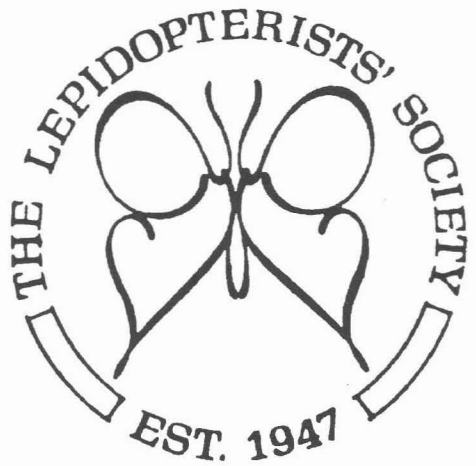


# NEWS

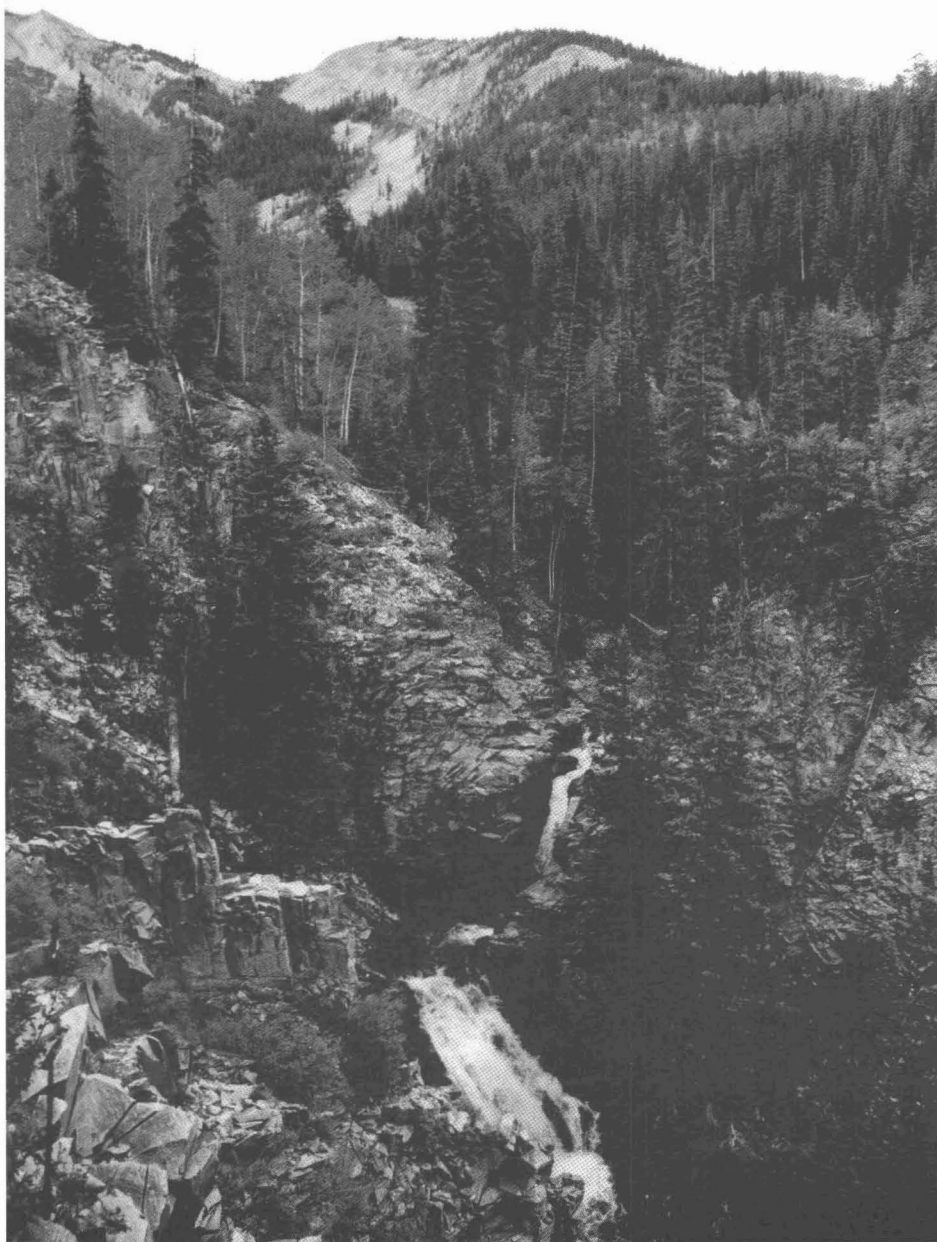
OF THE

# LEPIDOPTERISTS' SOCIETY



Volume 40, Number 5

Winter 1998



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# NEWS OF THE LEPIDOPTERISTS' SOCIETY

Volume 40, No. 5 Winter 1998



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The Lepidopterists' Society is a non-profit educational and scientific organization. The object of the Society, which was formed in May 1947 and formally constituted in December 1950, is "to promote internationally the science of lepidopterology in all its branches; to further the scientifically sound and progressive study of Lepidoptera, to issue periodicals and other publications on Lepidoptera; to facilitate the exchange of specimens and ideas by both the professional worker and the amateur in the field; to compile and distribute information to other organizations and individuals for purposes of education and conservation and appreciation of Lepidoptera; and to secure cooperation in all measures" directed towards these aims. (Article II, Constitution of The Lepidopterists' Society.)

The **News of the Lepidopterists' Society** (ISSN 0091-1348) is published 4 times per year by The Lepidopterists' Society, c/o Los Angeles County Museum of Natural History, 900 Exposition Blvd., Los Angeles, CA 90007-4057, USA., and includes one or two supplements each year. The **Season Summary** is published every year as issue number 2 of the News. In even numbered years a complete **Membership Directory** is published as issue number 6. Please see the inside back cover for instructions regarding submissions to, and deadline dates for, the News. Postage paid at Lawrence, KS.

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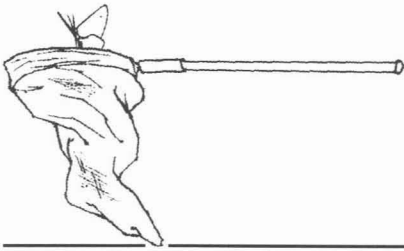
Issue Date: December 15, 1998

ISSN 0091-1348

**Center Insert:** This issue of the News contains a four-page pullout section containing the *Call for Contributed Papers, Local Arrangements, Registration Form, and Field Trip Sign-up Form* for the upcoming 52<sup>nd</sup> Annual Meeting of the Lepidopterists' Society to be held in Sierra Vista, Arizona, 4-8 August, 1999.

**Why not register now!**

**Cover:** A mountain valley near Gothic, CO, at the Rocky Mountain Biological Laboratory, site of the 3<sup>rd</sup> International Butterfly Ecology and Evolution Symposium. See the report on page 107 and photos on pages 114 and 115. Cover photo by Marcio Zikan Cardoso.



# Mailbag...

## Pesky URL's...

Dear Editor,

Congratulations on the slick improvement in the **News**. One question: Why does the **News** use all caps for web URL's and email addresses?

A quick glance at three other publications on hand shows: **EOS** (Transactions of the American Geophysical Union) uses lower case unless a cap is used in the URL, **Geotimes**, ditto except they set off the URL's with < > brackets, and the **Lepidoptera News** (Association for Tropical Lepidoptera) follows the format that EOS uses. Since some URL's have uppercase letters, it would seem that all caps, with larger caps for uppercase, would be confusing to novices and might lead others astray.

Please let Jim Taylor know that the "Out of the Net" column is interesting as it is. He's doing a good job. You too.

*Rudy de Mordaigle,*

K76741 B3-111, HDSP Box 3030,  
Susanville, CA 96127

*Thanks for the kudos and I know that Jim appreciates it too. As for the URL/email address issue, you may already have noticed that they have changed recently - you weren't the only one to suggest this change. The problem is that variations on text fonts are quickly exhausted. Bold is already used to offset titles, italics are used for scientific names or non-english words, etc. I wanted to offset email addresses and URL's (universal resource locator for web-impaired readers) from the text to draw attention to them so chose small caps. It would've worked too - it does nicely set off these addresses - if it wasn't for UNIX and case-sensitive servers. I'm now combining bold, italic AND lowercase for these addresses - it's not nearly as elegant but it does serve the purpose - Ed.*



## Yellow Underwings All Around...

Dear Editor,

I found it interesting to see the Yellow Underwing Moth (*Noctua pronuba* L.) on the cover of the **Journal of the Lepidopterists' Society** (Vol. 51(3), 5 Dec. 1997) and the note on the inside cover. In the fall of 1996 I found one of these moths here in eastern Pennsylvania. In the fall of 1997 I caught two more, one having light brown, and the other having dark brown, forewings.



*Pen and ink drawing by John Himmelman from the cover of the **Journal** 51(3).*

At the time I could not identify this moth - although I had figured that it was a Noctuid - as it did not appear in Covell's **A Field Guide to the Moths of Eastern North America** as stated in the **Journal** note. I didn't see it in Holland, either. The first hint of what it was was on an insect sticker set manufactured by California Pacific Designs, Silverwings Collector Stickers, which called it a "yellow moth".

I wondered why I had not seen this moth in previous years but the **Journal's** note stated that it was a newcomer to Connecticut from Canada, where it was introduced two decades ago, in 1993. I wish to report that it now

has, as of 1996, reached at least half-way down Pennsylvania in the vicinity of the Delaware River. This year I have seen it 30 miles further south than in the two previous years, from spring well into summer, and in greater numbers.

It seems to be highly variable as I have seen it with light, dark or heavily patterned forewings. I would like to know more about this moth, its current range, and the differences in its forewing patterns.

*Ron Roscioli*

101 Rose Court, Easton,  
PA 18042-9546



## The Harry K. Clench Memorial Award

*Alma Solis*

This award is given to the best student paper presented at the Annual Meeting of The Lepidopterists' Society each year and consists of an honorarium of \$250.00 and a certificate suitable for framing. The award is in memory of the late Harry K. Clench, Associate Curator of Entomology at the Carnegie Museum, Pittsburgh, Pennsylvania, and co-founder of the Lepidopterists' Society. The student paper can embrace any and all aspects of the study of Lepidoptera, reflecting the unusually diverse interests of Harry Clench, including systematics, biogeography, evolution, ecology, physiology, behavior, development, and natural history. The paper may address any group of Lepidoptera, moths or butterflies.

*continued on page 103...*



# Season Summary Online

Jim Tuttle

4285 N. Homestead Ave., Tucson, Arizona 85749

The Society is proud to announce that Season Summary records are now accessible "on-line" through the Society home page at [www.furman.edu/~snyder/snyder/lep/](http://www.furman.edu/~snyder/snyder/lep/). The Season Summary database was automated in 1995 and contains all records since that time, and all Saturniidae and Sphingidae records since 1971. The database is updated annually with the records from the past year, and its value will continue to increase as the size of the database grows.

The database is designed to allow the user to search in one of two ways. Searches can be conducted by taxonomic category or type (i.e., butterflies or moths) as follows:

### Search by taxon or type:

- #1 all Sphingidae records from the state of Florida
- #2 all *Papilio* species records from Mexico
- #3 all *Automeris io* records from Cameron County, Texas

Each search can be further refined to include only a single month of the year:

- #1a all Sphingidae records from the state of Florida in the month of November

Searches can also be conducted by geographic area as follows:

### Search by geographic area:

- #4 all Ontario butterfly records
- #5 all Pima County, Arizona Arctiidae records

As above, each search can be further refined to include only a single month of the year:

- #5a all Pima County, Arizona Arctiidae records for the month of July

The "on-line" Season Summary database allows the Society to reach a broad range of people interested in the study of Lepidoptera and will hopefully stimulate additional interest in The Lepidopterists' Society. Periodic announcements of the databases' availability will be posted on the internet. In addition, when used properly it is a valuable tool that can be used by amateurs planning vacations or professionals conducting research.

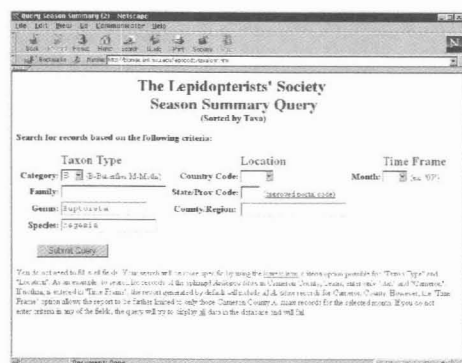
**Just remember that the database is a pointer system, and existing records only offer leads in choosing sites, selecting dates, and identifying other collectors to be contacted about additional information.** The absence of records in the database should not automatically be interpreted as the absence of the taxon in nature. As indicated above, the value of the database will only increase as it continues to grow each season.

The continued growth of the database is dependent upon contributors like you who take the time to submit their observations each year. Over the past few years this has meant a number of changes in the submission process and strict deadlines. Though at times pain-

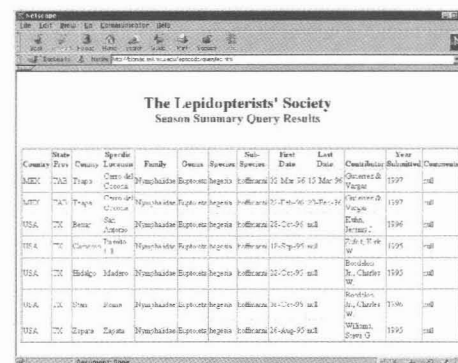
ful, these changes were necessary to ensure the quality of the data and get the hard copy Season Summary to you in a timely fashion. Submissions must be received by the appropriate Zone Coordinator by December 15, because they, in turn, must have their report to the Season Summary Editor by January 15. When you consider that the Zone Coordinator only has four weeks to compile their report, and that time frame includes the Christmas holidays, you can see why we encourage submissions as early as possible.

Shortly after the Season Summary Editor receives the individual zone reports, the annual report is compiled and draft copies are sent back to each individual Zone Coordinator to review. We then must get the final copy to the printer in time to meet our targeted goal of having the Season Summary in your hands by April 1. This process of quality control takes time, but helps to ensure that the new data that is added to the "on-line" database each year is as accurate as possible. Remember, this is a pointer system, if you question the determination of a specific record it is incumbent upon you to contact the original contributor.

*continued on page 103...*



A search screen (for *Euptoieta hegesia*) in the Windows version of Netscape Navigator



A results screen (for *Euptoieta hegesia*) in the Windows version of Netscape Navigator



# A Renaissance Man in a Denegraded but Still Fabulous Paradise... or, My Trip to Madagascar

Sanford Leffler

4701 15th Av. NE, #6, Seattle, WA 98105

When I read the mail notice, early in 1996, that Expedition Travels Inc., Gainesville, Florida, was offering a trip to Madagascar 6-25-X-1996, it took me less than two seconds to decide this was for me. Friends take vacation trips to the ocean. Me too, but, this time, my ocean was the Indian. Friends asked me why I wanted to go to Madagascar. Avoiding the usual facetious answers such as "because it's there," or "why not," I entered Biologist Mode and explained that the island has been frozen in time, it has been environmentally devastated, and I want to see it for myself. Before I left, friends were not very impressed by my responses, but, when I returned and they saw my photos, they congratulated me for choosing such a fascinating place.

Ten days: hardly enough time to sample more than a tiny amount of this the fourth largest island in the world. We traveled from the very European-looking capital Antananarivo, at about the nation's center, south to Isalo National Park, some 80 km north of the Tropic of Capricorn. Along the way, we explored along 800 km from the Central Highlands to the flat south-central grasslands of the Horombe Plateau, with side trips eastward to the still pristine rainforests of Perinet and Ranavalona National Parks. A system of 18 national and private parks and reserves, some up to 100 km long north to south, graces the island. Tourism is a necessity to provide revenue to support and expand the park system. Italy, France, Netherlands, Great Britain, and the USA, supply the largest numbers of tourists.

Perinet, east of Antsirabe, is particularly devoted to the black and white babakoto (indri) whose wonderous sad cries ring among the *Symphonia* trees. Nearly continuous to the south is Ranavalona where unfettered white water tumbles between granite walls festooned with ferns, orchids, sundew, and African violets, with *Papilio demodocus* and *Graphium oribazus* dancing provocatively just beyond net-reach, and tiny blues puddling following a refreshing fall of rain, while African Black Swifts hawked who-knows-what overhead. The Ranavalona National Park museum store capitalizes on one of the park's more bizarre residents by selling T-shirts featuring the black and red giraffe beetle (*Trachelophorus giraffa*—Attelabidae).

It was not quite the rainy season but a squall produced an unexpected foggy and biting chill at Ranavalona, continuing south with us to create a stunning, splendid double rainbow over the termite mound-studded red sands of the Horombe and forcing unprepared residents to try to keep warm by wrapping themselves in cotton lambas ill suited for the ordeal. Opportunistic people harvest termites from the mounds to feed to their chickens before the feisty black and white Pied Crows get there first.

Everywhere was a generally thriving population, able to support itself even in tiny outlying villages, with charming, curious, energetic children always with a nearby adult keeping a close watch on them. It was heartwarming to see the zoo and parks swarming with groups of school children, neatly dressed in colorful school uniforms,

hopefully some future environmentalists among them. I had to question the good intentions of relief agencies that provided shoes for a people who, outside the cities, generally went barefoot or, at most, wore rubber 'shower thongs'. But it was disheartening at dusk to see the narrow sidewalks lining the tunnels in Antananarivo crowded with homeless people wrapped against the cool night, building tiny fires, or being besieged in Antsirabe by pesty rickshaw drivers, panhandlers, and peddlars of everything from barbeque skewers to toys made from pop cans.

Agricultural practices have ecologically altered 80% of the island to favor a cycle of producing bricks and growing trees for firewood. Native forest is cleared by burning to allow growth of grass to promote grazing by zebu. Creeks are dammed to form rice paddies. Introduced fast-growing *Eucalyptus* and three-needle pine are planted which, after a few years are cut into firewood, this burned into charcoal. Whatever charcoal they themselves do not use, the landowners sell in big sacks with straw stuffed into the top to prevent spillage. Meanwhile, the paddies are planted and fertilized with zebu dung. Clay from the spent paddies is cooked in kilns made of the very bricks they produce, fueled by the charcoal. A fine recycling of resources except that the natural forest is cancelled from the equation.

Despite my having been inoculated against every hideous tropical disease, I fell victim to an unexpected reaction to a glass of tamarind juice, not realizing that the tamarind is a legume, to

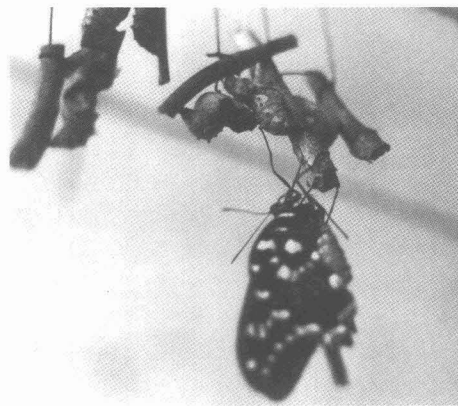
many of which I am allergic. In the coal-blackness of my hotel room (lights go off at 11:30 PM to conserve power), I had only briefly to decide whether to vomit in the toilet or go outside. Scientist that I am, the thought actually went through my dazed mind as to whether vomit deposited outside would attract insects. We'd never learn the answer. Despite claims in the guidebooks to the contrary, no, Virginia, there is nothing whatever wrong with Malagasy toilet paper: it is completely tush-friendly. Throughout the trip, rather than tempt fate with the water, I drank Eau Vive, a percentage of the sales proceeds of which support national social programs.

What I most wanted was to see, through the ecological disaster that has befallen most of the island, was bits of natural wonder like that gekko stuffing itself on moths attracted to our blacklight. Some 60 km east of Antananarivo along the main highway is the Marozeva Butterfly Farm. Species of *Papilio*, *Kallima*, *Precis*, and *Salamis*, among others, fly in large, screened flight cages, each set up like a mini-botanical garden. In other cages, many of the several dozen species of Malagasy chameleons, many endangered and ranging in size from the 10 cm long *Brooksia* spp. to the 1/2 meter long, goldblotched, green *Chameleon parsoni*, are raised. Within the main building, specimens of singing cockroaches, *Papilio dardanus meriones*, *Pharmacophagus antenor*, and Madagascar Comet Moth, *Cometsia mittrei* (Saturniidae), with its magnificent net-like, satiny cocoon, are pre-



Marondava Butterfly Farm: *Papilio dardanus meriones*. Photo by S. Leffler.

pared for sale throughout the world. Specimens of many of the butterflies are available, quite cheaply, for sale for \$1-3 each at the Farm's office. After viewing the fruit bats, vine snakes, and tomato toads in their enclosures with them, we lunched on delicious Malagasy pizza in a gazebo while watching brown lemurs cavort on an island in a lake where Moorhens and White-faced Tree Ducks swam and a Malachite Kingfisher, flashing rufous and steely blue, fished.



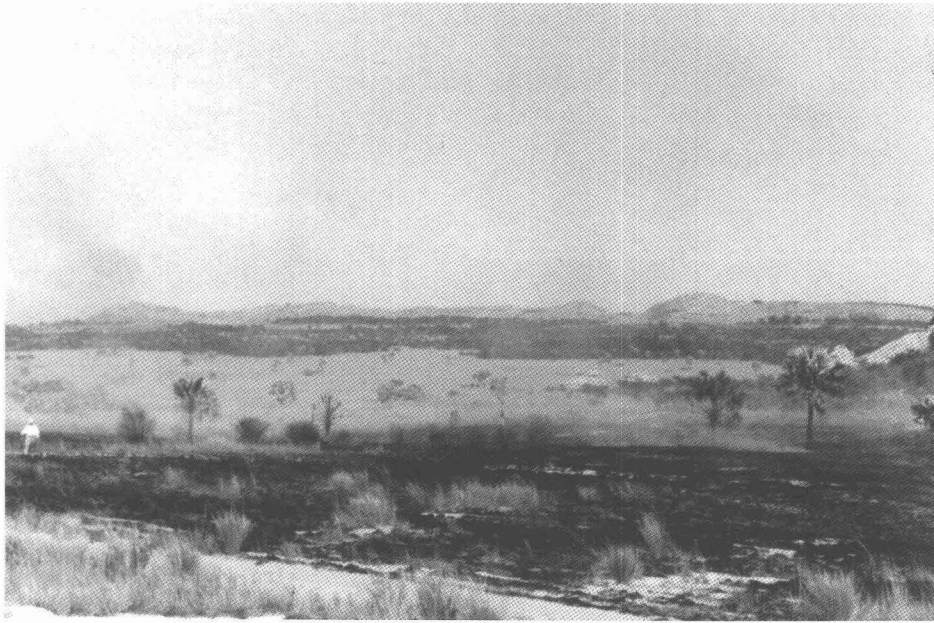
Marondava Butterfly Farm: female imago *Pharmacophagus antenor* and several chrysalids. Photo by S. Leffler.

Experiencing natural wonders often involved little effort. On pleasant evenings, we digested sumptuous repasts of zebu du jour on our bungalow porch at the Vakona Hotel, situated in a 50% *Eucalyptus* forest some 70 km east of Antananarivo and also home to a sawmill (vakona means sawdust) and a graphite mine that can be toured. Our gracious leader entertained us with Malagasy music, accompanying himself on a valiha, a meter-long, cylindrical instrument with up to 24 strings. Four cm-long rhinoceros beetles, attracted to our blacklight crash-landed and bounced while choruses of frogs sang their hearts out from the ponds bordering the dense forest. Representatives of several moth families, including Arctiidae (notably a *Utethesia*-like form), Geometridae, Noctuidae (especially attractive was a *Nyctipo*-like underwing), Pyralidae, and Spingidae. Three *Antherina suraka* (Saturniidae) came to the blacklight during our three-

night stay and a fourth was attracted to the hotel's lights. During the day, I collected one of the endemic satyrids, *Henotesia*, while listening to cuckoos calling from the underbrush.

As one travels south through the Cental Highlands along Highway A7, the landscape changes from rolling, denuded, red granitic rabb hills to the flat grasslands of the Horombe Plateau, a scene unexpected for Madagascar and reminiscent of true African savannah (but without the herds of mammals other than domestic zebus near the scattered villages). Appropriately, Horombe means "lots of grass." The southern city of Ihosy did not predict the gut-jarring, as-yet-unpaved 200 km still to go before we reached Isalo National Park. Yellow-bloomed *Pachypodium* with their hand-shaped stems and an occasional baobob presaged the endemic thorn-scrub of the island's southland that I did not have the opportunity to visit. A lunch-stop at Isohy proved entomologically interesting with *Papilio demodocus* flying in a restaurant garden dominated by tree-*Poinsettias* while I entertained members of a French tour group with my two-handed capture of a *Phalanta phalanta aethiopica* (small—perhaps not *aethiopica*?) inside the van while still strapped in by my seatbelt.

Isalo National Park preserves part of the bizarrely sculpted, highly colored Triassic sandstones of the Isalo formation, a correlate of the South African Karroo formation and which help mark a post-Triassic separation of Madagascar from the mainland. The oasis at the hotel east of Isalo National Park of *Pandanus* and palms is surrounded by grassland and then thorn-scrub. I sank to my ankles in muck prior to collecting *Eurema floricola*, *Danaus chrysippus*, and three species of Lycaenidae. One of the latter was along a grass-bordered rivulet, another over meter-tall grass, and the third barely within net-reach about two meters up in a fig tree. Madagascar Rollers, a pair of hoopoes, and a circling Black Kite witnessed my activities. I did not expect to see



South of entrance to Isalo National Park: habitat of *Pharmacophagus antenor*. Note the burning of scrub for agricultural purposes at right. Photo by S. Leffler.

*Pharmacophagus antenor* flying over a stretch of the thorn scrub near the park, leading silly-looking and desperate entomologists on a chase that was eventually fruitful (though not for the butterfly).

Malagasy butterflies are related to the African fauna with radiations of lycaenids, pierids, and satyrids, with a less pronounced one of *Acraea*, *Eurema* and *Pharmacophagus* having Asian affinities. The two dozen or so species of moths I collected will take effort to identify to family and subfamily, let alone to genus and species, since my local University library lacks necessary 19th Century references. A minor infestation of bagworms (Psychidae) north of Fianarantsoa showing as nests up to 30 cm long on *Eucalyptus*. Unable to have seen the actual moth, I do not know if this is a native species that switched foodplants or was imported along with the *Eucalyptus*. I harbored the not very secret hope that this psychid would annihilate all the *Eucalyptus* and permit a return of the native vegetation.

Some 80% of natural habitat now destroyed, lain waste by ingrained, millenia-old, but ruinous agricultural practices... Subjected to the heavy precipitation befitting a tropical land but deprived of verdant forests so that runoff into rivers bleeds rusty into the ocean... Unchecked exhaust emissions from vehicles without the requirement of catalytic converters adding continuously to a smoggy pall engulfing the cities and often uncontrolled fires torturing the countryside... Yet hope springs eternal in the enthusiastic faces of school children packing the beautifully maintained zoo, botanical garden, and natural history and cultural museum in Antananarivo. And in the parks and hotels - and the butterfly farm - capitalizing on their natural attractions to draw tourists and adventurers from throughout the world. And that never-ceasing wonder of a swallowtail caterpillar 'looking up' with expressive eyespots from its meal of orange leaves in a health spa garden. Some of wild Madagascar does remain.

**Award...continued from pp. 99**

Eligible students include those who have not completed their degrees, or have received the degree within the last 6 months, and have notified the organizer of the Annual Meeting in writing that the paper should be considered for the award. Student presentations are judged primarily on the substance and scholarly merit of original research, historical perspective, and literature review, accounting for 75% of the evaluation. The remaining 25% of the evaluation will be based on the student's delivery and presentation.

**Online...continued from pp. 100**

Take a look at this accessible and exciting new tool. It offers a great opportunity for everyone to contribute to the science of lepidopterology, and the "on-line" Season Summary gives The Lepidopterists' Society a jump on the 21st century.

The project would not have been possible without the commitment of the individual Zone Coordinators, my wife Peg for developing the database program, Bob Kriegel and Amos Ziegler for creating the JavaScript application, the Entomology Department at Michigan State University for housing the database, and John Snyder and Furman University for housing the Lepidopterists' Society home page.



Fred Stehr, Ted Herig, Mo Nielsen, unknown, Larry Gall (front), Jim Vargo and John Peacock "mug" for a group shot at the 1998 Annual Meeting in Eureka, Illinois. Photo by Charlie Covell.

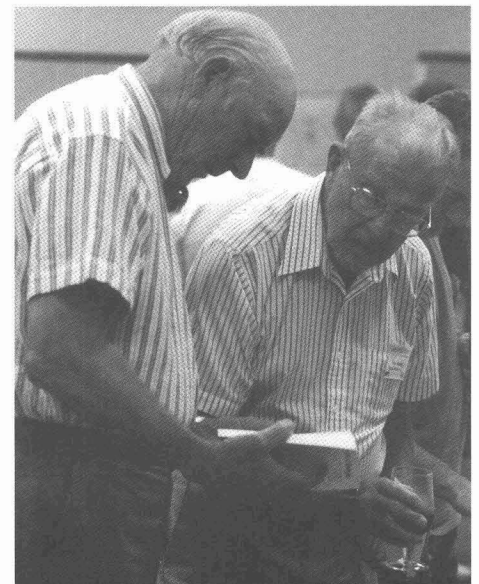






## More 1998 Meeting Photos...

Various views of the Banquet, the BBQ/Picnic and the Books-for-Sale table. Too many folks to try and name them all (even if I could)! Left: Charlie Covell, Stan Nicolay and Dave Ahrenholz. Right: Mo Nielsen and Stan Nicolay looking over the books. All photos by Charlie Covell except shot of BBQ/Picnic (upper right) by Peg Tuttle.



# Nomenclature at Ten Paces

Paul Manton

10 Flower Street, Hicksville, NY 11801

The always erudite and witty Henry Alford's "Shore Leave" (**The New Yorker**, 8/10/98) is a wonderful rumination on the psychological state of seashells – and people – with names like Depressed Vitrinella, Perverse Whelk, and Lurid Dwarf Triton. My favorite is Unstable Limpet, which to my ears smacks of a Don Knotts-esque neurotic in want of Viagra. This rather curious collection of molluskian monikers is no figment of Mr. Alford's imagination. All were gleaned from the Mollusks Library at the Smithsonian Institution's National Museum of Natural History in Washington, DC.

Lepidopterists are not to be outdone by this taxonomic challenge to the field of honor. The study of Lepidoptera has equally incredulous appellations forevermore lost in the arcane realm of entomological etymology. Ever since William, the Prince of Orange, was honored for usurping King James in 1688 with the namesake Monarch (*Danaus plexippus*), a royal line of Queens (*Danaus gilippus*) and Viceroy (*Basilarchia archippus*) ensued, attended by Admirals (*Vanessa atalanta*). The Empire described by Kipling as

having "dominion over palm and pine" bequeathed Queen Victoria's Birdwing (*Ornithoptera victoriae*), Lord Rothschild's Birdwing (*Ornithoptera rothschildi*), and Rajah Brooke's Birdwing (*Trogonoptera brookiana*) – all brought to the attention of western science by Henry Bates, Alfred Wallace, and other lepidopterists in the noonday sun.

The moth world is especially eccentric where names are concerned. I would love to know whence came the dubbing of the Impressed Dagger Moth (*Acrionicta impressa*), the Abrupt Brother (*Raphia abrupta*), and the Sweetheart Underwing (*Catocala ultronia*). Then there is the Girlfriend Underwing (*Catocala amica*), inescapably conjuring images of an older college roommate.

Some curious lepidopteran names require an extensive imagination. Hubner named the Hebrew (*Polygrammate hebraeicum*) for the marking on the wings that he thought resembled Hebrew letters (they look more like Hindi script to me). The thoracic pattern on the Death's Head moth (*Acrionicta styx*) of **The Silence of the Lambs** fame,

suggests an executioner's hood far more than a human skull. The California Dogface (*Zerene eurydice*) is not the least bit evocative of either a canine or a battle-seasoned GI. But decades of Ripley's **Believe It or Not**-type exposure will never dissuade the public otherwise.

Caterpillars have their ornate names to be sure. Orange Dogs (*Papilio cresphontes*), Woolly Bears (*Isia isabella*), Yellow Woolly Bears (*Diacrisia virginica*), and Hickory Horned Devils (*Citheronia regalis*) abound. But the Nameless Pinion (*Lithophane innominata*) takes the cake. The USDA's **Caterpillars of Eastern Forests** (Wagner, et al., 1997), advises lepidopterists that "*L. bethunei*, *L. hemina*, and other pinions have similar caterpillars – rearing to adult should be attempted to confirm identifications." Perhaps the Nameless Pinion should be called the Oftentimes Confused Pinion? But then, alas, it would be confused with at least two other confused insects. Are you following any of this? If not, lepidopterological nomenclature might simply be one big Question Mark (*Polygonia interrogationis*).

## 1999 Lepidopterists' Society Meeting

Paul Opler

P.O. Box 2662, Loveland, CO 80539-8921

Next year's annual Lepidopterists' Society Meeting will be held jointly with the Pacific Slope Section at the Windemere Conference Center and Hotel in Sierra Vista, Arizona from August 4-8.

Sierra Vista is at 4,632 feet elevation (about 1,500 meters) and is located on the east slope of the Huachuca Mts. in Cochise County. At this elevation the

temperatures are warm but not unbearable. This is the season when afternoon and evening thunderstorms may occur. It is a few hours drive from all of the "Sky Island" ranges (including the Huachucas, Chiricahuas, Patagonias, Santa Ritas, and Dragoons) where moth and butterfly collecting, viewing, and photography is at its best at this season. There is year to year variation

depending on the monsoon rains. This is the richest area for Lepidoptera in North America north of Mexico.

It is hoped that all attendees can stay at the Windemere where a special rate of \$68.00 USD + tax per room per night has been arranged. Up to 4 persons may occupy a room at this rate, which also includes a full American breakfast bar

*continued on next page...*

**1999...continued from previous page**

(the works) and free beverages and snacks at social hour (5-7) each evening. All meetings and presentations will take place at the Windemere.

A rough schedule is as follows:

**Wednesday, August 4<sup>th</sup>:** field trips

**Thursday, August 5<sup>th</sup>:** Council meeting and field trips. Evening reception for attendees at Windemere, make your own sandwiches and cash bar.

**Friday, August 6<sup>th</sup>:** Paper presentations during day, lunch on your own.

Photo salon, poster presentations, and commercial booths will take place throughout meeting. Southwestern Cookout in evening at Gammons Gulch (Ghost Town movie set) featuring top sirloin and char-broiled chicken.

**Saturday, August 7<sup>th</sup>:** Paper presentations during day, lunch on your own. Annual banquet at Windemere featuring choice of Chicken Piccata or Spinach Tortellini Marinara. Followed by award presentations, illustrated Presidential Address on Southwestern Moths by Michael Smith and the Door Prize drawing.

**Sunday, August 8<sup>th</sup>:** Paper presentations and annual business meeting in morning. The meeting will end at noon. The possibility of post-meeting trips will be explored.

Attendees may call the Windemere [1-800/825-4656] for reservations. Please mention the Lepidopterists' Society to receive the special rate. See the center spread for registration and paper presentation forms. For pamphlets, and maps write to Paul Opler at the address above. For those interested in organizing a symposium, please write to: Michael Smith, 1608 Presidio Way, Sacramento, CA 95661 [USA].

## A Fair Book Review? A reply to Mr. Willmott

Andrew V. Z. Brower

*Rice Chair of Systematic Entomology, Dept. of Entomology, Oregon State University, Corvallis, OR 97331-2907*

In the last issue of the **News** (40(4): 92), Keith Willmott took umbrage at some critical suggestions I made in my review (1997, *J. N. Y. Ent. Soc.* 104: 236-239) of Andrew Neild's "The Butterflies of Venezuela, part 1" (1996). I would like to point out first of all that Neild's book is one of the best butterfly guides I have seen, and I duly praised it in my review. I believe that a book review should critically address both positive and negative aspects of a book, to stimulate the continued improvement of the discipline. This is especially important when the book is one of a series, as is the case here. It was my hope that the suggestions for improvement that I offered would encourage Mr. Neild to produce an even better volume 2.

The aspect of the Neild's book that I found most troubling was the descriptions of 26 new species and subspecies, included among the accounts of known taxa. I am sure Mr. Neild consulted col-

leagues for advice and comments on his manuscript, and I do not question the sincerity of his efforts to ensure the quality of his work. However, I believe that new taxonomic descriptions should be submitted to journals and subjected to anonymous peer review before they are deemed worthy of publication. I would not expect to receive a critical review from a friend after whom I had named a subspecies in the manuscript! The marginal description of new taxa in guide books is obviously not a phenomenon unique to Mr. Neild, and it is quite clear that many lepidopterological and other scientific journals do not heed the recommendations of reviewers, if such reviewers are even sought. Nevertheless, it should always be remembered that new names are indelible marks on the body of taxonomic knowledge, and will add to the burden of future revisionary workers, regardless of their worth.

The examples in my review that piqued Mr. Willmott's ire arose in my effort to test Neild's book by using it to update the curation of the AMNH and NMNH *Adelpha* collections in February and March, 1997. At that time, neither collection showed any sign of Mr. Willmott's expert curatorial hand. Whether the "anonymous curators" of the two largest natural history museums in the New World are qualified to do their jobs, or not (as Mr. Willmott implied), I cannot say. I am sure they will be eager to see their "clearly far from expert" efforts superseded by Mr. Willmott's authoritative labors. After all, only an expert can winnow the mislabelled specimens from the *bona fide* locality records. I look forwards with great anticipation to the publication of his *Adelpha* monograph, and express my hope that it will appear in a peer-reviewed journal.





*Meeting Report...*

# The 3<sup>rd</sup> International Butterfly Ecology and Evolution Symposium

Phil Schappert

Department of Zoology, University of Texas, Austin, TX 78712-1064

Most of you are familiar with **The Biology of Butterflies** (Vane-Wright, R.I. & Ackery, P.R. (eds.), Academic Press, 1984), considered by some to be the “bible” of butterfly biology. The meeting that yielded that volume, held in 1982 under the auspices of the Royal Entomological Society of London, was the 1<sup>st</sup> International Butterfly Ecology and Evolution Symposium (IBEES). The attendees agreed that it would be wonderful to have an international symposium of that scale again, perhaps on a four-year schedule (think of it as a “butterfly olympics”). Still, the second IBEES wasn't held until 1994, in Sweden. This year the IBEES re-convened from August 15–19, under the auspices of the Center for Conservation Biology, Stanford University and the Rocky Mountain Biological Laboratory, in lovely Mt. Crested Butte, Colorado.

That first meeting had been dedicated to E.B. “Ernie” Ford, acknowledged as the “father” of British butterfly biology, on the occasion of his 80<sup>th</sup> birthday. This year the American organizing committee—Carol Boggs, Paul Ehrlich and Ward Watt—felt it would be appropriate to, in turn, honor the “father” of American butterfly biology so Charles Remington, familiar to members as one of the co-founders of this Society, was the Honorary President of the meeting. A total of 144 researchers attended, including some 60 graduate students, from 19 countries giving 59 talks and 59 poster presentations. It was a busy 3½ days!

There were invited presentations from Paul Brakefield (Netherlands; *The evolution of butterfly eyespot patterns*), Larry Gilbert (U.S.; *Introgression and*

*evolutionary novelty in Heliconius wing patterns*), Ilka Hanski (Finland; *The Biology of extinctions in butterfly meta-populations*), Naomi Pierce (U.S.; *Carnivorous and other aphytophagous Lepidoptera*), Art Shapiro (U.S.; *Phenofaunistics: seasonality as a property of butterfly faunas*), Michael Singer (U.S.; *Spatial pattern in butterfly hostplant associations*), Felix Sperling (U.S.; *Genetic differences at the species boundary in butterflies*), Dick Vane-Wright (U.K.; *Is the whole more than the sum of parts? Values, evidence and identity in butterfly systematics*), and Christer Wiklund (Sweden; *Sexual selection and the evolution of butterfly mating systems*). Unfortunately, Ron Rutowski (U.S.; *Visual ecology of butterflies*) was unable to attend due to a death in his family and Carol Boggs (U.S.; *Allocation, environmental variation and population dynamics*) graciously gave a truncated version of her presentation due to time considerations.

Other researchers presenting talks or posters whose names members might recognize included Woody Benson (Brazil), Andy Brower (U.S.), Astrid Caldas and Bob Robbins (Brazil and U.S.), Francie Chew (U.S.), Steve Collins (Kenya), Phil DeVries (U.S.), Bengt Karlsson (Sweden), Joel Kingsolver (U.S.), Roger Kitching (Australia), Claire Kremen (U.S.), David Lees (U.K.), Camille Parmesan (U.S.), David Ritland (U.S.), Jens Roland (Canada), J. Mark Scriber (U.S.), Bob Srygley (U.K. and U.S.), Chris Thomas (U.K.), Mamoru Watanabe (Japan), and Ward Watt (U.S.).

Paul Ehrlich (U.S.) gave an after ban-

quet plenary talk entitled *Butterfly biology in the future* which included an unabashed *festschrift* for Charles Remington, and some telling remarks about this Society (ask Deane Bowers about this sometime—if you dare). Despite an illness (which quickly swept through the unsuspecting, I might add) Dr. Ehrlich kept us alternately glued to our seats or rolling on the floor with laughter. It seems the early days of lepidopterology in the U.S. had some *risqué* moments. Dr. Remington, introduced to a standing ovation, concluded the evening, enjoying the “theatre in the round” in the process, by confirming most of the stories (and adding a few of his own in the process). It was, for the most part, a wonderful evening and a fitting capstone on the symposium.

But it's not over yet! It's entirely likely that the best part of the whole symposium, at least as far as those who were unable to attend is concerned, is still to come... An edited volume with invited chapters, including a CD-ROM with color plates and all of the abstracts (talks and posters), from the meeting is scheduled to appear late next year. The theme of the book is “butterflies as model systems for research” and is intended to present both where we are in our knowledge of the ecology, evolution and genetics of butterflies, but also where we are going. A new “bible”?

The 4<sup>th</sup> IBEES is tentatively scheduled for Leiden, Netherlands in four years. You might want to consider making some long-range plans...

*Thanks to Carol Boggs for providing statistics and additional information on the upcoming volume and to Larry Gilbert and Marcio Cardoso for the photos (see pp. 114-115).*

# Pupal Movements: Basking and Antibasking?

Gerald E. Einem

96 River Bend Drive, Brownsville, TX 78520

Of all of the stages in the lepidopteran life cycle, the biology and ecology of the pupa is the least known (DeVries, 1986; White, 1987). For example, abdominal movements are seen in many moth and butterfly pupae yet for most species the purpose or adaptive advantage of these movements is poorly understood. Abdominal movements of pupae can produce sounds, extract a pupa from a cocoon, or as described in this report, may orient a pupa toward or away from the sun.

Sound production by abdominal stridulation is found in seven lepidopteran families. Generally the sound is produced by rubbing tubercles or ridges on one abdominal segment against similar elements on an adjacent segment (Hinton, 1948). For instance, most Lycaenid pupae produce faint sounds from tiny file-and-peg structures where two abdominal segments meet (Downey

& Allen, 1978). Other abdominal movements enable some primitive pupae to wriggle from their cocoon just prior to ecdysis. Spines along the dorsal surface of the abdomen prevent the pupae from slipping backward. (Scoble, 1995). My observations of the movement of pupae suggest yet another function of abdominal movements, the regulation of body temperature.

The behavioral regulation of body temperature by basking or antibasking has been described for adults and larvae but not for the pupal stage. Adults can regulate body temperature by posturing (basking), flying to another area, or wing vibrations (Scoble, 1995). Swallowtail (Papilionidae) larvae, in bright sunlight, may orient their head toward the sun while raising the anterior part of their body perpendicular to the substrate upon which it is resting. This antibasking behavior, reducing expo-

sure to the sun, is the antithesis of basking (Minno, 1997). In this report, I describe pupal posturing in the Gulf Fritillary, *Agraulis vanillae* L. (Nymphalidae), which suggests both basking and antibasking behavior.

## Methods

Gulf Fritillary larvae and pupae were observed in my Brownsville, Cameron County, Texas backyard where a passionflower vine (*Passiflora incarnata* × 'Incense', Passifloraceae) was growing on a large wooden arbor. In July 1995, five pupae (see Table, A) and in December 1996, two pupae (see Table, B) were found attached beneath a horizontal beam near the top of the arbor.

As is characteristic of many Nymphalidae, the *A. vanillae* pupae were freely suspended by a cremaster attached to a silk pad, permitting side-to-side movement. When in a typical resting position, the pupae hung head downward, almost perpendicular to the horizontal beam to which they were attached. The pupae were exposed to full sunlight or a bright partly overcast sky.

Periodically, I recorded the position of each pupa as bent towards the sun (basking), bent away from the sun (antibasking) or vertical (resting). The ambient air temperature in the shade was recorded at the time of each observation.

## Results

In response to the position of the sun and the ambient air temperature, pupae appeared to bend their abdomens, positioning the head and thorax in a manner that increased or decreased exposure to the sun (Table A, B). Bending in the direction of the sun increased solar exposure (see Figure on pp. 117).

*continued on page 115...*

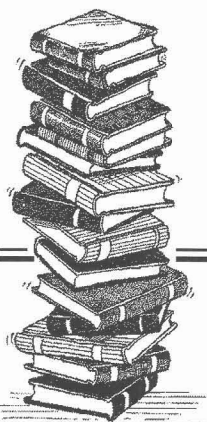
Orientation of *Agraulis vanillae* pupae: bent toward the sun, away from the sun, or vertical. A (1995), 5 pupae; B (1996), 2 pupae. An asterisk denotes times after sunset. All times are Central Standard.

### A.

Date: 1995	July 7	July 8	July 8	July 8
Time:	2024h	0830h	1000h	2130h*
Temperature (°C):	28	29	30.5	26
<b>Pupae No. 1-5</b>	toward	toward	away	vertical
Date: 1995	July 9	July 9	July 9	July 9
Time:	0830h	0900h	1615h	1630h
Temperature (°C):	27	29	31	31
<b>Pupae No. 1-4</b>	toward	away	away	away
<b>Pupa No. 5</b>	toward	away	vertical	away

### B.

Date: 1996	Dec. 1	Dec. 2	Dec. 2	Dec. 2	Dec. 2
Time:	0830-1030h	0830h	1230h	1600h	2020h*
Temperature (°C):	13-17	18	23	20	16.5
<b>Pupa No. 1</b>	toward	vertical	(eclosion)	—	—
<b>Pupa No. 2</b>	toward	toward	—	toward	vertical



# The Lepidopterists' Bookshelf

M. Alma Solis, Editor

## Living Butterflies of Southern Africa: Biology, Ecology and Conservation. Volume I. Hesperidae, Papilionidae and Pieridae of South Africa

by Graham A. Henning, Stephen F. Henning, John G. Joannou and Stephen E. Woodhall. 1997. Published by Umdaus Press, 397 pages, 469 color photographs, 1 black and white photograph, 69 color illustrations, 27 black and white illustrations and diagrams, 153 maps. Available from Umdaus Press, P. O. Box 11059, Brooklyn, 0011 Pretoria, South Africa. FAX: 27-11-884-5685; E-mail: [kambroo@cis.co.za](mailto:kambroo@cis.co.za); ISBN 1-919766-03-0, Standard Edition, U.S. \$129.00 (postpaid, airmail) (hardcover, dustjacket, glossy paper, 24 x 30.5 cm).

Anyone knowing of the publication of new titles of books, video, or audio tapes of interest to lepidopterists, and especially of books published outside the United States, are requested to send full particulars to the Book Review Editor, The Lepidopterists' Society, both for announcement in this column and to allow for timely review in the **Journal** or **News** of The Lepidopterists' Society.

Publishers are invited to send review copies directly to the Book Review Editor for consideration for review in the **News** or **Journal**. Members interested in re-viewing books for the **News** or the **Journal** should send their requests or interests to:

Dr. M. Alma Solis  
Systematic Entomology Lab., USDA,  
c/o National Museum of Natural  
History, MRC 127,  
Washington, D.C.  
20560, (202) 382-  
1785 (office), (202)  
786-9422 (fax)

E-mail: [asolis@sel.barc.usda.gov](mailto:asolis@sel.barc.usda.gov)

This is the kind of book we need more of! Fortunately, it is the first of a five-volume series that will eventually provide detailed discussions and brilliant photographs of all the butterflies of southern Africa. The first four volumes will treat all butterfly species known to occur in South Africa, Lesotho, and Swaziland, also indicating the distribution of these species in Namibia, Botswana, Zimbabwe, and Moçambique.

This first volume treats all Hesperidae (93 species), Papilionidae (15 species) and Pieridae (48 species) known from South Africa. Volumes II (Nymphalidae), III (Lycaenidae: Theclinae), IV (all other Lycaenidae) will be produced over the next few years. The fifth volume is to deal with all butterfly species that occur in Namibia, Botswana, Zimbabwe, and Moçambique, which do not occur in South Africa, Lesotho or Swaziland. Together, these volumes comprise the Living Butterflies of Southern Africa project.

The title of this project is an indication of what sets this book

apart from its recent predecessors. Species treatments portray these butterflies as living organisms, each with a unique biology and habitat, not just objects that can be collected at a certain place and time. Instead of an extensive section on how to make a butterfly collection (as seen in most previous books on the subject), the introduction of this book contains useful, extensively illustrated sections on butterfly systematics and nomenclature, butterfly life cycle (including morphology and terminology), behavior and habits, zoogeography (including illustrations of major habitat types in southern Africa), breeding butterflies, and butterfly conservation.

Great care is taken in the conservation section to explain the need for collecting, and to separate insect collecting from the list of major threats to butterfly populations. Major threats to southern African butterflies discussed include habitat destruction, invasion of alien plant species (herein termed "invasive green cancers"), and introduced Argentine Ants, *Iridomyrmex humilis*.

Unlike most butterfly books, where the section treating skippers is very incomplete and crammed at the back of the book, the Hesperidae is the first family treated in this volume, following the introduction. Nowhere have I seen such a beautifully illustrated skipper section in a butterfly book! Almost every species is represented by at least one color photograph of a living adult in a natural position, often several photos are given for single species. Wherever photos of living adults were not available, detailed color illustrations of adults in natural positions are provided, and in most cases, these are barely distinguishable from the photographs.

Each species discussion includes paragraphs on identification, notes on early stages (when known), habitat and ecology, distribution (including a colorful, detailed, distribution map), and conservation. The most valuable part of this skipper section, in my opinion, are the 59 color photographs and 43 color illustrations of skipper immatures, mostly larvae and pupae. All of these photos are of excellent



quality, many of which illustrate previously unpublished biological details. Where original photos of immatures were not available, larvae and pupae were re-drawn from G. C. Clark's 1978 chapter on life histories of South African skippers in *Pennington's Butterflies of South Africa*.

Following the skipper section are species treatments for the Papilionidae and Pieridae. Since these butterflies are much better known than skippers, they are represented by even more color photographs. Photos of various larval instars decorate the pages between stunning photographs of adults in natural positions; a total of 121 color photographs and 8 color illustrations of immatures are provided for these two families.

Species discussions are similar to those presented in the skipper section, yet even more detailed. The species treatments are followed by a list of larval food plants for all South African species, indicating all butterfly species known to feed upon each plant species. An extensive glossary, list of references, and index are provided before the list of Subscribers at the end of the book.

This book is written in a surprisingly non-technical tone, making it extremely useful to naturalists that have not had previous experience with butterflies. Unlike some butterfly books designed for a broad audience, important details have not been sacrificed in this vol-

ume. For every genus, species and subspecies treated, the full citation of its original description is given (including type locality), and special bibliographical references are cited for most species. Easy-to-use dichotomous keys are provided at the beginning of each family discussion, to identify each subfamily. For every subfamily in the book, keys to each genus are provided; for each genus that is represented in the region by more than one species, keys to the species are provided.

Keys are highlighted by color boxes, and are especially useful for skipper genera such as *Spialia* Swinhoe (with 14 species), *Borbo* Evans (with 9 species), and the pierid genus *Colotis* Hübner (with three subgenera and 18 species in the region). New taxonomic combinations in this volume include the elevation of the skipper *Coeliades lorenzo* Evans, 1946 to specific status, description of two new subspecies, *Kedestes lenis alba*, and *Colotis doubledayi flavulus*, and description of a new subgenus, *Cuneacolotis*, for *Colotis agoye* Wallengren, 1857.

Shortcomings in the book are few indeed. I question the usefulness of the description of the new subgenus *Cuneacolotis* in a book of this kind. The authors list apomorphic characters of *Colotis agoye* (Wallengren), including shorter antennae (compared to other *Colotis*) and note that its larva is distinctly "keel

shaped," but surprisingly, fail to illustrate the larva. Numbers of longitudinal ribs on the eggs are used to separate the other two recognized subgenera of *Colotis* (*Colotis* and *Teracolus* Swainson), yet eggs of *Colotis agoye* are apparently not known. Without a cladogram illustrating the distribution of characters for all species in the genus, I do not see how this subgeneric classification can be justified.

All in all, I believe that this book will set a new standard for butterfly books in Africa, and indeed the rest of the world. As mentioned in the foreword by Torben B. Larsen, the fact that this book could even be produced "is eloquent testimony to the enthusiasm, skill and perseverance of the many lepidopterists in South Africa." I only hope that this book may inspire lepidopterists in other regions to cooperate in producing similar volumes. Not only do I recommend this book to anyone with an interest in African butterflies, anybody interested in the Hesperidae at any regional level should buy this book for the photographs of the immatures. This is also an excellent book for general naturalists with only a passing interest in butterflies, since sitting down with the book for an afternoon is almost like a personal tour of the bushveld all over South Africa with the best lepidopterist guides in the region.

Andrew D. Warren,

Department of Entomology,  
Oregon State University,  
Corvallis, OR 97331-2907



Deadline for Receipt of Submissions: 15 April 1999

## CALL FOR CONTRIBUTED PAPERS

### *52nd Annual Meeting of The Lepidopterists' Society*

*A World Congress of Lepidopterists*

*4-8 August 1999, Windemere Conference Hotel, Sierra Vista, Arizona, USA*

Name: \_\_\_\_\_ Address: \_\_\_\_\_  
Phone: \_\_\_\_\_  
Fax: \_\_\_\_\_  
Email: \_\_\_\_\_  Check if a Poster  Check if a Student Paper

**Title:**

**Abstract:**

Please type both title and abstract, and limit abstract to 125 words or less

#### *Submission Guidelines (please read carefully):*

- Due to anticipated heavy attendance at the meetings, only **one** Contributed Paper may be submitted per person.
- Each Contributed Paper is a **total of 15 minutes maximum**; allow 12 minutes for the talk itself, and 3 minutes for questions.
- The **deadline is 15 April 1999** for Contributed Papers; this completed form, including title and abstract, must be received by the deadline in order to guarantee inclusion in the printed meeting program.
- To expedite production of the printed meeting program, when you send back this form please also consider e-mailing an ASCII version of your title/abstract to Michael Smith (mjs323@aol.com).
- Contributed Papers are presently scheduled for 5-8 August 1999, with most time slots being on Friday 6 August 1999 and Saturday 7 August 1999. After 15 April 1999 we will begin confirming actual time slots for Contributed Papers with speakers.
- 35 mm slide projectors are available for speakers, an overhead transparency projector may be available, but speakers should not plan for one. Posters will be accommodated in either a separate room or in the hotel hallway adjacent to the paper presentation room. Please contact us by 15 April 1999 if you are planning to ship a Poster or have other equipment needs. Speakers with additional equipment needs may be asked to bring such equipment. The Society will provide its own projectors for the meeting and is not being charged by the conference center for equipment.
- All sessions will be held at the Windemere Hotel and Conference Center.

**Return Completed Forms To:**

**Michael J. Smith**  
**1608 Presidio Way**  
**Sacramento, CA 95661 U.S.A.**

# LOCAL ARRANGEMENTS

## *52nd Annual Meeting of The Lepidopterists' Society*

*A World Congress of Lepidopterists*

*4-8 August 1999, Windemere Hotel and Conference Center, Sierra Vista, Arizona, USA*

### **TRAVEL:**

Sierra Vista, Arizona is located approximately 70 miles southeast of Tucson, Arizona. Those arriving by airplane should fly to the Phoenix or Tucson International Airports and rent a vehicle for the drive to Sierra Vista. Although Phoenix is 130 miles north of Tucson, in most cases less expensive airfares will be available to Phoenix, especially from Europe. There is no shuttle service from Tucson to Sierra Vista but commercial bus service at infrequent intervals may be available. **Directions to Windemere Hotel and Conference Center:** from north and west at Tucson take Interstate 10 43 miles east to exit 302, take Arizona Highway 90 27 miles south to Sierra Vista. From east take Interstate 10 and take exit 302 and drive south to Sierra Vista. On reaching northern edge of Sierra Vista, take highway 90 bypass east and then state highway 92 south. The Windemere Hotel and Conference Center is at 2047 South State Highway 92 and will be on your left. There is ample free parking space at the Windemere. All meetings will take place at the Windemere.

### **HOUSING & FOOD:**

Since all events are at the Windemere, we recommend that all participants stay at the Windemere, where a block of rooms at a special rate has been arranged. The rate is \$65+tax per room per night for up to 4 persons in a room. Participants should make all arrangements directly with the Windemere (1-800/825-4656; e-mail: [windemere@windemere-hotel.com](mailto:windemere@windemere-hotel.com)). All breakfasts and dinners are accounted for on the registration form. Lunches are not accounted for on the registration form. A restaurant is available at the Windemere and there are other restaurants in Sierra Vista, primarily on or adjacent to Fry Boulevard.

### **FIELD TRIPS:**

Field trips will be planned for Wednesday and Thursday, August 4<sup>th</sup> and 5<sup>th</sup>, respectively. We will try to plan for at least 2 trips each day including separate trips or routes for collectors and photographers/observers. In order to limit crowding and environmental damage, each trip will have a limited number of participants. Registration for field trips will be accounted for on a separate form including a liability release that must be submitted **no later than June 1<sup>st</sup>, 1999**. Because field trips are on a first-come basis, we cannot guarantee that there will be space for all prospective attendees. Box or sack lunches will be available for field trip participants, but participants are responsible for their own sunscreen, raingear, and water. We recommend that all participants bring a fannypack and canteen as there is low humidity and warm temperatures.

The possibility of one or more post-meeting expeditions is being explored. If there is sufficient interest, a non-collecting expedition may be planned to Sonora, Mexico. Because participants would not have Mexican collecting permits, the trip would have to be limited to photographers and observers. Such an expedition would involve a fee and the number of participants would be limited, perhaps to 10 or fewer.

### **LOCAL ATTRACTIONS:**

In addition to the natural diversity of southeastern Arizona. There are many tourist attractions that include historic Tombstone, the Arizona Desert Museum near Tucson, Chiricahua National Monument, and many more. Registration packets will include some tourist information. Additional information may be requested from the Windemere Hotel when making reservations, from local tourist offices or by searching the Worldwide Web.

**Please contact Paul Opler (e-mail: [paulevi@webaccess.net](mailto:paulevi@webaccess.net), FAX 970/226-9230) if you have other questions about local arrangements. You may also contact the Windemere Hotel and Conference Center (1/800-825-4656, e-mail [Windemere@Windemere-hotel.com](mailto:Windemere@Windemere-hotel.com), FAX (520) 458-1347 for room reservations or information about local tourist attractions.**



**Registration for 1999 Lepidopterists' Society Meeting  
Windemere Conference Center, Sierra Vista, Arizona  
August 4-8, 1999**

Last name: \_\_\_\_\_, First and initial: \_\_\_\_\_

Street address or P.O. box: \_\_\_\_\_

City or town: \_\_\_\_\_

State/province and zip/postal code: \_\_\_\_\_

Country: \_\_\_\_\_

*Registration fee includes reception, breaks, program, postage, registration materials and \$15 for Jordan Medal and other awards*

\*Number of persons x \$90 (by May 1, 1999), \$105 after May 1<sup>st</sup> ..... \$ \_\_\_\_\_

\*Number of students x \$75 (by May 1, 1999), \$ 90 after May 1<sup>st</sup> ..... \$ \_\_\_\_\_

\*Special spouse registration, reception and banquet only [no meeting sessions or breaks] \$75 (by May 1, 1999), \$90 after May 1st ..... \$ \_\_\_\_\_

\*Southwestern Cookout at Gammons Gulch, Friday eve. , includes dinner and entrance fee, \$33 per person, reservations no later than July 15<sup>th</sup> ..... \$ \_\_\_\_\_

\*Annual banquet, includes tax and gratuity, Chicken \$ 18.00 ..... \$ \_\_\_\_\_

\*Annual banquet, includes tan and gratuity, Tortellini \$18.00..... \$ \_\_\_\_\_  
Reservations for banquet no later than July 15th

\*Field trips, \$10 per participant per trip, includes lunch and beverage..... \$ \_\_\_\_\_

\*Table for sale of books, equipment or other materials, \$20 per day..... \$ \_\_\_\_\_

**TOTAL ENCLOSED** ..... \$ \_\_\_\_\_

Please make check payable to: Lepidopterists' Conference

**NOTE: At time of conference, registration capability will be LIMITED to registration for sessions only. NO cookout or banquet tickets will be available unless you pre-register!!!!**

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**Field Trip Sign-up for 1999 Lepidopterists' Society Meeting  
Windemere Conference Center, Sierra Vista, Arizona  
August 4-8, 1999**

Last name: \_\_\_\_\_, First and initial: \_\_\_\_\_

Street address or P.O. box: \_\_\_\_\_

City or town: \_\_\_\_\_

State/province and zip/postal code: \_\_\_\_\_

Country: \_\_\_\_\_

I (we) plan to attend a field trip on Aug. 4<sup>th</sup>: ..... (number) \_\_\_\_\_

I (we) plan to attend a field trip on Aug. 5<sup>th</sup>: ..... (number) \_\_\_\_\_

I (we) are interested in a trip where collecting is a major activity: ..... (number) \_\_\_\_\_

I (we) are interested in a trip where photography/observation is the main activity: (number) \_\_\_\_\_

Box or bag lunches will be available at the time of the field trips at \$7 per participant.

Please include \$7 per participant per lunch.

**TOTAL ENCLOSED** ..... \$ \_\_\_\_\_

---

**RELEASE FROM LIABILITY**

I release the Lepidopterists' Society, its officers, and field trip leaders from any liability that may result from my participation in field trips connected with the 1999 annual conference in Sierra Vista, Arizona. I understand that I may be driven in a private vehicle and that there are potential hazards on any field trip. I assume all responsibility, personal and financial, for any accidents or other personal injury or loss on any field trip in which I participate.

Name \_\_\_\_\_ Signature \_\_\_\_\_

Date \_\_\_\_\_

## The Sphinx Moths of Nebraska

by Charlie Messenger. 1997. *Transactions of the Nebraska Academy of Sciences*, vol. 24, pp. 89-141. 8 color plates. Available as spiral bound separate, 8½ x 11.

This regional handbook on Sphingidae deserves more than a passing glance. Each of the 32 species that occur in Nebraska is fully treated, with synonymy, diagnosis and characters to separate similar species, distribution (both general and to counties in Nebraska), and all known foodplants. The latter has been compiled from published sources (full bibliography in the back) plus new, unpublished data. The eight full color plates show lar-

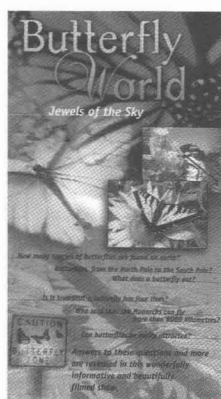
vae of seven species and full size adults of all 32 species. These plates are MONA quality or better!

There are no taxonomic changes here; the subspecies synonymized by Hodges in 1971 have been retained, but by gathering information from a variety of sources and organizing it in concise and readable form, this publication serves as a useful handbook for the Great Plains states. Plans are

underway to extend this format to other moth families in the future. Being a separate from a serial publication, this handbook is not offered for sale (to my knowledge). Some copies may be available by contacting the author, Charlie Messenger, University of Nebraska State Museum, Lincoln, NE 68588-0514, email: [clm@unlinfo.unl.edu](mailto:clm@unlinfo.unl.edu)

Ron Leuschner

1900 John St., Manhattan  
Beach, CA 90266-2608.



## Butterfly World: jewels of the sky

A film by Charles Domingue. Narrated by Ian Finlay. 35 min. Available in English or French, in PAL, SECAM and NTSC formats, from Daval Productions, Inc., Suite 420, 1090 West Pender, Vancouver, B.C., V6E 2N7, Canada, 1-800-561-4240 or 604-664-0501, e-mail: [info@davalproductions.com](mailto:info@davalproductions.com), web site: [www.davalproductions.com](http://www.davalproductions.com). Each video is \$19.95 + 4.00 shipping and handling (US \$). Quantity discounts apply, write or call for more information.

This video is a beautifully photographed, comprehensive look at butterflies and moths (despite the title, there is a good coverage of moths, especially macros) from all over the world. The title oversight is easily explained when one examines the video case where we're told that "There are more than 165,000 different species of butterflies..." Obviously they're using "butterflies" in place of "Lepidoptera". My feeling is that this is likely due to very loose translation from the French (e.g. "filmed throughout this planet...") since the video was produced in Montreal, Quebec, Canada.

The film begins, unexpectedly, with a soundtrack of tribal drums and chants. A black and white drawing of an Indian child segues to black and white live action of children and a medicine man while the narrator tells the

legend of a "world without joy". The medicine man and the children who help him create butterflies and while they're releasing these "dancing flowers", the film gradually changes to color...

From this unusual beginning the film introduces the viewer to many aspects of the biology of butterflies and moths including courtship and mating, the life cycle, strategies for avoiding predators, differences between moths and butterflies, etc. The "usual stuff" – with some unusual stuff thrown in to keep things interesting – but, for the most part, the "usual stuff" done well. The film returns to this "folklorish" aspect near the end where it uses an Aztec legend that butterflies are "souls returned to visit".

Much of the photography is done in a variety of butterfly

houses (including the Montreal Insectarium, the new Niagara Falls Butterfly Conservatory, Butterfly Place in Westford, Mass., and butterfly parks and aviaries in Kuala Lumpur and Penang, Malaysia) but slightly more than half of the film is "in nature".

Some of the highlights (for me anyway) are watching Georges Brossard (founder of the Montreal Insectarium) careening head first into a rocky bank after successfully capturing a *Morpho* along some tropical waterway and an unidentified collector careening head first down an embankment after a Nymphalid (you'll have to watch to see whether he got it or not). The number of shots of collectors being "overly rambunctious" is a tad overdone and I cringe to think about how this reinforces the stereotypical view of butter-



fly collectors as idiots madly dashing through meadows.

Other highlights include celebrating Monarchs in Pacific Grove, CA, a visit to the Monarch reserves at El Rosario/Sierra Chincua in Mexico, a visit to a butterfly farm – and butterflies as delicacies – in Malaysia, and various aspects of moth and butterfly collecting and watching.

There are a few problems with the film and/or the narration. I'm not entirely sure what a

proboscis is but it appears to be similar to a proboscis (*not* a tongue), and the point made about one of the differences between moths and butterflies being the use of olfaction vs. vision due to nocturnal habits of moths was completely lost when, on screen, they were showing a brilliantly colored, rose and yellow Imperial moth (or something similar).

However, these small problems do not detract from the wonderful photography and the general

purpose of the film to educate John and Jane Public about why we are so fascinated by these creatures. It is admirably suited for showing at every butterfly house on the globe as an introduction to the world of moths and butterflies or as an added attraction for their visitors.

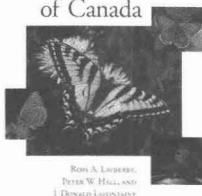
I give it  out of 5. Recommended.

Phil Schappert

Department of Zoology,  
University of Texas,  
Austin, TX 78712-1064

## Recently Published Books...

### The Butterflies of Canada



#### The Butterflies of Canada

by Ross A. Layberry, Peter W. Hall, J. Donald Lafontaine. 1998. University of Toronto Press, 280 pp., 32 color plates of adults and larvae, 294 distribution maps. Available from University of Toronto Press, 5201 Dufferin Street, North York, ON, M3H 5T8. U.S. orders to University of Toronto Press, 250 Sonwil Drive, Buffalo, NY, 14225-5516. Tel. 800-565-9523. FAX 716-685-6985. European orders to Marston Book Services, P.O. Box 269, Abingdon, Oxon, OX14 4SD. Tel. 01235-465500, FAX 01235-465555. ISBN 0-8020-0898-4, \$100.00 [£60.00] (cloth); ISBN 0-8020-7881-8, \$29.95 [£20.00] (paper)

The Butterflies of Canada is an illustrated guide to all aspects of the study of butterflies. It is the first comprehensive guide available for Canada and contains descriptions of close to three hundred species, including their early stages, subspecies, key identification features, as well as individual distribution maps. It includes chapters on Canadian geography and butterfly distribu-

tion, butterfly systematics, conservation, gardening, photography, and the history of butterfly study in Canada. It makes available new and unpublished information on butterflies, their classifications, ranges, larval food plants, abundance, flight seasons, and noteworthy habits.

#### Noctuoidea, Noctuidae (Part), Noctuinae (Part - Noctuini)

by J. Donald Lafontaine in Dominick, R.B., et al. *The Moths of America North of Mexico*, fasc. 27.3. 1998. Allen Press, Inc., 348 pp., 25 plates of black and white photographs of male and female genitalia, a few adults, and 1 plate of electron microscope photographs of larval mouthparts, 7 color plates of adults and 1 color plate of larvae. Available from The Wedge Entomological Research Foundation, 85253 Ridgetop Drive, Eugene, Oregon, 97405, U.S.A., or BioQuip Products, 17893 La Salle Avenue, Gardena, California, 90248, U.S.A., or Entomological Reprint Specialists, P.O. Box 7724, Dockweiler Station,

Los Angeles, California, 90007, U.S.A.. ISBN 0-9333003-09-9, \$115.00 (paper)

The tribe Noctuini of North America is revised. It includes 169 species in 31 genera (166 species in the United States and 3 in Mexico). Twenty one new species are described and 4 new genera are proposed. Adults of all species but one are illustrated in color, and male and female genitalia of most species are illustrated with photographs. Diagnoses of the larvae of 89 species are given, and larvae of 24 species are illustrated in color. Keys to genera and species for both adults and larvae are included. A distribution map of material examined is included for each species.

#### Castniidae, Callidulidae, Drepanidae, Uraniidae

by J. D. Holloway in *The Moths of Borneo, Part 8*. 1998. The Malayan Nature Society and Southdene Sdn. Bhd., 155 pp., 317 black and white photographs of male and female genitalia, 8 color plates of adults, and 2 color plates of larvae. Available from





*Southdene Sdn. Ghd., P.O. Box 10139, 50704 Kuala Lumpur, Malaysia, 603-4222653 (Phone), 603-4222267 (FAX), E-mail: hsbar@pc.jaring.my, web site: www.edi.co.uk/barlow/. ISBN: 983-99915-8-Z, \$30.00 (paper)*

This book, in a series that covers the moths of Borneo, includes the Castniidae (1 species), Callidulidae (7 species in 2 genera), Drepanidae (108 species in 35 genera and 3 subfamilies), and Uraniidae (90 species in 22 genera and 4 subfamilies). For each species a diagnosis and the geographical range are given, and where known, details of habitat preference and biology. The unusual biogeography of the groups is discussed in the introduction and the taxonomic position of the geometroid groups in relation to the macrolepidoptera is also reviewed in a later section.

**The Garden Is In, The Plants Are Up, Now What? Asked The Teachers**

*by Virginia Kincaid. 1998. 43 pp. Available from Virginia Kincaid, 10112 East Lake Drive, Oklahoma City, Oklahoma 73162, 405-722-3837, Ragbfly@aol.com. Copyright by Virginia Kincaid, \$20.00 (+2.25 postage) (paper, spiral bound)*

More than one hundred activities are listed by the four seasons and what we would experience in the school butterfly garden in Oklahoma, but it is adaptable to many areas of the United States. A map and plant list is included in the back of the book. There are many books on gardening and specifically butterfly gardening, but this is the first book with "hands on" activities for teachers and their students in a butterfly garden.

**The Butterflies of Papua New Guinea, Their Systematics and Biology**

*by Michael Parsons. 1998. Academic Press, 1008 pp., color photographs of more than 3000 specimens and 400 color photographs from life. Available from Academic Press, Order Fulfillment Dept. DM 47708, 6277 Sea Harbor Drive, Orlando, FL 32887. In the U.S. and Canada call toll free: 1-800-321-5068, FAX: 1-800-874-6418, E-Mail: ap@acad.com. ISBN 0-12-545555-0, \$275.00 (tentative).*

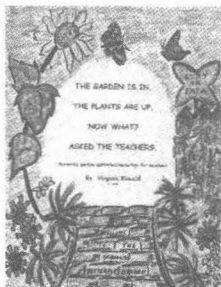
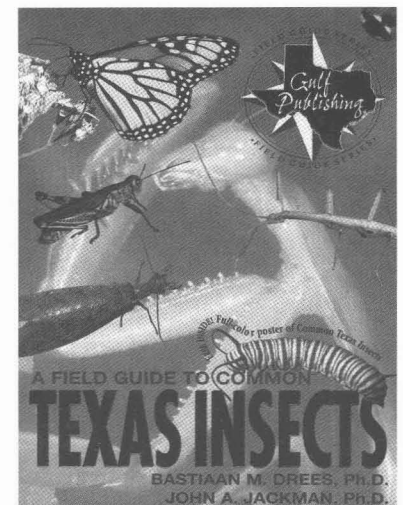
This book is a comprehensive description of the butterfly fauna and its relationship to the environment, foodplants, predators, and competitors of Papua New Guinea. Contents: Scope and Format of the Book. New Guinea Past and Present. World Faunal Regions and Butterfly Diversity. Origins and Compositions of the New Guinea Butterfly Fauna. A History of Butterfly Collecting in New Guinea. Butterfly Conservation and Commerce in Papua New Guinea. Aspects of Butterfly Ecology in Papua New Guinea. Mimicry in New Guinea Butterflies. Collection and Study. Adult Structure. Classification and Nomenclature. Family Hesperidae. Family Papilionidae. Family Pieridae. Family Lycaenidae. Family Nymphalidae. Glossary. Appendices. Bibliography. Index.

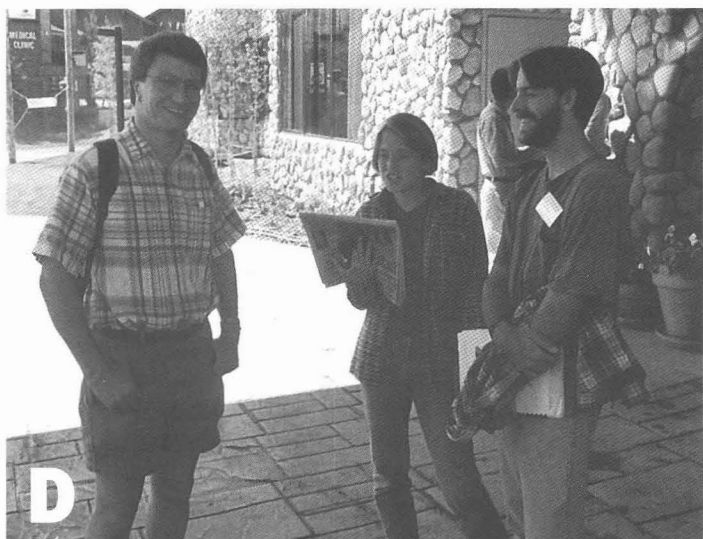
**A Field Guide to Common Texas Insects**

*by Bastiaan M. Drees and John A. Jackman. 1998. Gulf Publishing Company, xv + 359 pp., 381 color photographs. Available from Gulf Publishing Company, Book Division, P. O. Box 2608, Houston, TX 77252-2608. Tel. 713-520-4444. FAX 713-525-4647. E-mail: ezorder@gulpub.com; ISBN: 0-87719-*

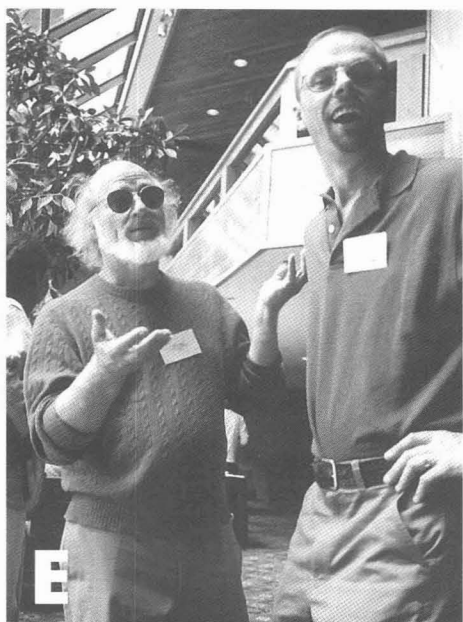
*263-4, \$18.95 (paper, laminate cover, 14 cm x 21.5 cm).*

There are probably over 30,000 species of insects in Texas, according to Dr. Horace Burke, who wrote the foreword to this book. It is very easy to use because a number is assigned in the text to each taxon and the same number corresponds to the color figure. There is an extensive bibliography to Texas insects. The index covers scientific names, common names, hostplants, diseases transmitted by insects, crops, insect family names, and many others. The text gives more detail on the biology of the insect than most field guides. There is some coverage of non-insect arthropods, although greater detail on these could be found in a 1997 companion book by Jackman entitled "A Field Guide to Spiders and Scorpions of Texas." For lepidopterists, Appendix B on threatened and endangered insects in Texas is of particular interest. It gives the status and background of several moths and butterflies found in the state, including *Zizula cyna*, *Adhemarius blanchardorum*, *Apodemia chisomensis*, *Calephelis freemani*, *C. rawsoni*, *Euproserpinus wiesti*, *Fixsenia polingi*, *Ministrymon clytie*, *Scinia indiana*, and *Stalingsia maculosus*.





# The 3<sup>rd</sup> International Butterfly Ecology and Evolution Symposium, August 1998



**A:** Paul Ehrlich holding court (thankfully he shortened his address substantially and did not read from his rather voluminous notes—see bottom left); **B:** Mauricio Linares, Durrell Kapan and Ilka Hanski (is that beer I see on the table?); **C:** Charles Remington enjoying the “theatre in the round” or maybe it was the dancing?; **D:** Felix Sperling, Katy Prudic and Jeff Oliver (two of Art Shapiro’s students); **E:** But you must understand... (Michael Singer implores of Chris Thomas); **F:** Woody Benson (right) teaching Bob Srygley the correct, Brazilian way to do the Macarena; **G:** The Texas Crew (Gilbert and Singer Labs), Past and Present (left to right): David Boughton, Mirian Medina, Durrell Kapan (back), Marcio Cardoso, Camille Parmesan, Mike Singer (back), Erika Deinert, Helene Engler (back), Evandro Oliveira, Gabriel Neve, Bob Srygley, Phil Schappert, Carol Boggs, Paul Ehrlich (academic “Father” to both the Gilbert and Singer lineages), Larry Gilbert, Phil DeVries, Carla Penz (missing: Chris Thomas,

**Pupa...continued from pp. 108**

At lower temperatures, in the range of 13–28°C, pupae were bent towards the sun (July 7, 2024h; July 9, 0830h; Dec. 1, 0830h–1030h; and Dec 2, 0830h and 1600h). At higher temperatures, greater than 30°C, pupae were bent away from the sun which reduced solar exposure (July 8, 1000h; and July 9, 1615h and 1630h). At an intermediate temperature, 29°C, pupae were bent toward the sun on one day (July 8, 0830h) and away from the sun on the following day (July 9, 0900h). This discrepancy may be due to the pupal body temperature being higher on July 9 since it was exposed to the rising sun for one half hour longer than on the previous day.

After sunset (Table A, B), pupae were in a vertical (resting) position (July 8, 2130h, and Dec. 2, 2020h). Other nighttime observations indicated that the pupae remained in a vertical position throughout the night. Pupae must also return to the vertical position during the transition from morning to afternoon orientation when following the sun on a cool day, or when avoiding the sun on a hot day.

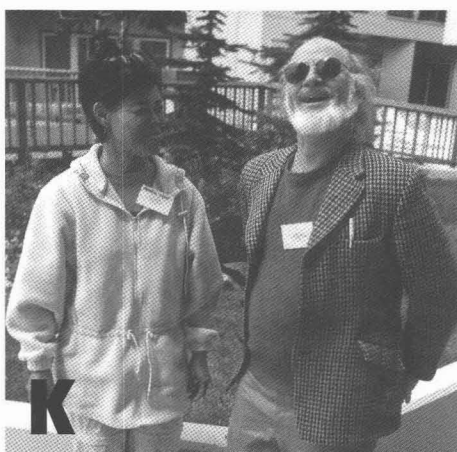
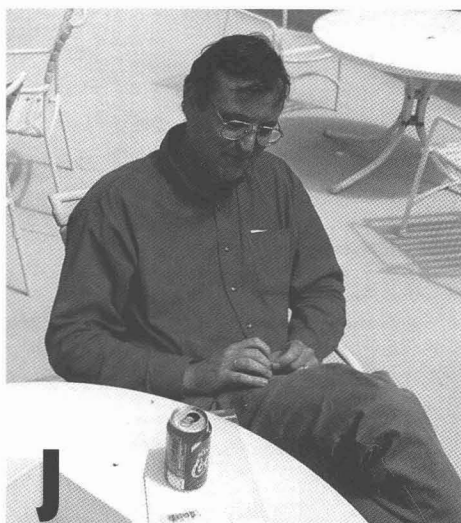
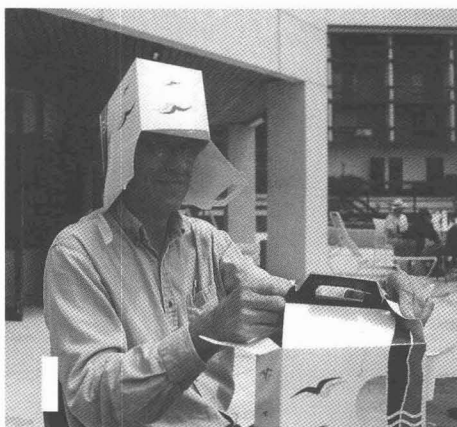
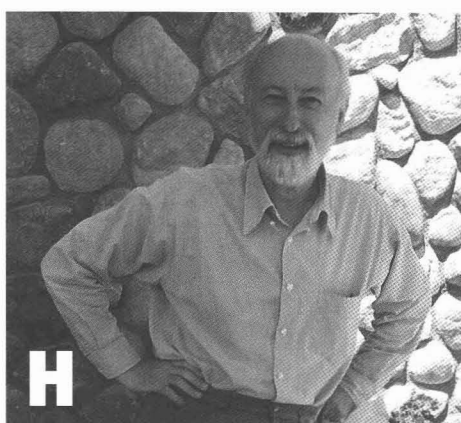
*Agraulis vanillae* pupae may not be able to bend towards the sun just before eclosion (Table B). A pupa (No. 1) that eclosed on Dec. 2 at 1230h was not bent towards the sun when observed at a low air temperature just four hours before at 0830h.

**Conclusion**

Although there is extensive literature on basking in adult Lepidoptera, reports of basking and antibasking are uncommon for larval, or lacking for pupal, stages. My observations of pupal basking and antibasking behavior in *A. vanillae* suggest that pupal movements are a response to the position of the sun and ambient air temperature. This indicates a thermoregulatory function that may affect the rate of development or prevent heat injury or death.

Pupal basking and antibasking behavior should also be looked for in

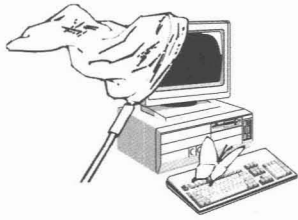
*continued on page 117...*



Mauricio Linares); **H:** Dick Vane-Wright; **I:** Larry Gilbert discovers a new use for box lunch boxes; **J:** Paul Brakefield; **K:** Francie Chew and Michael Singer enjoying the sunshine; **L:** Some folks were lucky enough to visit the shale beds at Florissant Fossil Beds National Monument. Photos by Larry Gilbert except G by Francie Chew and I and L by Marcio Cardoso.







# Out of the Net...

by Jim Taylor, [1\\_iron@msn.com](mailto:1_iron@msn.com)

As you know, the **News** is published but four times a year, and the lead time needed by Editor Phil is about a month. One tends to forget deadlines—particularly the non-monetary kind—and I am guilty of having run past this one. An e-mail prod by Phil is causing me to miss my golf game to write this. “This”, by the way, is being patched together on October 31 (I have yet to carve my pumpkin) and was due yesterday. The internet changes from second to second, but I must pull the trigger a full month before and trust the URLs to hold steady until the NEWS is delivered. Talk about Kentucky windage.

Also, I’ll apologize in advance for a shorter-than-normal column. It takes time to find something of general interest, and time is in short supply. Promise to do better next issue. Now, on to business:

**Atlantic Forestry Centre**  
[atl.cfs.nrcan.gc.ca/index\\_e.html](http://atl.cfs.nrcan.gc.ca/index_e.html)

At this site is the Atlantic Forestry Centre (the French spelling should be a tip-off that it is Canadian) in New Brunswick. There is far too much here to describe in detail, but after a description of the facility (and a sort of bulletin board about what’s new) there is a yard-long list of publications available complete with ordering instructions.

Under the “Forest Health Network—Monitoring and Analysis—Major Disturbances” captions there are listed insects which cause forests the most grief—along with pictures of the little devils. Caterpillars and beetles abound here. There are also some fascinating descriptions of exotic insect interceptions at seaports, complete with foreign origin, how they arrived, and the sta-

tistics of what has to be a losing war. The best part of the site from my point of view is under the headings “Forest Biodiversity Network—Moth Diversity in Fundy National Park—Species Checklist.” Here are 626 macros in 14 families and 38 subfamilies listed in MONA order. Better yet, many include full color (or colour) photographs, and new pics are added regularly. I find some species of Notodondids hard to distinguish—they all aren’t possessed of some easily spotted characteristic (*Heterocampa astarte*’s white streak at the apex of the fore wing, for example). Here in Notodondidae are 29 species, 27 of which are pictured. Not to put ideas in anyone’s head, but one could blow them up, print them out, and staple together a little illustrated key. (I kinda like Prominents; they perch with their fore feet facing forward and modestly together.)

**Catalogue of the Lepidoptera of the French Antilles**  
[www.jouy.inra.fr/papillon/indexeng.htm](http://www.jouy.inra.fr/papillon/indexeng.htm)

The Catalogue of the Lepidoptera of the French Antilles has added 103 species of Noctuidae (Amphipyrrinae) and Geometridae. The Catalogue includes so far eleven families of Lepidoptera. The pictures are worth the trip.

**Hampson Plates, British Museum**  
[www.bio.umass.edu/biology/kunkel/Moths/hampson/](http://www.bio.umass.edu/biology/kunkel/Moths/hampson/)

For Noctuidae lovers, here are the Hampson Plates from the British Museum collection. You can get at it in a variety of ways. There is a species plate index, a species direct index, a subfamily index, a genera index, etc. A click on “Volume Plate Contents” yields a list-

ing of plates by subfamily, for example. A further click on a plate, plate CIII for instance, produces a list of 24 species on the left side of the screen and pictures of them on the right. You also get a choice of small, medium, or large. Go visit; you’ll like it.

**Indiana State Image Gallery**  
[www.ent.iastate.edu/imagegal/lepidoptera.html](http://www.ent.iastate.edu/imagegal/lepidoptera.html)

If you like caterpillars, particularly commercially destructive caterpillars, this is the site for you. Here are pictures of armyworms, cutworms, corn earworms, corn borers, and so on. A gallery of gruesome snaps of the damage they cause is included. Worth a visit.

**Topical Giggles...**  
[www.erols.com/rjspear/gyp\\_photogal.htm#lookagain](http://www.erols.com/rjspear/gyp_photogal.htm#lookagain)

For those of you who enjoy a joke, take a peek at this site. After you’ve had your giggle, take the time to read some of the material available at the buttons on the page. I would suggest you start with “Dubious Doings” and “Myths.” Don’t miss reading a few of the “News” articles, and some of the past editorials help you understand the jape on the opening site. The owner of the site, a Mr. Robert Spears, is in Maryland, and it is encouraging to me to see a little sanity so close to Washington.

**Moth Story**  
[web.raex.com/~michael5/moth.htm](http://web.raex.com/~michael5/moth.htm)

Finally, there is a story at this site which, other than being about an emperor moth, has nothing to do with Lepidopterology. Would anyone like to volunteer to carry this message to a few Federal agencies?

Thomas @ NRCan.gc.ca  
 Tony Monas



**Pupa...continued from pp. 115**

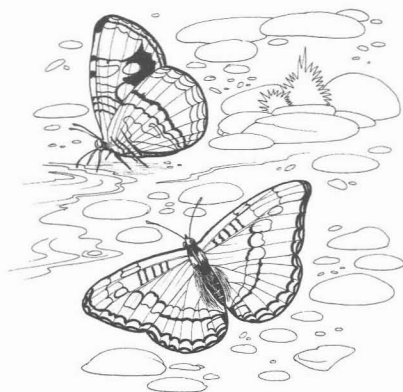
other species, especially in other Heliconiinae. In this Subfamily, the mode of pupal attachment and flexible abdominal movement suggests that basking behavior may occur in additional species. Preliminary studies of the Cloudless Sulphur (*Phoebis sennae* (L.), Pieridae) and the Mourning Cloak (*Nymphalis antiopa* (L.), Nymphalidae) pupae suggest that they are unable to utilize basking or antibasking behavior.



*Gulf Fritillary (Agraulis vanillae) pupa basking, the body turned toward the sun. Photo by Gerald E. Einem.*

**Literature Cited**

- DeVries, P. J. 1986. The butterflies of Costa Rica and their natural history. Princeton University Press, New Jersey. 539pp.
- Downey, J. C. and A. C. Allyn. 1978. Sounds produced by pupae of Lycaenidae. Bull. of the Allyn Mus. 48: 14pp.
- Hinton, H. E. 1948. Sound production in lepidopterous pupae. The Entomol. 81: 254-269.
- Minno, M. C. 1997. Hot swallowtails rise to the occasion: larval antibasking behavior. News of the Lepid. Soc. 39(3): 58.
- Scoble, M. J. 1995. The Lepidoptera: form function and diversity. Oxford University Press Inc. New York. 404 pp.
- White, R. R. 1987. The trouble with butterflies. J. Res. Lepid. 25: 207-212.

**From the Editor's Desk**

*Phil Schappert*

There are a few (fewer than usual, I'm happy to report) errata: In 40(3), Summer, this very column suggested that one could get "lost in the shuffle" (whatever that is?) and in the last issue (40(4), Autumn) I misspelled John Shuey's name, not once, but twice (both in photo captions which are written during the assembly of the issue so, unfortunately, I cannot blame my proof-reader). Apologies, John.

You may note that the new "Lepidopterists' Calendar" column is missing from this issue. It seemed like such a fine idea (quite a few members requested it) but **not a single submission** of anything going on anywhere has found its way to the Editor! Surely there's something happening out there in "Lep. Land". And where is the "Report from Europe"? Willy de Prins where are you?

There are some changes in store. The Executive Council, following recommendations from the Publications Committee and Editorial Board, agreed to recognize that the **News** is really a quarterly with frequent supplements. Let's face it, the **Season Summary** and the **Membership Directory** are edited and compiled by someone other than the editor of the **News** and are never paginated with the volume they're issued as part of. They've always been supplements and alternating between 5 numbered issues one year and 6 the next has only confused members. So, beginning with Vol. 41 the **Season Summary** will be **News S1** (supplement no. 1). In Vol. 42 there will be two supplements, S1 (**Season Summary**) and S2 (**Membership Directory**). Get it?

There will be a change in the mailing of the **News** which will affect members

in the US. We're changing from 3<sup>rd</sup> class non-profit to 2<sup>nd</sup> class non-profit to get faster mail delivery (average of 7 vs. up to 21 days), easier regulations regarding paid advertising (planned to offset increasing costs, contact the Editor if you'd like to buy space) and—this is the hard part—believe it or not, it's cheaper! It also means that on those few occasions when the **News** and the **Journal** are ready for mailing at the same time, they can mail together for a significant cost saving.

The cost saving realized from changing the mail agreement is being redirected back into the **News**: to put color covers on 5 issues per year. For the last 4 years there has been one color issue, including a color cover, per year. For a slight change in procedure we can provide color covers for 4 additional issues: the 3 other issues of the **News** plus the **Season Summary**. So, what are we going to do with more color covers? We're going to offer them as prizes in the annual photo contest, that's what!

A few years ago it was decided, as a cost saving measure, to stop offering prizes in the photo contest. While covers of the **News** are not monetary prizes they are prizes nonetheless. So the plan is, beginning with the next photo contest, to give the front cover to 1<sup>st</sup> place winners, and the back cover to 2<sup>nd</sup> and 3<sup>rd</sup> place winners, on issues 2 through 4 (issue 1 and the **Season Summary** will have topical covers). Hopefully this will accomplish two goals: increase submissions to the photo contest (only two entrants this past year!) and provide members with another, colorful, resource for communicating with fellow members.

The **News** is your newsletter. Why not use it!

# The Marketplace

**IMPORTANT NOTICE TO ADVERTISERS:** If the number following your advertisement is "403" then you must renew your advertisement before the next issue! Remember that all revisions are required in writing.

## Books For Sale

For Sale: **Monograph of the Geometrid Moths** by A.S. Packard, 1876; **Checklist of the Lepidoptera of Boreal America** by J. B. Smith, 1903; **On the Diurnal Lepidoptera of the Athabaska and Mackenzie Region, British Columbia** by M. Cary, 1906; **An Annotated List of the Butterflies of San Diego, CA** by W.S. Wright, 1930. M.C. Nielsen, 3415 Overlea Dr., Lansing, MI 48917, 517-321-2192. <sup>405</sup>

One, like new, copy of the two volume set **Monographia Rhopalocerorum Sinensium** (Monograph of the Chinese Butterflies) in attractive slip case. This is the only comprehensive work available on Chinese butterflies. All species are illustrated life size in high quality color. A collector's item, will take highest offer (minimum \$200). Wayne H. Whaley, 391 East, 1040 North, Orem,

UT 84057, 801-222-8607 (work, leave message), 801-225-6684 (evenings). <sup>405</sup>

Comstock, John A., **Butterflies of California**. Original issue. Rebound; in prime condition. Autographed by the author. With enclosure: 63 color plates updated to MONA. Make offer. Frank Sala, 3493 Greenfield Place, Carmel, CA 93923, 408-624-5677. <sup>404</sup>

For Sale. Send for list of publications on Lepidoptera for sale. Enclose SASE. Dr. Eugene J. Gerberg, 5819 NW 57<sup>th</sup> Way, Gainesville, FL 32653-3257. <sup>404</sup>

Color plates of **Butterflies of California** by J. A. Comstock, updated to MONA for identification. Color plates digitally reproduced, full size, better than original. 63 plates with ident. Loose-bound \$120, on heavy stock \$170. Firm-bound \$160, on heavy stock \$200. Field book size (5½" x 8½") \$160, on heavy stock \$200. Frank Sala, 3493 Greenfield

Place, Carmel, CA 93923, 408-624-5677. <sup>404</sup>

**Discovering the Butterflies of Lassen Volcanic National Park** (1998) by Laurence Crabree. Paper, 107 pp., 23 color plates, 9 text figures, 6 illustrations. Treats 106 species and includes full-color, life size photographs of 229 butterflies and 14 day-flying moths. Copies can be obtained from Hilltopping Publications, Box 79, Chester, CA 96020 for \$11.95 + \$0.86 tax and \$2.00 shipping (total: \$14.81 USD). <sup>404</sup>

New Books: **Butterflies of Ceylon** by Bernard D'Abrera (£85 / approx. \$140). **Butterflies of Papua New Guinea** by M. Parsons (£185 / approx. \$305). Special offers: We hold the remaining stock of **Butterflies of Saudi Arabia** by T. Larsen (Special offer until end of 1998 - only £12.50 / approx. \$21); **Charaxinae Butterflies of Africa** by S. Henning

The aim of the Marketplace in the **News of the Lepidopterists' Society** is to be consistent with the goals of the Society: "to promote the science of lepidopterology...to facilitate the exchange of specimens and ideas by both the professional worker and the amateur in the field,..." Therefore, the Editor will print notices which are deemed to meet the above criteria, *without quoting prices*, except for those of publications or lists.

No mention may be made in any notice in the **News** of any species on any federal threatened or endangered species list. For species listed under CITES, advertisers must provide a copy of the export permit from the country of origin to buyers. **Buyers must beware and be aware.** Advertisements for credit, debit, or charge cards or similar financial instruments or accounts, insurance policies and those for travel or travel arrangements cannot be accepted be-

cause they jeopardize our nonprofit status.

Only members in good standing may place ads. All advertisements are accepted, in writing, for two (2) issues unless a single issue is specifically requested and must be renewed before the deadline of the following issue to remain in place. All ads contain a code in the lower right corner (eg. 386, 391) which denote the volume and number of the **News** in which the ad. first appeared.

Advertisements must be under 100 words in length, or **they will be returned for editing.** Ads for Lepidoptera or plants must include full latin binomials for all taxa listed in your advertisement. **Send all advertisements to the Editor of the News.**

The Lepidopterists' Society and the Editor take no responsibility whatsoever for the integrity and legality of any advertiser or advertisement. Disputes arising from such notices must be re-

solved by the parties involved, outside of the structure of The Lepidopterists' Society. Aggrieved members may request information from the Secretary regarding steps which they may take in the event of alleged unsatisfactory business transactions. A member may be expelled from The Lepidopterists' Society, given adequate indication of dishonest activity.

Buyers, sellers, and traders are advised to contact your state department of agriculture and/or PPQAPHIS, Hyattsville, Maryland, regarding US Department of Agriculture or other permits required for transport of live insects or plants. Buyers are responsible for being aware that many countries have laws restricting the possession, collection, import, and export of some insect and plant species. Plant Traders: Check with USDA and local agencies for permits to transport plants. Shipping of agricultural weeds across borders is often restricted.

(Reduced to £48 / approx. \$80). All prices + shipping. Our latest catalog contains details of 1,500 new, used and rare books on entomology and related subjects. For your free copy contact: Ian Johnson (Pemberley Books), PO Box 334, Hayes, Middlesex, UB4 0AZ, England. Tel/Fax: +44 181 561 5494; [ij@pembbooks.demon.co.uk](mailto:ij@pembbooks.demon.co.uk); Website: [www.pembbooks.demon.co.uk](http://www.pembbooks.demon.co.uk). 404

**American moths of the subfamily Phycitinae** (1966), USNM, \$25; **Moths of America North of Mexico** (hard-bound), Fascicle **6.2** (Gelechioidea), \$55; Fascicles **13.1a-c** (Pyraloidea), \$80; Fascicle **20.1** (Mimallonioidea and Bombycoidea), \$30; Fascicles **20.2a & b** (Saturniidae), \$75; Fascicle **21** (Sphingoidea), \$50; Fascicle **22.2** (Noctuoidea-Lymantriidae), \$45 (plus shipping). Glenn A. Gorelick (Dept. of Biological Sciences), Citrus College, 1000 w. Foothill Blvd., Glendora, CA 91741, [ggorelick@citrus.cc.ca.us](mailto:ggorelick@citrus.cc.ca.us). 403

For sale: John A. Comstock's **Butterflies of California**. Price: \$300.00. Please contact Brian Harris or Dr. Brian Brown at the Natural History Museum of L.A. County Entomology Section, 900 Exposition Blvd., L.A. CA 90007. Fax 213-746-2999 or call 213-763-3364. 403

### Livestock

Cocoons and pupa for Spring 1999: *Actias luna*, *Antheraea polyphemus*, *Samia cynthia*, *Hyalophora cecropia*, *Automeris io*, *Callosamia promethea*, *Papilio glaucus*, *P. troilus*, *P. polyxenes asterius*. Send SASE to: Don Oehlke, c/o P.O. Pottersville, NJ 07979, 908-439-2462. 405

For Sale or Trade: ova of *Catocala palaeogama*, *C. cerogama*, *C. neogama*, *C. ultronia*, *C. meskei*, *C. grynea*, *C. mira*, *C. minuta*, *C. aholibah*, *C. ilia*, *C. ilia* "zoe", *C. obscura*, *C. residua*, *C. amatrix*, *C. cara*, *C. innubens*, *C. piatrix*, *C. robinsoni*. SASE please to: Jim Mouw, 245 Sarah Avenue, Iowa Falls, IA 50126. 405

Livestock available: Cocoons of *Actias luna*, *Automeris io*, *Callosamia promethea*, *Hyalophora cecropia*, *H. col-*

*umbia*, and *Samia cynthia* available fall and winter 1998. Also pupae of *Papilio p. asterias*, *P. glaucus*, and *P. troilus*. Send for free price list to Bill Oehlke, Box 476, Montague, PE.I., Canada, C0A 1R0, Email: [oehlke@montagueint.edu.pe.ca](mailto:oehlke@montagueint.edu.pe.ca), website: [www3.pei.sympatico.ca/oehlke](http://www3.pei.sympatico.ca/oehlke), fax: 902-838-0866; phone: 902-838-3455. 405

For sale or exchange: Large selection of Iranian butterflies, perfect quality, with data. All *Louristana* sp., *Hypbushirica*, *A. apollinaria*, *Colias sagartia*, *C. cholorocoma*, *C. aurorina*, *C. thisoa* ssp. *shahkuhensis*, *Euchloe*, *Papilionidae*, *Agrodiaetus* and more. Many species from other families at fair prices; local or rare species that are allowed for exchange. Exchange or buy other kinds or pupae for breeding. I need any breeding information you can provide. Also, local beetles and dragonflies, books. Please send me your collection list or write for extensive price list to A. Karbalaye, P.O. Box 11495-175, Tehran, Iran. Fax: 0098-21-7531604. 404

Wanted: overwintering pupae of *P. zelicaon*, *P. polyxenes*, *P. oregonius*, *P. bairdii*, *P. kahli*, *B. philenor*, *P. xuthus*, *P. bianor*, *P. maackii* and others. Robert Keiser, Adh Borinstraat 36, 2070 Zwijnrecht Belgium. 404

For Exchange Only: Larva or pupa of *Empyreuma affinis*, *Syntomeida epilias jucundissima*, *Composia fidelissima*, and *Eumaeus atala florida* in exchange for other species of Arctiids and Sphingids. Leroy C. Koehn, 6085 Wedgewood Village Circle, Lake Worth, FL 33463-7371; Tele: 561-966-1655; [Leptrap@aol.com](mailto:Leptrap@aol.com). 404

Wanted: to exchange butterflies and macro moths with interested people from other countries. I'm also interested in live material. Manuel Carrasco Gonzalez Bda Andaluca, Bque 5-5 C 11540-Sanlcar de Bda, [jcuberog11@ocefss.ucm.es](mailto:jcuberog11@ocefss.ucm.es). 404

Will buy ova or pupae of Calleta Silkmoth, *Eupackardia calleta*; Black Witch, *Ascalapha odorata*; Giant Leopard Moth, *Epantheria scribonia*. Steve

Greenfield, 1810 Marbury Lane, Albany, GA 31707, [clayspot@aol.com](mailto:clayspot@aol.com). 404

For Sale: Overwintering cocoons of *Actias luna*, *Automeris io* and *Callosamia promethea*. SASE for prices. Larry J. Kopp, RD 1, Box 30, Klingsertown, PA 17941-9718. 404

Wanted: Pupae of Sphingidae. Stefan Mikus, F.-Otto-Schott-Weg 20, 31319 Sehnde, Germany. 404

Pupae of *Saturnia walterorum*, *Hyalophora euryalus*, *Annaphila decia* for sale. SASE to Frank Sala, 3493 Greenfield Place, Carmel, CA 93923, 408-624-5677. 404

Cocoons of *Hyalophora cecropia*, *Antheraea polyphemus* and *Actias luna* for sale. Also, papered specimens of each of the above for sale. SASE to Ronald Aaron Royer, 895 Royer Lane, Lebanon, PA 17042-9433, 717-867-1021. 404

### Specimens

Wanted: Collector or wholesale seller from Mexico, Guatemala, Honduras, Nicaragua, Panama, Colombia, Ecuador and Caribbean Islands. I am interested in buying or exchanging for butterflies and moths from these countries or areas. Manuel del Pino Gamiz, C/. Padre Santonja 15-7, 46920 Mislata, Valencia, Spain, phone/fax: +34+96+3501009. 405

Fine, quality butterflies, live pupae, dried and papered butterflies, moths, beetles, mantids, stick insects large and small, etc. A-1 quality. Leodegario Layron, c/o Mogpog Post Office, 4901 Mogpog, Marinduque, Philippines, phone: 042-332-1558, fax: 042-332-2092. 405

For sale: Saturniidae, Sphingidae, all other families of Lepidoptera, Coleoptera and other insects from Paraguay. Papered with full data. Live ova of Saturniidae, possibly pupae/cocoons. For lists, contact: Ulf Drechsel, Gral. Aquino 694, Asuncion, Paraguay. 405

For exchange: Wisconsin leps. and Mexican (via E. C. Welling, ca. 1920) for other US or Caribbean. SASE for list. George F. Holbach, 1549 N. Lynn Rd., Adell, WI 53001. 404



For exchange: Detroit area collector wishes to exchange for US or Canadian species. Quantities are strictly limited but requests for next season will be noted. All specimens with complete data. For more information and availability, contact Donald Starkey, 41226 Marjoran, Sterling Heights, MI 48314. 404

For sale: Butterflies, moths and other insects from the tropical regions of the world. Many bred pairs of unusual butterflies from El Salvador as well as collectors' items with data for private collections, museums and schools. Request a catalog with color illustrations for \$5 refundable with first order. Please mention the Lepidopterists News when replying. Miguel Serrano 6823 Rosemary Drive,, Tampa FL 33625 403

Serving Lepidopterists since 1976. Many unusual specimens from Neotropics, Africa and Indo-Australia regions. Many bred or ranched specimens! Just mail US\$1 (cash or stamps) for our new 12-page catalog to: Simon Ellis, Transworld Butterfly Co., Apartado 6951, 1000L San Jose, Costa Rica 403

For sale: Papered specimens and framed collections of Solomon Islands butterflies, beetles and seashells available for sale. Collections are available as orders, families and species in specially constructed display cases and insect drawers. Ideal for private collections and museums. For more information and Price List, write to: Patrick Nanau, Nature Science and Hobbies, c/o P.O. Box 850, Honiara, Solomon Islands. 403

Searching for contacts (to buy or exchange butterflies and beetles) particularly from Mexico, Central America, Colombia, Brazil, Australia, South Africa, Indonesia, Tanzania and India. Please write to: Shin-ichi Ohshima, Shimohideya 707-99, Okegawa, Saitama (363-0025), Japan. Fax: (81) 48 787 0290 403

### Equipment

For Sale: Light traps, 12 volt DC or 110 AC with 15 watt or 20 watt black lights. The traps are portable and easy to use. Rain drains & sorting screens protect specimens from damage. Free brochure and price list available. Also, custom

built light traps and light fixtures: Mercury vapor, black light & black light dark in 15, 20 & 40 watt, and sun lamps. Together or in combination. Electrical controls, photoelectric switches, rain drains and sorting screen. Will design enclosures and include enclosure plans with purchase of fixture. To obtain a quote, your specifications are required. For information, contact: Leroy C. Koehn, 6085 Wedgewood Village Circle, Lake Worth, FL 33464-7371; Tele: 561-966-1655; [Leptrap@aol.com](mailto:Leptrap@aol.com) 404

Wanted: Interior steel 21 drawer insect cabinet, Model P500; for Cornell drawers (23"W x 19"D x 72"H); color: beige. Contact: John W. Peacock, 185 Benzler Lust Road, Marion, OH 43302-8369, 740-389-4886. 401

### Art

Beautiful butterflies laminated between beveled glass. Felt bodies, thread antennae, soldered and antiqued. Suncatchers, diamond shaped (4" x 7") \$25.00 includes postage. Mary Jane Zissoff, Trilogy of Art, Box 143, Parry Sound, Ontario, Canada. P2A 2X3. 705-746-4147, [www.zeuter.com/parrysd/specialty\\_stores](http://www.zeuter.com/parrysd/specialty_stores) 403

### Help Needed

Wanted: Seeds of the following plants: Wall Pellitory – *Parietaria officinalis*, Stinging Nettle – *Urtica dioica*, Water Soldier or Crab Claws – *Stratiotes aloides*. Also would like 6 to 8 small cuttings of Gray Sallow – *Salix atrocinerea*. Contact: Randy Robinette, 7302 Midland Trail Rd, Ashland KY 41102-9294. 404

### Help Offered

Wish to collect legally in Costa Rica? Whether you decide to visit Costa Rica for pleasure or work we can help you obtain your Official Collecting permit for the time of your stay. You would be allowed to collect in all the country (except National Parks). Costa Rica rain forests are unique in what you can get: species from the north (Mexico) or the south (South America). Contact: Miguel E. Chumpitasi, P.O.Box 1106-2150, Moravia, San Jose, Costa Rica or phone/fax (506) 235-5160. 404

Extraordinary stamps issue of 10 stamps with the following butterflies: *Caligo memnon*, *Morpho peleides*, *Papilio thoas*, *Siproeta stelenes*, *Ascia monuste*, *Parides iphidamas*, *Callicore pitheas*, *Danaus plexippus*, *Historis odius* and *Smyrna blomfieldia*. The mail office estimates that the issue will last up to November. The price for the 10-stamp set placed in deluxe cardboard is \$6 USD plus \$2.50 USD for air delivery (USA or Canada) or plus \$4 USD for Europe. Contact: Miguel E. Chumpitasi, P.O.Box 1106-2150, Moravia, San Jose, Costa Rica or phone/fax (506) 235-5160. 404

### Miscellaneous

**Call for Photos:** I am writing a book on butterfly ecology and conservation, called **A World for Butterflies**, for Key Porter Books in Toronto, Ontario. Since the subject is ecology/conservation my intent is to show photos of living butterflies "doing" things (e.g. butterflies and caterpillars in activities which show aspects of their biology, ecology and behavior). In my opinion this means the best place to find photos is from people who love butterflies first and photography second because you have to spend a lot of time in the field to catch the unusual! If you would like to submit photos for consideration, then I'd love to hear from you. For more information please contact: Phil Schappert, Department of Zoology, University of Texas, Austin, TX 78712-1064, [philjs@mail.utexas.edu](mailto:philjs@mail.utexas.edu), (512) 471-8240 (office), (512) 471-9651 (fax), (512) 237-3864 (home), [www.esb.utexas.edu/philjs/bookinfo.html](http://www.esb.utexas.edu/philjs/bookinfo.html). 405

For Sale: Small amount of dormant rootstock of *Aristolochia clematitis* (very hardy winter plant) and seeds of *Coronilla varia* (crown vetch), *Medicago sativa* (alfalfa, Lucerne), *Rumex hydrolapathum* (great water dock), a few others and annual flower and grass mix. SASE to Randy Robinette, 7302 Midland Trail Rd., Ashland, KY 41102-9294. 404





# Unusual Occurrence of Moths on the Upper Texas Coast During and After a Tropical Storm

Charles Bordelon Jr. and Edward C. Knudson

8440 Washington Blvd., Beaumont, TX 77707 and 8517 Burkhart, Houston, TX 77055

On Tuesday, September 8, 1998, Tropical Storm Frances moved onto the south Texas coastline. Our collecting trip to the Big Thicket was subsequently cancelled due to the weather conditions as the greater swath of the storm bore down on the upper Texas coast. The center of the storm moved into the Corpus Christi area on Wednesday, September 9. The major feeder bands, however, surged into the Beaumont/Houston area resulting in Tropical Storm conditions that persisted through Friday, September 11. This storm, and its immediate aftermath, brought some interesting observations...

Due to the previous drought in Texas, moth activity in our area was virtually zero. But even in weather conditions with winds gusting to 65 mph, and rain blowing sideways from the ESE, a strange phenomenon occurred. A huge outbreak of the Fall Armyworm

(*Spodoptera frugiperda*) occurred in the Beaumont area. Hundreds were observed by Bordelon on Wednesday and over 1000 were found in his bait trap on Thursday night. All were flying in tropical storm force winds and yet were coming to bait. Moths in SE Texas are not notorious about coming to bait in windy or rainy conditions.

Many other species, mostly noctuids, also appeared during, and immediately after this period. Most of these would normally occur throughout the season but instead they all turned up at once. Beyond that, eleven new species records for Harris and Jefferson Counties were found by the authors, including: *Metapopneumata rogenhoferi*, *Cobubatha orthozona*, *C. dividua*, *Eubolina impartialis*, *Toxonprucha diffundens*, *T. rudelis*, *Anomis flava fimbriago*, *Semiothisa cyda*, *S. nigrocomma*, *Palpita flegia*, and *Trischistognatha pyrenaelis*. We also found unusually large num-

bers of the Black Witch (*Ascalapha odorata*), nearly a dozen specimens, during the same period. Bordelon also found a specimen of the noctuid, *Tricholita florida*, known mainly from its namesake and only the second record for SE Texas.

These unusual species persisted until about September 18, when the last vestiges of the storm were gone. Most of them are common in SW Texas into the lower Rio Grande Valley, from where they no doubt originated. Bordelon also noted an unsurpassed flight of the Southern Dogface (*Zerene cesonia*) occurring from SE to NE Texas where it is casual at best.

It is no surprise that these phenomena may occur during tropical storms in this region, but this serves mainly as a reminder to collectors along the Gulf Coast to remain aware of these events and to leave the lights on and the bait out in even the inclement weather.



The state of Michigan is a great place for Lepidopterists! Where else can one go from Hell to Paradise in the same day? And find good collecting in both places! (The tiny community of Hell is in Livingston Co. in the southeast of the state and Paradise is in the eastern part of the upper peninsula). Photo subject and photos by Mo Nielsen.

## Membership

The Lepidopterist's Society is open to membership from anyone interested in any aspect of lepidopterology. The only criteria for membership is that you appreciate butterflies or moths! To become a member, please send full dues for the current year, together with your current mailing address and a note about your particular areas of interest in Lepidoptera, to:

Kelly Richers,  
Assistant Treasurer,  
The Lepidopterists' Society  
9417 Carvalho Court  
Bakersfield, CA 93311

### Dues Rate

Active (regular)	\$ 35.00
Affiliate	5.00
Student	15.00
Sustaining	50.00
Contributor	100.00
Institutional Subscription	50.00
Air Mail Postage for News	15.00

Students must send proof of enrollment. Remittances must be in U.S. dollars, payable to "The Lepidopterists' Society". All members receive the *Journal* (published quarterly) and the *News* (published quarterly). Supplements included in the *News* are the Membership Directory, published in even-numbered years, and the Season Summary, published annually. Additional information on membership and other aspects of the Society can be obtained from the Secretary (see address at right).

## Change of Address?

Please send permanent changes of address, telephone numbers, areas of interest, or e-mail addresses to:

Julian P. Donahue, Assistant Secretary,  
The Lepidopterists' Society,  
Natural History Museum of Los Angeles  
County, 900 Exposition Blvd.,  
Los Angeles, CA 90007-4057.  
[donahue@caroli.usc.edu](mailto:donahue@caroli.usc.edu)

## Our Mailing List?

Contact Dr. Donahue for information on mailing list rental.

## Missed or Defective Issue?

Requests for missed issues should be directed to: Ron Leuschner (1900 John Street, Manhattan Beach, CA 90266-2608, (310) 545-9415, [ronleusch@aol.com](mailto:ronleusch@aol.com)). Defective issues will also be replaced. Please be certain that you've really missed an issue by waiting for a subsequent issue to arrive.

## Journal of the Lepidopterists' Society

Inquiries regarding *Journal* policy and manuscripts submitted for publication in the *Journal* are to be sent to:

Dr. M. Deane Bowers, Editor  
Journal of the Lepidopterists' Society  
Entomology Section, University of  
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University of Colorado, Boulder, CO  
80309-0334  
Phone (303)492-5530,  
FAX: (303)492-8699  
[bowers@spot.colorado.edu](mailto:bowers@spot.colorado.edu)

Editorial policy is outlined on the inside back cover of any issue of the *Journal*.

## Book Reviews

Send book reviews or new book releases for review, for either the *Journal* or the *News*, to:

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Systematic Entomology Lab., USDA,  
c/o National Museum of Natural History,  
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(202) 382-1785 (office)  
(202) 786-9422 (fax)  
[asolis@sel.barc.usda.gov](mailto:asolis@sel.barc.usda.gov)



## Submission Guidelines for the News

Submissions are always welcome! When space becomes limiting, preference is given to articles written for a non-technical but knowledgeable audience, illustrated, written succinctly, and under 1,000 words. Please submit your article or item in one of the following formats (in order of preference):

1. Article on high-density, DOS- or MAC-formatted, floppy diskette in any of the popular formats. You may include graphics on disk, too. Indicate what format(s) your article is in, and call if in doubt. Include a printed hardcopy and a backup in ASCII or RTF (just in case).
2. Electronically transmitted file in ASCII or other acceptable form *via* e-mail.
3. Typewritten copy, double-spaced suitable for scanning and optical character recognition. Articles may also be faxed directly to my computer for OCR but you must call first so that I can set up for reception of your fax. Artwork should be line drawings in pen and ink or good, clean photocopies suitable for scanning.
4. Handwritten or printed (very legible, short pieces only please, <500 words).

## Submission Deadlines

Material for Volume 41 must reach the Editor by the following dates:

Issue	Date Due
1 Spring	Jan. 31, 1999
2 Summer	Apr. 30, 1999
3 Autumn	Jul. 31, 1999
4 Winter	Oct. 31, 1999

Reports for Supplement S1, the Season Summary, must reach the respective Zone Coordinator (see list opposite) by Dec. 15, 1998. See next page for more information.

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**The Lepidopterists' Society**

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P.O. Box 368  
Lawrence KS, 66044

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Lawrence, Kansas



*Heliconius cydno galanthus* (Bates) with its hostplant, *Passiflora quadrangularis* (L.), at Sarapiquí on the Atlantic slope of Costa Rica in January of 1998. Drawing by Miguel E. Chumpitazi.

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