume on the metalmark butterflies, the Riodinidae. The text and color plates equal the high standards of the first volume: included are 3 color plates in the introduction that show various mimicry complexes involving riodinids. The introduction also includes some excellent SEM photographs of larval and adult details, as well as much useful biological information. Over 250 species are treated in the main text, with 70% of these also occurring in other areas of the Neotropics besides Costa Rica; 85% range throughout Central America.

List price: \$29.50 paper, \$90.00 cloth.

REVISION OF THE NEARCTIC SPECIES OF ELACHISTA s.l. II.

The argentella group (Lepidoptera, Elachistidae)

by L. Kaila. 1997. (*Acta Zoologica Fennica* 206). 93pp, paper.

This second part of Dr. Kaila's revision of Nearctic Elachistidae covers 67 species, 25 of which are newly described, mostly from western states. The work follows the first part of the revision, published as a journal article in 1996, on the *tetragonella* group (*Ent. Scand.*, 27:217-238). All species are figured in halftone photographs, both adults and genitalia.

Price: FIM 209 (about US\$38).

KEY TO THE INSECTS OF RUSSIAN FAR EAST. Vol. V.

Trichoptera and Lepidoptera. Pt. 1

by V. S. Kononenko (ed.). 1997. 540pp, cloth. Akademia Nauk.

This first Lepidoptera part for the series covers the Microlepidoptera families from Micropterigidae to Ethmiidae, but with the Yponomeutoidea mixed in before the elachistoid groups (Gelechiidae are not included in this part). The series is very similar to that already published for the European part of Russia (including former western USSR areas) and seems to have many of the same figures. As in the former series, this Far East version has the same format and presumably workable keys to species (the text is entirely in Russian and could not be read; species names are in Latin). Even without a knowledge of Russian, the work can be used to identify many species due to the many figures of adults and genitalia.

Price: unknown.

FORTHCOMING BOOKS - 1997

LEPIDOPTERA OF TAIWAN

1997

Vol. 1 - Part 1: Introduction, by J. B. Heppner and H. Y. Wang

The introductory part for this series follows the catalog already published in 1992. This part covers the history of Lepidoptera work in Taiwan from early days up to the current Lepidoptera survey, begun in 1981. A key to families is provided in English and Chinese. This part includes 60 color plates. Future parts will cover all species in detail.

Member price is \$81.50 (non-member price: \$125.50).

CLASSIFICATION OF LEPIDOPTERA

1997

by J. B. Heppner

This work is being readied as a separate book. The planned supplement (Suppl. 3 of *Tropical Lepidoptera* Vol. 4, 1993 [1996]) is only the key to families (\$10.00 for ATL members).

Member price is \$24.50 (non-member price: \$42.50).

LEPIDOPTERORUM CATALOGUS (New Series)

1997

edited by J. B. Heppner

The new series began in 1989 with the publication of Fasc. 118 Noctuidae (Poole) [now 124], after a 50 year interlude since the original series ended in 1939. In 1997, several small families should be ready. Already published are Fasc. 48. Epermeniidae (Dec. 30, 1996) and Fasc. 55. Acrolepiidae (May 12, 1997).

Member prices will be nominal (\$1.50 to \$4.50 each, depending on size); non-member price: \$4.50 to 7.50 each).

Since most persons who ordered parts 1-22 as a unit in the past may well want the entire series, we have sent the new issues (48 and 55) upon publication. Unless we are notified otherwise, we will continue this until the \$10.95 originally paid for is used up; or, send us a note on what parts you want. Let us know if your order has not been received.

BUTTERFLIES OF GREECE

1997

by L. N. Pamperis

This first comprehensive book on the butterflies of Greece gives coverage for all 232 species known for the region. The book includes 1,174 color photographs taken in nature and 123 distribution maps. The text is in English, with descriptions and notes for each species, plus the conservation status of each species. The book has 574 pp, in A4 size (ca. 8 x 11.5 inches), and is cloth bound.

Publisher is Bastas-Plessas, 21 Herous Str., GR-10442 Athens, Greece. List price is 30,000 Dr. (about US\$103, includes shipping).

PASSINGS

†**Emmanuel de Bros**, 25 March 1997, in Binningen, Switzerland. Mr. de Bros was on the ATL Advisory Council since 1994. Members will remember his well-illustrated article from 1993, in *Tropical Lepidoptera*, on a butterfly trip to the mountains of East Africa.

†**Dr. Wolfgang Dierl**, 26 March 1996, in Munich, Germany. Dr. Dierl was longtime Curator of Lepidoptera and later Director at the Zoologischen Staatssammlung München (Munich State Zoological Collection), one of the larger natural history museums in Germany, with large Lepidoptera holdings. His specialty was Psychidae and Eriocottidae moths, mainly of the Old World and particularly the fauna of Nepal.

†**Dr. Robert V. Gregg**, 15 July 1997, in Rio Rico, Arizona, USA. Dr. Gregg was particularly interested in moths and collected from his former home in Goshen, Kentucky, for many years before moving to Arizona. His collection has been donated to the Florida State Collection of Arthropods, Gainesville, Florida.

†**Dr. Denis F. Owen**, 3 October 1996, in Oxfordshire, England. Dr. Owen was a professor at Oxford Brooks University, Headington, Oxfordshire. For many years he taught zoology in Uganda and Sierra Leone, where he did much of his research on African butterflies, resulting in his well-known book, *Tropical Butterflies* (1971). After a teaching post in Sweden, he returned to England, where he published many more papers on the genetics and population ecology of tropical butterflies, plus British moths *Biston* (Geometridae) and *Callimorpha* (Arctiidae). Oxford Brooks University awarded him an honorary D.Sc. degree just before he died. Dr. Owen was a charter member of ATL and on the Advisory Council since 1991.

MEETINGS

1997 **Southern Lepidopterists' Society**: October 11-12, Gainesville, Florida, USA

1998 **Societas Europaea Lepidopterologica**: March 22-26, Malle (Antwerp), Belgium

Association for Tropical Lepidoptera: April 17-19, Gainesville, Florida, USA

NOTICES

DEALERS WANTED: supplies of dried and live insects wanted from Africa, Asia, and South and Central America. Any interesting species wanted on trade basis; legal supply only. Send stock list or interests to: Dutch Entomological Breeding Centre "Erato", Louis Armstrongrode 25, NL-2717CH Zoetermeer, Netherlands. Tel/FAX: (31-79) 352-0022.

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