NEWS OF THE LEPIDOPTERISTS' SOCIETY

Volume 43, Number 1 Spring 2001

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The **News of the Lepidopterists' Society** (ISSN 0091-1348) is published quarterly 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 Supplement S1 and is mailed with issue 1 of the News. In even numbered years a complete **Membership Directory** is published as Supplement S2 and is mailed with issue 4 of that volume of the News. Please see the inside back cover for instructions regarding subscriptions, submissions to, and deadline dates for, the News.

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Cover: Best in Show/Grand Prize (First—Moths), 2000 Lepidopterists' Society Photo Contest: *Agapema homogena* by Leroy Simon.

Rothschildia Hosts and Hybrids

Robert D. Weast

5324 NW 78 Court, Johnston, Iowa, 50131

I have long been intrigued by the Sonoran desert taxon *Rothschildia cincta cincta* (Tepper). I grew up wearing out the pages of Holland's Moth Book and was smitten with his scant, but tantalizing mention of *"Callosamia" calleta* and *Rothschildia "jorulla."* In my young midwestern eye I fancied these as rare, exotic beauties surviving somehow amid the torrid, xeric desertscapes of giant saguaro cacti and mesquite. I just had to learn more of these desert denizens. Thus began the long quest of traveling, collecting, rearing and researching these Saturniids. The mysteries of the moths began to unfold. They are still unfolding.

Review of previous work

In February of 1959 I received wild collected cocoons of *Rothschildia lebeau forbesi* (Benjamin) from San Benito, Texas. I wanted to rear a generation to synchronize its eclosure with that of the monsoon flight of *cincta* in Arizona. I refrigerated them at 42°F (5°C) until mid-April and then placed them in an outdoor cage. They emerged in May and produced a brood that fortuitously eclosed in late July. I placed them in a cooler and drove to Brown Canyon in the Baboquivari Mountains, Pima Co., AZ. On 3 August I tethered a single female in the canyon and in one of those rare moments of delight I discovered at dawn a male *cincta* paired to her. The 1400 mile (2253 km) trek from Iowa to Arizona paid off. From this mating I reared about 70 cocoons on wild cherry (*Prunus* sp.). The hybrid females laid well but the ova were very small and not viable. In 1986 I replicated this mating using *cincta guerreronis* (ex Sahuayo, Michaocan, Mexico) with a *forbesi* female. Of the 30 resultant pupae, only 1 was female and the remaining 29 were male. The female was barren but the males, backcrossed to pure *cincta geurreronis,* proved to be fertile.

In February 1999 1 collected 30 cocoons of *forbesi* on ash and willow in Harlingen, TX. I delayed their eclosure until May and from these I reared a good number of cocoons. I mailed female pupae to Jim Tuttle of Tucson and Bill Harding of Sedona, AZ. Jim secured a mating with a wild male *cincta* 18 July at Pena Blanca Canyon, Santa Cruz Co. and mailed the fertile ova to me in Des Moines, IA. Bill tethered a female at Pena Blanca 23-24 July, and attracted two males but neither mated. Bill told me that several other collectors took as many as 20 *cincta* that late July.

I reared 90 cocoons from the 150 ova Jim sent me. I treated the larvae at all stages with the antibiotic cipro to help prevent disease. The pupae began to eclose in late September into October, too late at this latitude for successful completion of another generation. Unlike the hybrid females of 1959 and 1989, those of 1999 had the full compliment of normal size ova. The males of 1959 and 1989 proved to be fertile when backcrossed with pure parent species, but those of the 1999 brood were sterile. I allowed 7 of them to mate with their sibling females and discovered these females behaved as if they had not mated. They retained most of their ova, but they did lay a few each night. None of the ova indicated embryonic development, suggesting that the hybrid males were sterile.

One easily recognizable difference between *cincta* and *forbesi* are the forewing discal spots. In *forbesi* the discal spots touch or extend through the postmedial band; in *cincta* they do not the reach the postmedial band. Most of the hybrids exhibit the shorter discal spots of *cincta*. Of course there are other distinguishing adult characters as well. Mature *forbesi* larvae bear yellow dorsal scoli; those of *cincta* are orange and those of hybrid larvae are orange.

Intergeneric matings

Cladistic studies indicate a close affinity between *Eupackardia* (Cockerell) and *Rothschildia* (Grote). I was surprised, nevertheless, to discover that a *calleta* mated sometime during the night with a female *forbesi* in my emergence cage. I didn't expect this because *calleta* typically mates after 8:00 a.m. and *forbesi* usually commence ca. 11:00 p.m. There were no other *calleta* present. Unfortunately, the *forbesi* behaved as do unmated females, laying a few involuntary eggs each night but retaining almost all ova until death. None of the ova was fertile.

In 1987 Dick Halbert achieved a breakthrough mating between *calleta* and *Rothschildia orizaba* (Westwood) which resulted in fertile ova. Some of these were given to Kirby Wolf (pers.comm.). He successfully reared the larvae and at least one pupated but died after a year in its cocoon. The spectacular larva, with dominant *calleta* characteristics, is pictured here (see B on next page). It is conceivable that on rare occasions the species may interbreed as both are common in Mexico City. Caged adults of intergeneric species may be more apt to pair than those in wild populations.

Ironically, even though *calleta* males respond to the pheromones of *forbesi* and *orizaba*—albeit while caged—I found that a Brazilian congener *Rothschildia jacobaeae (Walker)* female failed to attract *forbesi.* I tethered her for several nights in Harlingen, and

A: Fifth instar larvae of cincta × forbesi*; B: Fifth instar larva of* calleta × orizaba*, reared by Kirby Wolf; C: Intergeneric pairing of a* calleta *male to a* forbesi *female; D: Hybrid male* cincta × forbesi. *Photos by Robert D. Weast.*

although wild *forbesi* males would mate with nearby tethered *forbesi* females, the *jacobaeae* remained unpaired. Perhaps these two species have distinctly different mating times or maybe the *jacobaeae* pheromone is unsuitable.

New Hosts

In Texas there are 6 confirmed hosts of *forbesi* (peach, ash, willow, citrus, acacia and lime prickly ash). I recently discovered 3 new hosts, to wit: Chinese tallow *(Sapium sebiferum)*: 16 cocoons on 2 trees; Carolina jessamine *(Gelsemium sempervirens)*: 2 mature larvae on this vine; and crepe myrtle *(Lagerstroemia)*: 5 mature larvae were brought to me by a neighbor stating that they were tearing up her crepe myrtle. I then began looking on that shrub around Harlingen and found cocoons several times.

Conditionally I offer 2 more possible hosts. The first is esperanza (= yellow bells, *Tecoma stans)*. Because I didn't have crepe myrtle in my yard I transferred the neighbor's *forbesi* larvae to *Tecoma stans*. They fed on it readily and spun cocoons several days later. In **Wild Silks Moths of The United States** reference was made to esperanza as a host. Because both *Tecoma stans* and a species of acacia both share the common name esperanza, clarification is needed. I have taken *calleta* ova on *Tecoma stans* in Harlingen and Michael Collins has taken *calleta* larvae on that shrub at Pena Blanca Canyon, Arizona. I have little doubt *forbesi* exploits this host. All of these are planted as ornamentals in the Lower Rio Grande Valley.

The second likely host may be the deciduous conifer bald cypress *(Taxodium mucronatum)* which is native to Texas. It is sold in nurseries and is common in the Valley. I suggest this as a host because, after having released a mated female *forbesi* in my Iowa yard, I later discovered a large cocoon high up in my bald cypress tree *(Taxodium distichum)*. This tree stood alone, not touching other plants, confirming that cypress was most likely the sole host. *Rothschildia l. forbesi* enlarges the list of conifer feeding saturniids, (*Citheronia sepulchralis, Eacles imperialis, Hyalophora euryalus, H. columbia columbia* and *Graellsia isabellae)*. Also newsworthy is a new host record for *Automeris io*. In 1998 in the Valley I found 2 mature *io* larvae feeding on Australian pine *(Casurina* spp.). This evergreen bears single, drooping needles up to 15 inches long and is widely planted in the Valley as an ornamental.

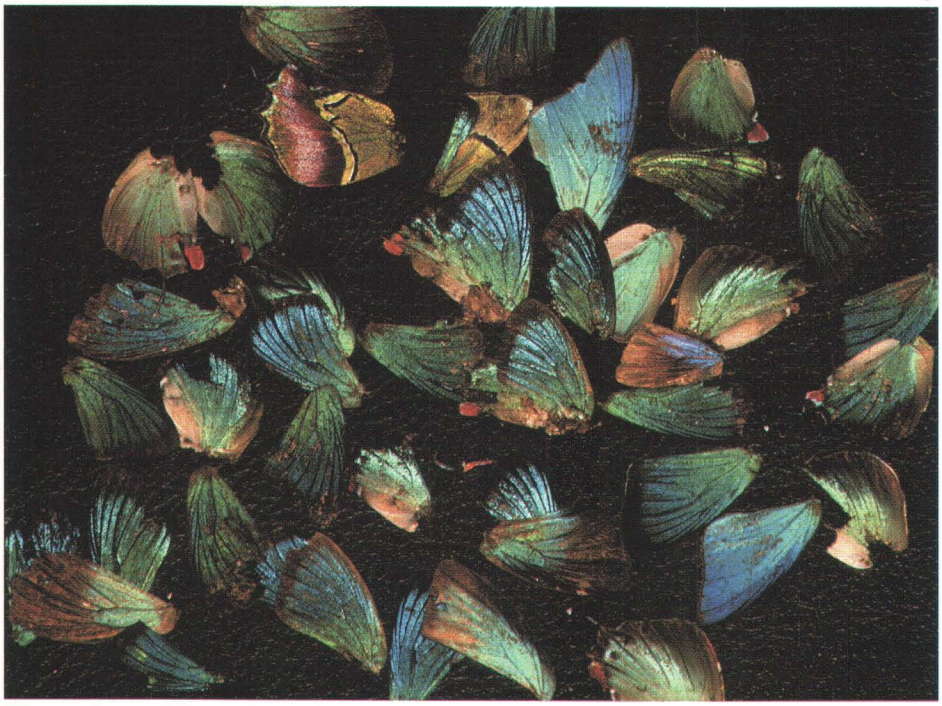
continued on pp. 6

Selective Predation on Iridescent Blue Butterflies by Birds

George O. Krizek

2111 Bancroft Place, NW, Washington, DC 20008

While on a recent trip to Acapulco, Guerrero State, Republic of Mexico, I observed the results of apparent vertebrate predation on iridescent blue butterflies. The observation was made on January 29, 1999 while visiting Isla Roqueta in Acapulco bay near western Acapulco. Isla Roqueta is separated by about one mile from the mainland and is covered with tropical dry forest in several stages of succession.



Wings of several butterflies found under flowering mango trees on Isla Roqueta, Mexico, on January 29, 1999. Photo by George O. Krizek.

I found the wings of several butterflies lying on the ground in a 20 m × 20 m area underneath some flowering mango trees (*Mangifera indica*) in the vicinity of a small well. I found 20 or more wings of iridescent blue butterflies, all lying with the blue side up (see photo). I did not find any wings of non-iridescent butterflies in the area despite the wide variety of tropical butterflies that were present at the time.

I collected almost all of the wings and my analysis indicated that they represented one or two individuals of *Archaeoprepona demophon anitmache* Huebner while the remaining wings all belonged to two species of hairstreaks. Three or four wings were from *Pseudolycaena damo* Drury, one wing was from a small non-hairstreak butterfly (as determined by Dr. R. Robbins), and the remaining wings were from several individuals of *Evenus regalis* Cramer. There were about four males to each female of the latter species (see photo, *Archaeoprepona* not shown). Most wings were undamaged but several hindwings showed evidence of having been grasped at the base by a bird beak. The damage was commensurate with the butterflies having been grasped while they were perched. *Pseudolycaena damo*, *Evenus regalis* and a number of other hairstreaks have been found visiting mango flowers in Guanacaste Province, Costa Rica (P. Opler, pers. comm.).

I did not observe the actual predation, hence I have not determined what kind of bird was involved or how the predation took place. In any event, neither the "false-head hypothesis" of predator avoidance (Winkler, 1968; Hinton 1980; Robbins 1980, 1985; Krizek 1998) nor the "startle effect" of the iridescent blue dazzle (T. C. Emmel, pers. comm.) seemed to work against this particular predator. To be exact, it did not protect the individuals whose wings I found. I assume that only a single bird was involved since all of the wings were found in a small area.

Some protective mechanisms may "fail" during evolution. Not only do these mechanisms not protect the individuals that they were meant to protect but they may actually have the opposite effect. Hinton (1980) describes a situation in which some bee-eaters (birds in the family Meropidae) are attracted to those warning colors that are repulsive to most other vertebrates. The birds specialize in eating brightly colored Hymenoptera with combinations of red-and-black and yellow-and-black coloration.

I have described a similar example: the cryptic resemblance of young papilionid larvae, which have the shape and coloration of a bird dropping, protects them from some predators but does not protect them against human predators (Krizek 1977, 1983). In fact, a searching

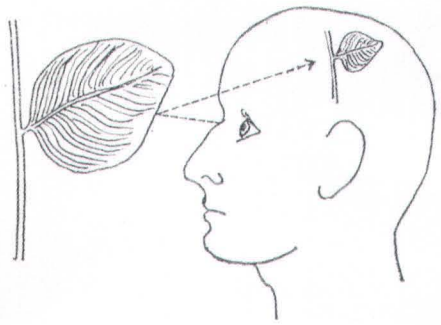


Figure 1: Undistorted normal visual perception: a leaf is seen as a leaf.

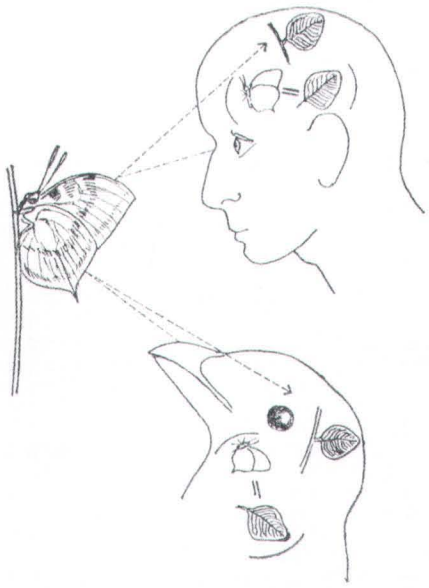


Figure 2: Appropriate visual perception of a crypsis defense mechanism. Here crypsis serves its original purpose: visual illusion. An Anaea *butterfly, a leaf mimic, is seen as a leaf.*

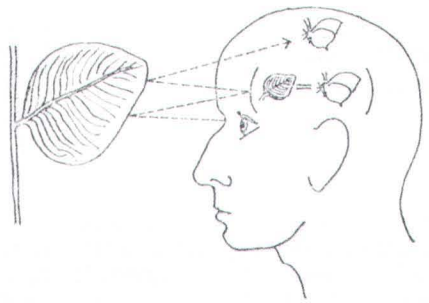


Figure 3: Inappropriate interpretation of an undistorted visual signal: anticipation of crypsis when it is not present. This phenomenon, called "superillusion" (anticipatory visual illusion) is common in lepidopterists. Figures reproduced from Cs. Psychiat., 85(5), 1989, 334-339 by permission of the author.

lepidopterist is ready to see a papilionid caterpillar in every real bird dropping (Krizek, 1984). The "clever" human mind outwits nature in this area. The original protective mechanism has the opposite effect and actually betrays the individual. We can only assume that this phenomenon has only an academic and theoretical meaning, since entomologists, as a general rule, do not eat caterpillars.

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Acknowledgements

My special thanks to Paul Opler for his kind help with the manuscript as well as for his comments regarding the behavior of Evenus regalis and Pseudolycaena damon in Costa Rica. Thomas C. Emmel deserves my sincere thanks for his interest in my observations and his assessment that they are worthy of publication. Robert K. Robbins generously assisted me in the determination of the illustrated wings. I also want to thank my daughter, Monika Krizek-Griffis, for her editorial assistance and her computer skills, which are superior to my own.

Hybrids...*continued from pp. 4*

In 1999 I mailed Eric Olson several dozen *forbesi* ova and he successfully reared them on an artificial diet. The larvae were a washed out, pallid green hue, due to a lack of carotene in the diet.

In 1999 Jim Tuttle (pers. comm.) discovered a new host for *cincta,* taking a few cocoons on hop bush (= soapberry, *Dodonaea viscosa).* This brings the total of known hosts of *cincta* in Arizona to 5 *(Jatropha, Coursetia, Mimosa* and possibly *Sapium).* I suspect more will be discovered. As is typical, collectors, such as myself, to save time and energy climbing over tortuous, cactus and rock strewn terrain, will target known sites and hosts in their searches and may overlook other possibilities.

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Announcement:

TILS/TTR now online

The International Lepidoptera Survey (TILS) and *The Taxonomic Report* (TTR) are now on line at **www.tils-ttr.org** Issues of the TILS News may be accessed there in full. The cover page of all issues of TTR are also available. The sites Photo Library illustrates the type specimens of many new taxa in addition to various neotypes and topotypes. The site is still "under construction" so several changes and new features will be occurring.

Presidential Profile & Commentary

Passion

Robert K. Robbins, President

Organizational objectives, missions, and visions leave me cold. Frozen. Numb. Unmoved. I joined the Lepidopterists' Society in 1970, but it was not because I read its objectives (Article II of the Constitution, sandwiched in the recent Membership List). For 30 months I was Chair of the Smithsonian's Department of Entomology and had to revise its mission and vision statements. Quite frankly, I did not think that it mattered a whit. Although I understand the rationales for organizational mission statements and the like, they do not explain why I joined the Lepidopterists' Society. More importantly, they do not make me feel glad in my bones to be a member. So why did I join? Let me try, however badly, to explain.

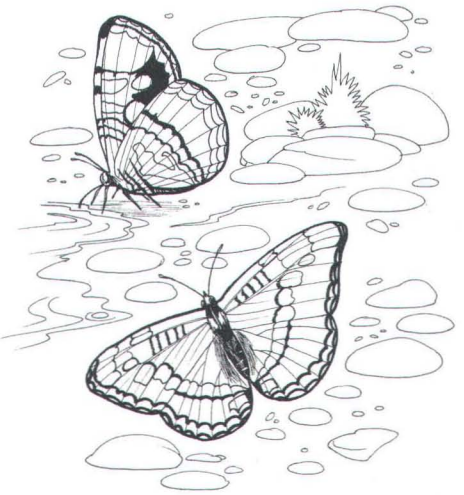
My interest in butterflies, which had been full-blown as a child growing up on Long Island's South Shore (New York), was re-awakened during the summer of 1968 when collecting companion Jeff Glassberg (founder of NABA) and I found our old insect nets rusting in a garage and began to look for butterflies again. During the July 4th weekend, we watched male Satyrium calanus (banded hairstreaks) flying around an oak at 7 AM. I liked the way these butterflies flew and landed. I was attracted to the intricate pattern of offset white lines on their wings.

Repeated visits to Latin America over the next four years firmly established my zeal for eumaeine hairstreaks. These butterflies were a challenge: hard to follow in flight, difficult to catch, and seemingly impossible to identify. There were lots of species, and the prospect of catching an unknown one with an unexpected wing pattern fueled my enthusiasm. It was an adventure to collect in the jungles of the American tropics, where about 95% of the species lived. Before long, alternating hindwing movements coupled with an angular wing silhouette became a search image deeply ingrained on my psyche. I stalked iridescent blue flashes along forest trails and on hilltops. Clearly, hairstreak rhythms meshed well with those "mechanisms" inside of me that determine what I like and do not like; and a passion, perhaps better phrased a neurotic zeal, was born and nurtured.

Good fortune flowed from this zeal. I subsequently went to graduate school in biology at Tufts University with Francie Chew as my advisor. I was awarded successive post-doctoral fellowships with Bob Silberglied and John Burns, and was then hired as a research entomologist at the Smithsonian's National Museum of Natural History. Imagine the good fortune to work with three such talented, wise, and caring advisors! Imagine the good fortune to be paid to pursue one's passion! And imagine the numerous students and collaborators with whom I have had the good fortune to work!

I joined the Lepidopterists' Society to share my Lepidoptera-inspired enthusiasm and passion and zeal with like-minded folks through correspondence, meetings, phone calls, and publications. Indeed, I have met so many of you "like-minded folks" through our Society that I would not dare to attempt even a partial listing, but you know who you are. It has been rewarding and enriching.

Passion is a bit like the spaghetti sauce that I had for dinner last night; it was hard to eat without getting it all over myself and everyone around me. No matter what is written in our Constitution, I hope that the real objective of members will be to share their Lepidoptera passions with others, particularly youngsters. By doing so, we ensure the vitality and growth of our Society. We enrich ourselves and those around us. And, we cannot help but enjoy ourselves.



2001 Annual Photo Contest

The Education Committee invites you to enter the Annual Photo Contest at the next annual meeting of the Society. Prizes will be awarded in three categories: butterflies, moths, and life history sequence or individual photos of larvae and pupae. Cash award of $50 for first place in each category and photographic supplies will be awarded. The Best in Show will receive a special trophy award. Award winners will be published in an issue of the *News*.

For additional information and entry forms, please contact Dr. Jackie Miller, Allyn Museum of Entomology/ FLMNH, 3621 Bay Shore Road, Sarasota, FL 34234, ***jmiller@virtu.sar.usf.edu***. Deadline is 1 June 2001. This competition is one of the highlights of the meeting. Come and join the fun!

Pterourus glaucus × *multicaudata*? The specimen in the center was collected in Travis County, Texas, in March of 2000. With markings like typical *glaucus* (left) but a tail structure like *multicaudata*, (right) it may represent a natural hybrid between the two species. Both species have been taken in the same location. (The *glaucus* shown is from Travis County, Texas, and the *multicaudata* shown is from Utah.) Collector: Russell Rahn of Irving, Texas. Thanks to Susan Bayless for taking the photograph.

Zela Metalmark (*Emesis zela* Butler): A New Record for Texas

Ed Knudson, Charles Bordelon[1] and Roland Wauer[2]

8517 Burkhart, Houston,TX 77055

The first known Texas specimen of the Zela Metalmark was discovered in Big Bend National Park, by Roland Wauer. It was found in Mouse Canyon, a narrow, rocky canyon at about 4200 ft. elevation on the northern edge of the Chisos Mountains on Sept. 1, 1998. Several photos were taken by Wauer (above and underside views), which leave no doubt as to the identity of this butterfly.

Emesis zela was previously known to occur in the US in southeastern and central Arizona and extreme southwestern New Mexico. The host plant is thought to be Oak, but has not been proven. Two other species in this genus occur sporadically in extreme south Texas, The Curve-winged Metalmark (*Emesis emesia*), which feeds on *Cesalpinia* sp. and the Falcate Metalmark (*Emesis tenedia*), which feeds on *Clematis* sp.

Photo by Roland Wauer.

[1] 8440 Washington, Beaumont, TX 77707; [2] 315 Padre Ln., Victoria, TX 77905

Odd Visitors...

Odd visitors to the hummingbird feeders at the Stengl "Lost Pines" Biological Station have included a variety of butterflies and moths including the Giant Swallowtail, *Papilio cresphontes* (Papilionidae), shown here. This particular individual visited this feeder (one of 4) repeatedly over 3 or 4 days. Other lepidopteran visitors to the hummingbird feeders have included Gray Hairstreak, *Strymon melinus* (Lycaenidae), Robin Clearwing, *Hemaris thysbe* (Sphingidae)(both photographed), and Red Admiral, *Vanessa atalanta* (Nymphalidae). Photo by Phil Schappert.

Karl Jordan Medal Award 2000 to Tosio Kumata

Jacqueline Y. Miller,

Allyn Museum of Entomology, Florida Museum of Natural History, 3621 Bay Shore Road, Sarasota, FL 34234

Dr. Tosio Kumata was the honored recipient of the Karl Jordan Medal during the 51st Annual Meeting of the Lepidopterists' Society, at Wake Forest University. Dr. Kumata was born in in Abasiri-city, Hokkaido, Japan on 3 July 1932. He completed his undergraduate degree at Hokkaido University, Faculty of Agriculture in 1955 and also completed the M. S. (1957) and Ph. D. (1962) soon thereafter. Upon completion of his doctoral degree, Dr. Kumata joined the Faculty of Agriculture, Entomolological Institute, Hokkaido University, Sapporo as an Assistant Professor in 1962, was promoted to Associate Professor in 1981, and Full Professor in 1995. In March of 1996, he officially retired from the University and has continued to be an active research investigator working in cooperation with Entomology Division of CSIRO, Australia. He is a member of several scientific societies. He and his lovely wife, Masako, have one daughter, Asami, and three sons, Takasi, Tuyosi, and Atusi.

John Brown with Masako and Tosio Kumata. Photo by Jackie Miller.

During his undergraduate training, Dr. Kumata began to work on the taxonomy of Japanese Lymantriidae. The taxonomy of adults had been examined in detail, and thus he focused his efforts on the larval characters for a revisionary study of the group. However, when he began his graduate work, he decided to change his specialization from the Lymantriidae to the Gracillaridae due to economic reasons. He could not afford to purchase the number of insect boxes necessary for the storage of such large moths as the Lymantriidae.

Thus began Dr. Kumata's revisionary studies on Gracillariidae with an emphasis on larval characters. In all he has published more than 41 interrelated papers in English and another six in Japanese. His detailed studies on this family, especially on taxa from Japan and Australia, have provided a means for the proper identification of a previously very poorly known lepidopteran group. Through these studies, Dr. Kumata has demonstrated the importance of larval characters in discerning the taxonomy of the Gracillariidae. For example, his discovery of the mesothoracic spiracles in the larvae of the subfamily Oecophyllembiinae is the first record in the Lepidoptera. It is for his excellent revisionary studies on the life history, taxonomy and systematics of the Gracillariidae that Dr. Tosio Kumata was recognized by the Committee and awarded the Karl Jordan Medal. Dr. Kumata presented a special lecture, "Gracillariidae: Their Morphological Diversity in the Larval Stage," summarizing some of his comparative studies on this intriguing group.

Announcement...

Basic Techniques Manual available...

Basic Techniques for Observing and Studying Moths & Butterflies

by William D. Winter.

Lep. Soc. Memoir #5 is a 350-page book (with 82 pages of Appendices) packed with information for study of Lepidoptera no matter what the reader's interests are. The introductory chapter tells where and when to look for butterflies: Best bets are disturbed areas, edge zones (roadsides, railroad verges) and openings in the forest. Since each group of species has its own habits and flight times, it is best to try different times, seasons and habitats.

Other chapters describe photo techniques, gardening for butterflies, and collecting methods. The latter subject is expanded to show how to obtain maximum scientific information within proper environmental guidelines. Both beginners and experienced students of Lepidoptera will find this book to be a valuable reference.

To get your copy, send check or Money Order ($25.00 (Members), $40.00 (Non-members) + $4.00 (US and Canada) or $6.00 (Other Countries) postage and handling, made payable to "The Lepidopterists' Society," to:

Ken Bliss, Publications Mgr.
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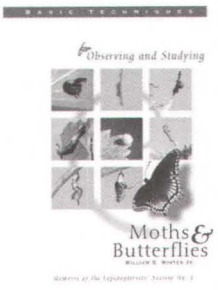

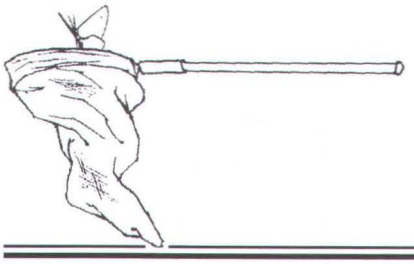

Mailbag...

Complete Seitz...

Dear Editor,

re:"..There are probably no complete sets [of Seitz] in any American or Canadian library..." Peigler, R.S and E.W. Classey. "Seitz' Macrolepidoptera of the World" Vol. 42 No. 4, pg. 95.

I am pleased to report that there is (almost) a complete set of the English edition of Seitz in a Canadian Library. The University of Alberta Libraries owns all 16 volumes, with their appropriate plates and supplements. However, we are missing the previously unknown, eight-page Volume 17. The majority of the volumes are in the publisher's bindings (a few have been well-used and subsequently rebound) and most still bear a "Watkins and Doncaster, Naturalists. 36 Strand London, W.C." label.

The University of Alberta Libraries have an excellent entomology collection resulting from many years of development and support from faculty members and a tradition of donor generosity through the provision of trust funds to continue developing the collection.

To the authors: Thank you for a most interesting article. Mr. Classey: please let me know if a Volume 17 comes available for purchase!

Pam Ryan

Public Services Librarian,
Science and Technology Library,
University of Alberta Libraries,
Edmonton, Alberta CANADA,
Pam.Ryan@ualberta.ca

Research Request...

Dear Editor

I am an undergraduate student at the Department of Entomology, Cornell University. For my undergraduate honors thesis, I am conducting a phylogenetic analysis of the Libytheinae, using molecular and morphological characters. My aim is to come up with a phylogeny and then propose a hypothesis to their worldwide distribution. My major advisors at Cornell are Dr. J. Franclemont and Dr. Q. Wheeler.

To successfully resolve the relationships, I need collaborators. It would greatly help my project if members could please send me specimens of any of the 12 species, dried (in envelope), spread, in alcohol, in Kahle's solution, larvae, etc. It would be best if the alcohol samples are preserved in 95-100% ethanol, and that specimens are placed in Kahle's solution immediately after collected. I will send vials containing alcohol or Kahle's solution to those who are willing to help.

In return for your generous help in providing specimens, I can offer an exchange for butterfly or moth specimens from Japan. Please let me know if you can assist in this project.

I look forward to your response.

Akito Kawahara

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It *Still* Doesn't Fly...

(Reprinted from Reader's Digest, January 2001, "You Said It", pp. 11).

Keith Carter's "Rio Grande" photograph with the "butterfly" is lovely, and your words on November's back cover are moving. But the "butterfly" is a moth—specifically, a polyphemus. These moths simply do not fly during the day unless disturbed, then their goal is to find a dark hiding place. The odds of finding one on a hiker's boots in sunshine, for long enough to take a picture, are only slightly higher than the Rio Grande suddenly freezing.

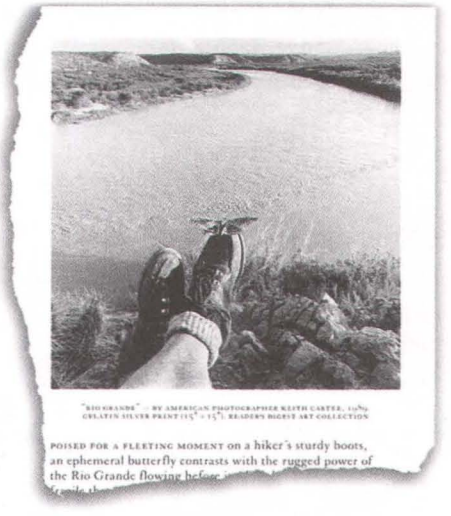
So the butterfly is a fake...uh, posed. We are looking at a thorougly dead moth, probably pinned or glued to the hiker's boot so a stray breeze will not dislodge it while the photographer carefully frames his picture. It's lovely. It's hilarious.

Rik Littlefield,

member, The Lepidopterists' Society

The RD editor responded with this reply:

The "butterfly" is indeed a moth. As for its daytime debut, photographer Keith Carter says, "How it got on my boot remains a mystery. It's art, not science!"



POISED FOR A FLEETING MOMENT on a hiker's sturdy boots, an ephemeral butterfly contrasts with the rugged power of the Rio Grande flowing before

Metamorphosis...

The Society has learned of the death of the following members. Our condolences to their families.

Lauren D. (Andy) Anderson, Ph.D.

Professor Emeritus of Entomology, University of California, Riverside, 25 August 2000. Anderson was born on 10 April, 1909, in Morganville, Kansas. At the University of Kansas he earned a Bachelor's degree in 1930 and a Master's degree in 1931. Using leave time accrued while working at the Virginia Truck Crop Experiment Station in Norfolk, VA, he continued his graduate studies under Alvah Peterson at Ohio State University and contributed numerous larval samples for Peterson's classic works on immature insect taxonomy. From 1948 to his retirement in 1976 Andy conducted research and taught at the Citrus Experiment Station and then the University of California, Riverside. He was instrumental in establishing the UCR Entomological Research Collection, which includes one of the West's best collections of immature insects, his specialty. Andy had been a member of the Society since 1971. An extensive obituary appeared in the UCR *Friends of the Entomology Research Museum Newsletter* No. 8, Summer-Fall 2000.

J. Bernard ("Bernie") Gollop

of Saskatoon, Saskatchewan, Canada, on 26 May 2000. Dr. Gollop had been a member since 1997.

Peter Frederick Bellinger, Ph.D.

Professor Emeritus of Biology, California State University Northridge, Northridge, CA, in Chatsworth, CA, on 20 November 2000. Although Pete (as I knew him) was a world authority on the systematics of springtails (Collembola), he cultivated an active interest in Lepidoptera and frequently brought "UFOs" to the Museum for identification. Pete was born in New Haven, CT, on 15 June 1921, and received his B.A. (1942) and Ph.D. (1952) at Yale University. He first joined the Society in 1951, and served as Assistant Editor of both the *News* and *Journal* from 1951 to 1969. In 1958 he assumed the role of Society Librarian, and held that position until I succeeded him in 1978, when the Society Library was moved from Northridge to the Natural History Museum of Los Angeles County. As a graduate student he began writing abstracts for the Recent Literature section of the *News* (and later the *Journal),* for decades a valuable feature of virtually every issue that attempted to summarize world-wide lepidopterological literature. He and his cadre of international collaborators eventually became overwhelmed in their attempt to provide complete coverage of the world literature; this, coupled with the skyrocketing costs of publication, led to the eventual demise of Recent Literature. Peter married Carolyn Jones on 11 April 1953, who predeceased him on 9 February 2000. He is survived by two children, Frederick Peter Bellinger and Christina Elizabeth Warrender.

Julian P. Donahue,
with assistance from James N. Hogue

Arthur William Rupp

(always known to the Society as A.W. Rupp since he first joined in 1966), of Priddis, Alberta, Canada, on 13 June 2000, at the age of 72, after a long and courageous battle with cancer, maintaining his good humour to the end. Art travelled widely in his professional capacity as a geologist, and had a tremendous appetite for the wonders of nature, even in the most desolate of areas. He acquired an interesting collection of a wide variety of artifacts, including seashells, rocks, works of art, etc., but his predominant interest was in butterflies and moths. I met him first at a Lepidopterist Society meeting in Fairview, Alberta several years ago, and this was the beginning of a close friendship with him and his wife Flo. Their acreage in Priddis on Fish Creek was a little wonderland of nature, and they both were extremely happy there. We miss him dearly and will always treasure our times together.

submitted by Dr. Rudolf A. Valerio,
Calgary, Alberta

Lynn Williams

of Grants Pass, Oregon, in August, 2000. Mr. Williams first joined the Society in 1992, and was a Sustaining Member.

Richard P. Fall, 1928 – 2000

Members of our Society lost one of our greatest supporters with the death of Richard Fall at age 72 on Oct.31, 2000. Richard had been successfully battling prostate cancer and other problems, but the stress of recent operations had apparently taken too much out of him, and he experienced a massive heart attack while getting into his car after work that day. He is survived by his wife of 45 years, Louise, and sons Ken, Chris, and Stuart.

Richard was a lifetime resident of Los Angeles, and attended Cal Poly San Luis Obispo and UCLA. He married Louise Harding in 1955, and a year later founded Bio Metal Associates in a garage in west Los Angeles. The company became BioQuip, Inc. in the sixties, and for a short time had a branch in Baltimore, MD. Richard was Chairman of the Board and co-owner at the time of his death. His great love was developing and perfecting equipment for entomologists, and such innovations as the knock-down insect drawer kits and tropics net with snap-together sections that many of us have used over the years. He actively sought feedback from his customers, and with many of us he became a fast friend. He had the effect on me of stimulating creative thinking about new items to develop, and improvements on old ones. Back in the eighties he was working on a tropics net that had 4-foot fiberglass sections. He sent this to me in a PVC shipping tube and I carried it to Latin America for butterflying. I would return it for half of the year so Chris Nagano could use it for his monarch studies in California. Mud would prevent the sections from slipping together, and the ends finally split. The aluminum snap-together sections were the much better end product, but it was fun helping with its evolution.

The exploratory visit by Richard and Louise in 1968 to Louisville while seeking their eastern branch site, dinners together at Entomological Society of America meetings, and memorable visits to BioQuip offices and shop in Gardena, CA provide me with some of my happiest memories as an entomologist. I am sure many other members share this sentiment, as Richard was the kind with whom one could forge a friendship rarely achieved by people who see each other only occasionally. The Falls have been devoted to the Lepidopterists Society, and have funded numerous receptions and donated many door prizes to enhance our Annual Meetings.

Those who would like to honor Richard's life and achievements can donate to the Richard P. Fall Memorial Scholarship at the Entomological Society of America, 9301 Annapolis Rd., Lanham, MD 20706-3115. Checks must be payable to the Entomological Foundation and noted as for this fund.

Richard's true memorial are the memories we have of him, the "tools of the trade" he designed and produced for us, and BioQuip itself, which flourishes still under the leadership of Louise and their sons and their wives.

Charlie Covell

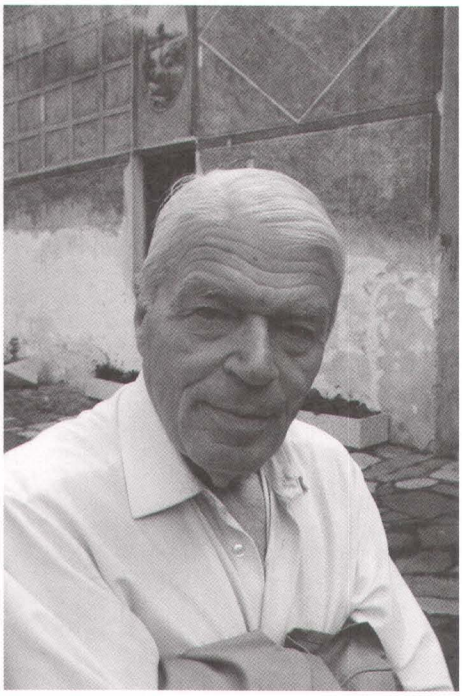
Sir Cyril A. Clarke, MD, PhD, FRS

Sir Cyril Clarke, member of the Lepidopterists' Society Executive Council 1959-1962 and vice president 1966-1967, died in Cheshire, England, on 21 November 2000, at the age of 93. His principal contributions to science and medicine were in the field of genetics, especially hereditary patterns in human blood groups. He often pointed out that much of this was based on his earlier work on the genetics of swallowtail butterflies. His paper in the British Medical Journal [#26 below] is a fine summary of these related interests and contributions, and contains perhaps the only full-page color plate of butterflies in the medical literature.

After elucidating the heredity of the Rh blood group, Clarke and his colleagues developed a vaccine that allows Rh-negative women to bear Rh-positive babies successfully. As a fellow pathologist, one of us (RES) learned of these fetal diseases as erythroblastosis fetalis and haemolitic disease of the newborn. It would be interesting to

know whether Dr. Clarke ever knew Dr. Benjamin Landing, who also died last year after an interesting and successful career in medical genetics, pediatric pathology, and hereditary patterns in butterfly morphology.

Clarke's first significant contribution to lepidopterology, which made much of his subsequent work possible, was a method for hand-mating butterflies in



the laboratory to produce interspecific hybrids. The technique helped Clarke and his long-term collaborator, Philip Sheppard, to study the genetic architecture of mimicry genes and species differences in a variety of swallowtails, especially *Papilio dardanus*. This work continued to be prominently cited decades later in college textbook discussions of multiple niche polymorphisms, diversifying selection, and the formation of gene linkage complexes. In spite of his renown, Sir Cyril Clarke was enormously enthusiastic and helpful to other swallowtail researchers, including more than a decade of correspondence with one of us (FAHS) as a student and postdoc.

Clarke and his collaborators also carried out substantial research on other butterflies (e.g. *Hypolimnas*) and a variety of moths (e.g. *Biston*, *Lymantria*, *Panaxia*). Much of this work compared the effects of heredity and environment on changing morphological patterns over several decades in England and North America, especially the phenomenon of industrial melanism in the peppered moth. Clarke not only had a keen ability to see through to the conceptual heart of evolutionary and genetic puzzles, but he also had the experience and wisdom to keep his work well grounded in the real world. Several of his later papers showed that earlier, elegant explanations of phenomena like industrial melanism, which were so compelling that they became classic textbook examples, were in fact considerably more complex than initially believed.

A well-written obituary, with a photograph of Sir Cyril, appeared in the New York Times, Tuesday 5 December 2000. A short biography, with an earlier photo, appeared in the Commemorative Volume of the Lepidopterists' Society, edited by Roy O. Kendall, published in 1977. The present summary of his life is written mainly for lepidopterists.

Cyril Astley Clarke, his father a physician, was born on 22 August 1907, in Leicester, England. He was educated at Cambridge University, receiving his MD degree in 1937, and PhD in medical genetics in 1963. His specialty training in gynecology and laboratory medicine was at Guy's Hospital in London. After serving as a surgeon in the British military during World War II, he joined the faculty of the University of Liverpool in 1958, where he rose to Professor of Gynecology, and Director of the Nuffield Laboratory of Medical Genetics from 1963 into the late 1970s. From 1972 to 1977 he served as President of the Royal College of Physicians. He was knighted in 1974, and received honorary doctorate degrees from the Universities of Edinburg, Leicester, and East Anglia. Other honors bestowed upon him included Commander, Order of the British Empire [1969], the Albert and Mary Lasker Award [1980], and Fellow of the Royal Society of London [1970]. He was an expert yachtsman, and was appointed a Royal Yachtsman in 1969. His wife of 63 years, Dr. Frieda [Feo] Margaret Mary Hart, who helped him in many of his various research endeavors, died in 1998. Their three sons and several grandchildren and great-grandchildren survive him.

His enormously productive career must serve as an example of how studies involving the collection, rearing, and laboratory hybridization of Lepidoptera can help lay foundations for research in human biology and pathology, which may result in important and even life-saving new treatments for human diseases.

Acknowledgments

We thank Stephen Clarke for his help and the photo of his father, Laurence Cook for a partial list of Sir Cyril Clarke's publications, and Pam Ryan and Ruth Gilbert for library assistance.

Ray E. Stanford and
Felix A. H. Sperling

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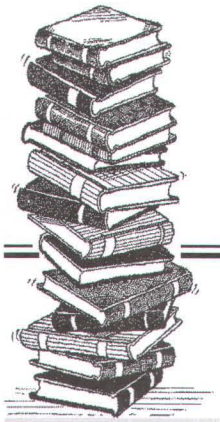

The Lepidopterists' Bookshelf

P. J. DeVries, Editor

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

Book Review Editor for consideration for review in the

The Spirit of Butterflies: Myth, Magic, and Art

by Maraleen Manos-Jones. 2000. Harry N. Abrams, Inc. Hardcover, 144 pp. copiously illustrated, 24 x 29 cm. ISBN 0-8109-4115-5. $34.95.

Late in his life, Vladimir Nabokov assembled materials to do a coffee table book on butterflies in art. He never wrote the book, nor did anyone else—until now. *The Spirit of Butterflies* is, however, more ambitious than that. It aspires to be a cultural history of butterflies, embracing myths of all nations, religious symbolism, art and design, from prehistory to today—an ambitious undertaking indeed!

It imbeds its text in a visually stunning and exquisitely selected collection of images. Manos-Jones, who says she was the first woman to see the Mexican wintering colonies of the Monarch and is writing a book about it (she describes it as if she was alone), has been butterfly-obsessed since; she has

book about it (she describes it as if she was alone), has been butterfly-obsessed since; she has

Because I found much in it that was new to me, I found myself wishing it were fully referenced.

There are, however, plenty of errors in the book. In the Introduction the author tells how she initially became "hooked" on butterflies as a result of a chance encounter with a Monarch larva. Her descriptions repeatedly refer to the fleshy black filaments on its body as antennae, and she truly does not seem to know they are not.

giant silk moth (*Antheraea* sp., Saturniidae) in a Japanese print is, too. But back to the Death's Head Sphinx: there is a famous page of the Book of Hours of Catherine of Cleves (circa 1435), one of the finest of all illuminated manuscripts, that has several butterflies in pivotal positions in the design. One of these is the Red Admiral (*Vanessa atalanta*, Nyphalidae), which is shown twice: in the upper left-hand corner with its wings closed, and in the center-left border with them open. Inexplicably, the former is not once but twice reproduced in this book and identified as a Death's Head Moth (on pp. 64 and 76), and on p. 76 the caption actually goes on about how that moth is a symbol of Saint Vincent, while the other butterflies shown (*Aglais*

about how that moth is a symbol of Saint Vincent, while the other butterflies shown (*Aglais*

How the Lepidopterists' Society Works

Ernest H. Williams, Secretary

This is our Society.

We, the membership, elect the officers, and they represent us in making decisions about the activities and directions of our organization.

The business of the Society is overseen by an Executive Council, which consists of the elected officers and nine additional elected members-at-large (the back of each issue of the NEWS lists all these people). For the sake of efficiency, most of the business of the Society is handled within designated committees. It may help you to know our committee structure; if you know who's in charge of something, you can contact the right person to make your views known!

Here are the standing committees of the Society, the current Chair of each, and an abbreviated description of the committee's tasks. We're putting this information in the **News** to keep the membership aware of our structure and how we function. Contact information for committee chairs is found in the recently distributed membership directory

1. Budget and Publications Committee. (Eric Metzler, Chair). Oversees financial aspects of the Society, including the dues structure, and works with the Treasurer and Assistant Treasurer.

2. Meetings Committee. (Susan Weller, Chair). Solicits sites for annual meetings and works with organizers to ensure that meetings are well advertised and planned.

3. Membership Committee. (Brian Scholtens, Chair). Distributes membership information about the Society and our collecting policy, oversees the website, supervises sales of Society items, and supports activities at annual meetings.

4. Education Committee. (Jackie Miller and Susan Borkin, co-Chairs). Makes information available about Lepidoptera generally and the Society in particular.

5. Awards Committee. (Alma Solis, Chair). Raises funds for awards and oversees the selection of winners.

6. Records Committee. (Ernest Williams, Chair). Maintains minutes of meetings along with other records of the Society, including the membership database; works with the Secretary and Assistant Secretary.

7. Nominating Committee. (John Brown, Chair). Nominates members of the Society for positions to be filled in each election (traditionally chaired by the most recent past President).

8. Editorial Board. (Bob Robbins, Chair). Oversees all publications; includes the Editors of the News, Journal, Memoirs, and website.

An invitation to join the

Lepidopterist' Society of Africa

This Society was formed in 1984 by a group of enthusiastic lepidopterists in Southern Africa; the area of focus was subsequently extended to include the whole African continent. Its membership includes both professionals and amateurs; our constitution, aims, objectives and code of conduct are all very similar to those of the older American 'Lepidopterists' Society'. The Society has one publication, issued quarterly; the journal ***Metamorphosis*** (ISSN 1018-6490). In this journal, both scientific papers and articles of general interest are included.

In 1997 the first International Conference was held in Nairobi, Kenya and the second was held in 1999 at Kirstenbosch Botanical Garden in Cape Town. Both were well attended by delegates from all over the world, including USA, Australia and Europe. These conferences were jointly organised by the Lepidopterists' Society of Africa and the African Butterfly Research Institute (Nairobi).

There are a variety of specialists among our membership, including specialists in Geometrids and the association between the Diptychini and Cycads. Some are studying ant-association in immature stages of lycaenids, others are concerned with conservation issues and two members run successful butterfly flying houses. Special publications are produced from time to time; two examples of these are a comprehensive list of lepidopteran foodplants and shortly, an annotated checklist of Zambian butterflies. A website is currently in the process of construction.

We would like to welcome new blood from the Americas and elsewhere to join our Society and enrich the expertise and experience built up over the years. Whether your speciality is of a scientific nature, interested in exchange of specimens or you are interested in making contact with fellow collectors and specialists in Africa, do consider joining our Society. The fee structure (outside Africa) is shown below and has

Continued on pp. 27

Membership Update...

Julian Donahue

This update includes all changes received by 15 February 2001.

"Lost" Members

(publications returned: "temporarily away," "moved," "left no address," or "addressee unknown"):

Benoit Mery (Versailles, France)

Minor changes/corrections to the 2000 Membership Directory:

Bagdonas, Karolis R.: note correct middle initial

Beard, Brian M.: change street number from "108" to "106"

Berenbaum, May R.: change street number from "905" to "505"; add "320 Morrill Hall"

Hiller, Anthony: add street address: "1964 Mount Glorious Road"

Inoue, Hiroshi: complete postal code is "358-0053"

Meekel, Hendrik: new postal code: V2W 1W1

Osborne, Melville W.: delete "R.F.D."; new ZIP Code: 08844-4222

Sano, Hiroshi: postal code should be"630-0101"

Taylor, Orley R., Jr. (Prof.): replace "3038 Haworth Hall" with "1200 Sunnyside"

New and Reinstated Members

members who have joined/renewed/or rescinded their request to be omitted since publication of the 2000 Membership Directory (not included in the 2000 Membership Directory; all in U.S.A. unless noted otherwise)

Albright, Ann: 18115 SE Neck Road, Dayton, OR 97114-7811.

Boden, Julie: [address omitted on request]

Buckingham, Gary R. (Dr.): P.O. Box 147100, Gainesville, FL 32614-7100.

Cannino, Vincent Anthony: 713 Archer Road, Winston-Salem, NC 27106-5411.

Chiba, Hideyuki: P.O. Box 11, Chikugo, Fukuoka 833, **Japan.**

Della Salda, Massimo: Vico 2º Nazionale 28, 09044 Quartucciu, Cagliari, **Italy.**

Elia, Gail: Texas Discovery Gardens, P.O. Box 152537, Dallas, TX 75315-2537.

Etheridge, Mark: 401 Main Street, P.O. Box 164, Myersville, MD 21773-0164.

Fisher, Peter A.: 227 Conlins Road, Scarborough, Ontario M1C 1C4, **Canada.**

Fitzgerald, Terrence D. (Ph.D.): Department of Biology, SUNY, 1 Neubig Road, Cortland, NY 13045-2499.

Gilligan, Michael: 16721 County Road 109, Arcadia, OH 44804-9751.

Johnson, Samuel A.: 1520 West Iowa Street, Colorado Springs, CO 80904-3950.

Laguerre, Bernard: [address omitted on request]

Lewallen, Greg: P.O. Box 1446, Fort Davis, TX 79734-1446.

Loefken, Anja: 360 East 72nd Street, New York, NY 10021-4753.

Mullen, Sean P.: Dept. of Ecology and Evolutionary Biology, Corson Hall, Cornell University, Ithaca, NY 14853-2701.

Owen, Graham J.: 12 Park Avenue, Roseville, New South Wales 2069, **Australia.**

Rennau, Sean: 2263 Northridge Court, Washington, IL 61571-1917.

Samuelson, G. Allan: Bishop Museum, 1525 Bernice Street, Honolulu, HI 96817-2704.

Snow, Alicia: 1586 Shrader Street, San Francisco, CA 94117-4236.

Stamp, Nancy E. (Dr.): Dept. of Biological Sciences, State University of New York, Binghamton, NY 13902-6000.

Tormo M., Jose Enrique: Padre Recaredo de los Rios, 16 – Atico F, 03005 Alicante, **Spain.**

Wauer, Roland H.: 315 Padre Lane, Victoria, TX 77905-2642.

Address Changes

(all U.S.A. unless noted otherwise)

Bell, Elizabeth A.: 1165 Lisa Lane, Santa Cruz, CA 95062-3505.

Belmont, Robert A.: Belmont Pest Control, c/o Massey Serv., 1100 Commercial Blvd., Suite 116, Naples, FL 34104-7097.

Borth, Robert J.: 6112 North Lake Drive, Milwaukee, WI 53217-4319.

Boyd, Bret M.: 113 Evergreen Court, Rockingham, NC 28379-2460.

del Pino Gamiz, Manuel: C// Hernan Cortes 10, 7a-34, 46920 Mislata, Valencia, **Spain.**

Drummond, Boyce A., III (Dr.): Director, Colorado Natural Heritage Program, 254 General Services Building, Colorado State University, Fort Collins, CO 80523-0001.

Dunford, James C.: 2600 SW Williston Road, Apt. 1504, Gainesville, FL 32608-3951.

Gould, Walter P.: 10923 SW 78th Avenue, Miami, FL 33156-3731.

Hagen, Robert H.: Ecology & Evolutionary Biology, University of Kansas, Haworth Hall, 1200 Sunnyside Avenue, Lawrence, KS 66045-7534.

Hepperle, Donald E.: 167 Harrison Street, Waterloo, IA 50703-3713.

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LEPSOC 2001

52nd Annual Meeting of the Lepidopterists' Society

Oregon State University
Corvallis, Oregon, USA
July 25-29, 2001

The 52nd Annual Meeting of the Lepidopterists' Society will be held 25-29 July 2001 (Wednesday through Sunday) on the campus of Oregon State University in Corvallis Oregon. The local hosts are Andy Brower, Paul Hammond, Dave McCorkle and Andy Warren and the Department of Entomology at Oregon State University. The meeting will be held at the LaSells Stewart Conference Center. Accompanying this announcement is a Registration Form and Call for Contributed Papers, as well as notes on local travel arrangements, housing and food. Included in the registration fee are the opening reception on Thursday evening, the daily paper/symposium presentations, and meeting programs and mailing. Food and lodging are not included in the registration fee, so please be sure to sign up on the Registration Form for the Friday Evening barbecue, the Saturday evening Banquet, and housing as desired. Forthcoming issues of the News will carry additional information, as will the LEPS-L internet listserver and the society's web site at www.furman.edu/~snyder/snyder/lep.

Tentative meeting schedule (subject to change!!):

Wednesday July 25th
- Butterfly collecting/observing trips to Cascades and Coast Range (to be arranged)
- Mothing field trip (to be arranged)

Thursday July 26th
- Executive Council meeting
- Welcome Reception in evening
- Slide Fest

Friday July 27th
- Symposium I (Lepidoptera Conservation)
- Group Photograph
- Contributed Papers
- Pacific Northwestern barbecue and wine tasting (Tyee Wine Cellars)

Saturday July 28th
- Symposium II (Life around Lepidoptera: forces shaping lepidopteran populations and communities)
- Contributed Papers
- Social Hour and Annual Banquet followed by awards, presidential address and door prizes!

Sunday July 29th
- Contributed papers
- Annual business meeting

Questions? Contact Andy Brower, Dept. of Entomology, Oregon State University, Corvallis OR 97331-2907; phone 541-737-5531; fax 541-737-3643; email browera@bcc.orst.edu

REGISTRATION FORM

51st Annual Meeting of the Lepidopterists' Society
Oregon State University, Corvallis, Oregon USA
July 25-29, 2000

Last Name: _____, First and Initial _____
Street Address or P.O. Box: _____
City or Town: _____
State/Province and Postal Code:
_____
Country: _____ Email:
_____

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

Regular Registration Rate

Number of persons x $85 (by 1 June 2001; $110 after June 1) $_____

Student Registration Rate

Number of Students x $55 (by 1 June 2001; $75 after June 1) $_____

Companion/family Registration Rate (includes reception; no meeting sessions or breaks)

Number of persons x $30 (by 1 June 2001; $40 after June 1) $_____

Barbecue/wine tasting, Tyee Wine Cellars, Friday Evening, $16 per person $_____
Cash bar and vegetarian food will be available. Please indicate if you prefer vegetarian:
_____

Annual Banquet, Saturday Evening, $18 per person (cash bar) $_____
Please select a menu option: chicken ___, or vegetarian pasta dish ___

Field trips, $10 per participant per trip, includes lunch and beverages $_____
(we will car pool)

Official LepSoc 2001 T-shirt featuring northwestern Lepidoptera, $15/shirt $_____
Specify how many medium ___, large ___, x-large ___

Vendor Table for sale of books, equipment, or other materials, $ 30 per table (8 feet) $_____
Available during the meeting from Friday morning to Saturday evening (secure after hours).

Oregon State University Dormitory Housing

Basic accommodations about 5 minutes from conference ctr. (adjacent rooms share a bath; linens included)
persons for Tues. 24 July ___; Weds. 25 July ___; Thurs. 26 July ___; Fri. 27 July ___; Sat. 28 July ___
single room $39 per night $_____
double room $26 per person per night $_____
Names of people sharing room: _____

Total Enclosed: $_____

Make check payable to "Lepidopterists' Conference"
Send completed registration forms and payment to:
Dr. Andrew Brower, Local Arrangements Chair
Dept. of Entomology
Oregon State University
Corvallis, OR 97331-2907

questions? Phone 541-737-5531 or email browera@bcc.orst.edu

Note: field trip, barbecue and banquet tickets must be reserved in advance! Walk-in registration during the meeting will be for sessions only!

Call for Contributed Papers
51st Annual Meeting of the Lepidopterists' Society
25-29 July 2001, Oregon State University, Corvallis, Oregon USA

Contributors are encouraged to submit this information on-line at
www.ent.orst.edu/meeting/lepsoc.htm

Last Name: _____, First and initial
_____
Street Address or P.O. Box: _____
City or Town: _____
State/Province and Postal Code:
_____
Country: _____ Email:
_____
Phone: _____ Fax: _____

___ Check if a student presenter ___ Check if a talk ___ Check if a poster

Title: _____

Author(s): _____
Abstract for program (125 words or fewer; please type!):

Audiovisual requirements: slides ___, video ___, powerpoint ___, other (specify)

Submission Guidelines (please read carefully):

- Only one Contributed Paper talk may be submitted per person (an extra poster is okay)
- Each talk is a total of 15 minutes maximum; allow 12 minutes for the presentation and 3 minutes for questions.
- The abstract submission **deadline** is **1 June 2001**. This completed form must be received by then in order to ensure inclusion in the printed meeting program.
- To expedite production of the program, please consider submitting via email or the web site above.
- Contributed talks will be presented Friday, Saturday and (if necessary), Sunday morning.

Return completed forms to: Andy Brower, Dept. of Entomology, Oregon State University, Corvallis, OR 97331-2907 or submit via email to browera@bcc.orst.edu

Off-Campus Housing

If you prefer more luxurious accommodations, the "official" meeting hotel is

the Corvallis Super 8 Motel

407 NW 2nd St., Corvallis, OR 97330

The group daily rate is $55 for a single, or $65 for a double room (tax incl.).
Rooms come with one or two queen-size beds. Continental breakfast is included.
The hotel features expanded cable TV, a heated indoor pool and jacuzzi.
Laundry service is available.
Check in time: 3 pm check out time: 12 noon

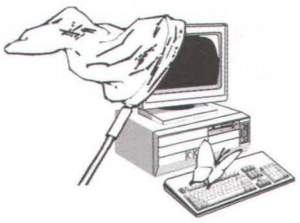
The location is convenient to downtown shops and restaurants,
and about a 20 minute walk from the LaSells Stewart Center.

Shuttle bus service to the conference will be provided in the morning and evening.

Please make your reservation by 25 June, 2001 to get the group rate!

Call (541) 758-8088 for reservations

Don't forget to mention the Lepidopterists' Society when you call!



Out of the Net...

by Jim Taylor, ***1_iron@msn.com***

Good morning, Children. Please take your seats and turn to ***www.junkscience.com/ddtfaq.htm***, where you will find a home page with the choices: Junk Science, an explanation of who the Junkman is, Trash Talk BBS, Store (where you can buy books and such), a place for feedback, a means for searching the site, a place to register for e-mail, and archives and links. My purpose in directing your attention to this location in your text today is twofold.

Firstly, I usually spend a good deal of my time gloating over my living conditions compared with those through which you Yankees suffer. Here in South Georgia I can usually collect throughout the winter—there is almost always something flying. At this moment (January 4, high noon), however, it is below freezing—and our lows have been down in the teens. My swimming pool is frozen over—for the first time in the twenty years since we built it. I am doing the spring column now because it is just too unpleasant to go outside.

I urge each of you to click the Junkman's "Site Search" button and then, when prompted, search for "global warming." Read just a little of the material presented. You will find a less-hysterical view of global warming than that presented by Al Gore, and one with which I agree. I really don't think emissions from my Mercury or my wife's Oldsmobile or your Volvo is solely responsible. There is an over-abundance of wolf-crying going on about the environment, and global warming is but one of the more popular wailing walls...

While visiting the Junkman, you might read about DDT, too. And closer to home, search for "monarch" and browse the *Bt* corn material. I personally think it will be a good deal easier to feed the world's burgeoning population with genetically altered food plants. I also suppose, in the case of Bt corn, controlling the corn borer this way is better than the alternative—heavy doses of insecticides. The idea of a monarch caterpillar eating corn pollen which blew over the fence onto his milkweed leaf (rather than just brushing it off and getting on with his dinner) seems to me too remote to worry about. Would he rather have his food plant, which is close to the field of corn, sprayed accidentally with an oily pesticide?

And why is there great concern for the death of the occasional monarch caterpillar, while the corn borer is being slaughtered wholesale by the same agent just across the fence? Why doesn't someone establish a "Corn Borer Watch?" The answer is simple: Man doesn't eat milkweed, but the corn borer represents competition for food.

Secondly, and while I cannot offer anything other than my opinion, I think there is too much being made of what is going on in Mexico with the monarchs' overwintering site when, as a practical matter, there is little we can do about it—nor should we try. While there well may not be a tree left in Mexico in fifty or so years, I think Man and his needs come first in this world, just as any self-respecting monarch thinks monarchs come first.

I tend to look askance at alarm-sounding, and the Winter, 2000, issue of the NEWS reported on a gathering of monarch experts in New York recently to "sound [the] alarm" over what is happening in Mexico. The article contains the phrase "critical crisis." Now, the adjective "critical" and the noun "crisis" are very close together in the dictionary because they stem from the same root word. To speak of a critical crisis is akin to calling attention to a disastrous disaster. A little hyperbole goes a long way.

I don't want anyone to misunderstand what I am saying. I like monarchs. But if the local Mexicans, acting in their own best interests, pull up all the trees the monarchs are now in, and next year's crop finds a barren desert when it arrives, the world has changed—something which has been going on for billions of years. If this comes to pass, the monarchs (a) will die in large numbers over the next several years, after which the survivors will adjust to the new reality and find someplace else to roost and get on with life, or (b) will die out totally. That is why God invented Charles Darwin; the rule is adapt or die.

Okay. Flame away.

A few issues ago I reported on a new site, "Noctuid Search, " at ***plant.cdfa.ca.gov/noctuid/*** which shortly thereafter mysteriously disappeared. I don't know what happened to it, but the good news is it is back. It is an interactive key for the identification of Owlets, so take that thing you caught at the back porch light and go look it up.

The late Dave Winter worked long, hard, and industriously on what was to become "Basic Techniques for Observing and Studying Moths and Butterflies." It has now been published as "Memoirs of the Lepidopterists' Society #5" and can be ordered from:

continued on pp. 28

The Monarch: What's in a Name?

Gary Noel Ross

6095 Stratford Ave., Baton Rouge, LA 70808, gnr-butterfly-evangelist@juno.com

The monarch butterfly. How noble a creature!

Consider: The butterfly is now a common household word and the poster child for the world of entomology; monarchs are very conspicuous—medium sized, bright orange (a royal color), and have a slow, soaring flight; monarchs (and other butterflies, too) are potent symbols of rebirth and hope; for decades the species has been cited in most textbooks to illustrate a typical butterfly life cycle as well as metamorphosis; the species is found in all American states except Alaska and in all regions of Canada except Yukon Territory and Northwest Territories, and because the species is a notorious wanderer, monarchs have been observed as vagrants in many Caribbean, Pacific, and Atlantic islands (including Great Britain), and Mauritius in the Indian Ocean; monarchs' annual migrations are the most epic (hundreds of millions of individuals) of an animal on planet Earth; the monarch's concentrated wintering colonies in coastal California and central Mexico have been featured numerous times by the global media, and are each year the destinations of thousands of international ecotourists; the monarch and its dependency upon specific phytochemicals in its milkweed host plants to render both caterpillars and adult butterflies unpalatable to many predators is frequently cited in many texts as a classical example of coevolution between animal and plant; the similarity in coloration between the monarch butterfly and the unrelated viceroy butterfly is often cited as the classic example of mimicry between an unpalatable and an edible species; and finally, the very name monarch is easy to pronounce, easy to spell, and evokes a majestic, regal, and perhaps even superhero presence.

With such incredible credentials, it is easy to understand why scientists and the public at large have embraced the butterfly and its name as a perfect marriage, and why the monarch is well on its way to become an American icon.

But names are not always what they seem. The popularity of the monarch butterfly may be blinding us to an important bit of history. In fact, our contemporary perception of the butterfly and its name may be a classic example of putting the proverbial "cart before the horse." You see, most of the qualities that we associate with the monarch were discovered long after the butterfly received its peculiar name. That's right! The first actual published usage of the name "The Monarch" dates to a publication by the esteemed American entomologist Samuel H. Scudder in an article titled "English Names of Butterflies," published in the scholarly journal *Psyche*, an organ of the Cambridge Entomological Club located in Cambridge, Massachusetts, in 1874. (The monarch's current scientific taxon, *Danaus plexippus*, is credited to Carolus Linnaeus, the "father of taxonomy," who in 1758 described the species as *Papilio plexippus*, as he considered the genus *Papilio* to be appropriate for all butterflies.) But other common names have been used throughout history, too. Jacqueline Miller in her book "The Common Names of North American Butterflies," indicates that "Milkweed Butterfly," "Storm Butterfly," "Wanderer," and "Archippus" have all been used for *Danaus plexippus*.

But perhaps what is most interesting involves comments in two relatively recent books. In Fred Urquhart's "The Monarch Butterfly: International Traveler" published in 1987 we read in the Introduction: "The early settlers who came to North America from Europe, particularly those from England and Holland, were impressed by the sight of such a magnificent butterfly, and so they name it "monarch" after King William, prince of Orange, stateholder of Holland, and later king of England—its orange color no doubt suggesting the name. From "William" we get the vernacular "Billy," and hence the name "King Billy," which has also been applied to this butterfly." And in Robert Pyle's 1999 book "Chasing Monarchs: Migrating with the Butterflies of Passage," there is not only a reiteration of the statements by F. Urquhart (by the way, a Canadian living in Toronto) but the following: "Don Davis, a wonderfully knowledgeable monarch aficionado in Toronto, told me that his late grandfather knew these butterflies as "King Billies."

What a conundrum! What fertile ground for explOration! I was titillated.

First, I contacted Donald Davis who eagerly shared with me some tidbits of family history. According to Don, his father (1915-2000) and his grandfather (1882-1962) both alluded to the monarch butterfly as "King Billy." Although born in Ontario, both ancestors were descendants of United Empire Loyalists who had migrated to Canada following the American Revolutionary War.

Next, I delved into British-Colonial America history and the role of King William III. Born in 1650 at The Hague in the Netherlands, William reigned jointly with his wife Mary Stuart (Queen Mary II) as the monarchs of Great Britain from 1689 until William died in 1702 (Mary had died a few years earlier). William also was titled "Prince of Orange" because he was of the House of Orange, the name of the royal family

of the Netherlands. (The name "orange" actually comes from an ancient independent agricultural principality called Orange, today located in the lower valley of the Rhone in the Vaucluse Department of southern France.) William was the last of the direct line of the House of Orange. After William's death the House of Orange and the noble German House of Nassau merged to become the House of Orange-Nassau, which still exists as the hereditary ruling monarchy of the Netherlands with Queen Beatrix as head. (The significance of this lineage is that the House of Orange-Nassau is credited with linking the history of the formation of the Dutch Republic and the spread of Protestantism in Europe, including Great Britain.)

This period in European history is marked by great conflicts between Roman Catholicism and Protestantism. In 1685, the Catholic James II, King of England, and Louis XIV, also Catholic, and King of France, conspired to bring the various provinces of Great Britain with their mixture of Catholic and non-Catholic citizens, over to Catholic domination. As opposition, an invitation was drafted by a number of protestant English political leaders on July 1, 1688 and sent to William, Prince of Orange, in the Netherlands—a stronghold for Protestantism. William was invited to head an armed expedition to England to dethrone King James and therefore, stop the expansion of Catholicism in England. William accepted; King James was defeated. On April 11, 1689, William and his wife Mary (his cousin and daughter of the defeated James II) became the new monarchs of Great Britain.

But James was not through. Shortly after his defeat, James invaded Ireland, again with French assistance. And once again, James was defeated. The decisive battle was fought at the Boyne River near the town of Aughrim on July 1, 1690. This defeat of James destroyed any hopes that he may have had of regaining his kingdom.

As the new reigning sovereigns, William and Mary stressed tolerance and compassion for all. But although their rule enabled Catholics and Protestants to coexist, religious enmity continued, particularly in Ireland where large numbers of Protestants, particularly Lowland Scots Presbyterians, had immigrated. Finally in 1795, long after the death of both William and Mary, a major confrontation known as the Battle of the Diamond erupted between warring factions. As a result, a secret society consisting of Anglican Protestants in the county of Armagh, province of Ulster (originally called Ulaid, the northeastern quarter of the island and what is now identified as Northern Ireland) was founded. Known as the Orange Order, Loyal Orange Association, Orange Society, or simply Orangemen, the society was named in honor of William III. The society spread rapidly throughout Great Britain and professed as its mission to strengthen resistance to Catholicism. Even today, the Orangemen represent a bastion of Protestant Unionist opinion. To commemorate the Battle of the Boyne in 1690 and the victory of William III over the Catholic King James, each July 12 Orangemen wearing orange insignias and orange sashes parade through both Protestant and Catholic neighborhoods in Northern Ireland singing songs of past Protestant victories. Because these demonstrations often incite local hostilities, Orangemen frequently become front-page news and the world is reminded of long-standing religious intolerances.

This endemic hatred between Roman Catholic and Protestant in Europe, and in particular Northern Ireland, has had a profound effect upon American history. The original colonies of the incipient United States were founded in large part by refugees from Western Europe and Great Britain seeking religious freedom and economic opportunities. Although many of the early immigrants to America settled in Virginia because of its good ports and freedom from Indian attacks, the first American swarming ground for the Scotch-Irish was the backcountry of Pennsylvania. Mostly Lowland Scottish in origin, these Protestants had been settled in Ulster (Northern Ireland) for two or three generations but who were disturbed by high rents, recurrent crop failures, and, of course, egregious English discrimination. (Most immigrants from the Netherlands settled both in Pennsylvania and in the Hudson Valley of New York.) The Encyclopedia Americana records that while the principal immigrants between 1607 and 1680 were English, the numbers of Irish continued to increase to the point that between 1820 and 1850 nearly one-half of all European immigrants claimed Ireland as their homeland. The Irish continued to flee their homeland, but by the later part of the nineteenth century, their numbers were overtaken by Germans and even later by peoples from the Mediterranean area of southern Europe.

So much for history. I find it difficult to accept that the following are pure coincidence and totally unrelated: a) a British sovereign named King William III, also titled Prince of Orange, and who was a staunch defender of Protestantism—principally in Ireland, b) Protestant Irish immigrants settling in Colonial America, c) a bit of folklore from eastern Canada suggesting that a bright orange butterfly, common throughout eastern North America was referred to as "King Billy," and d), the butterfly in past literature being referred to as "The Monarch" and in more contemporary times simply as "monarch."

And so, in order to try to discover the commonality, I called upon my imagination to step back in time. Of course, I cannot peer backwards into the past. But the existing evidence is compelling. The following is what I suggest as a plausible paradigm.

For Colonial Americans, life must have been tough. Food was scarce, winters severe. A myriad of nameless diseases and pestilence descended as cyclical

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The Greeks Had a Word for It*

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A group of diplomats gathered for lunch at the UN Cafeteria. The British ambassador observed: "The most beautiful word in the English language is 'butterfly." Mimicking a butterfly's flight with his hands, he repeated the word: "Butterfly, butterfly, butterfly!" "Ah, oui," replied the Frenchman. "Eet eez ze same en French. So elegant: 'papillon, papillon!" "And also ze Spanish," said the gentleman from Madrid. "Mariposa! Mariposa!" The Italian spoke up: "My word is even better: Farfalla, farfalla!" The German, livid, rose to his feet and pounded his fist on the table. "Und vot's the matter mit 'Schmetterling?' " he demanded.

Lingua Franca has been described as "**People** Magazine for academics." In the November 2000 issue, under the headline "Winged Words," accompanied by an illustration of a Uraniid moth, it reports on a speculative essay floated on the Web in August by Brown University anthropologist William O. Beeman (***linguist.org/issues/11/11-1765.html#1***) about "the butterfly problem." As **Lingua Franca's** Michael Erard puts it: "Apparently, there is a different word for butterfly in every language, even though historical relationships and geographic contacts often suggest the words should be similar... 'We expect to find cognates,' Beeman says, 'but here we don't." Beeman solicited "butterfly" words from colleagues and collected 97 of them, which he reproduces with his essay. He quotes from an unpublished paper by linguist Haj Ross of North Texas University: "The concept/image of butterfly is a uniquely powerful one in the group minds of the world's cultures...Butterflies are such perfect symbols of transformation that almost no culture is content to accept another's poetry for this mythic creature. Each language finds its own verbal beauty to celebrate the stunning salience of the butterfly's being."

This is wonderfully poetic. But is it true?

Linguistics has a superficial similarity to biological taxonomy. It attempts to classify languages into families based on similarities and differences, just as biological taxonomists do with organisms. In both cases the similarities and differences reflect historical, evolutionary processes. Rudi Keller of the Heinrich-Heine-Universität (Dusseldorf), speaking on my campus in November, reminded us that "Latin is not dead at all, but living happily ever after in versions that are usually called 'French,' 'Italian,' 'Catalan' and so on." This phylogenetic relationship is unambiguous, in part because we have samples of earlier versions of these languages and in effect can watch them evolve. But even if we didn't, their grammatical, syntactic and vocabulary similarities would point to a common origin. Linguistic evolution is, however, more complicated than biological evolution because it is routinely reticulate. When organisms speciate, gene flow is cut off; each species is thereafter an independent lineage. It is this fact that allows for phylogenetic reconstruction using nested shared, derived characters – the method known as cladistics. If organisms hybridized promiscuously (as some in fact do), characters would not nest and the method would fail (as it does in such cases). There is no equivalent of "reproductive isolation" in languages—they hybridize all the time by adopting one another's words and even grammatical constructs. This critical fact was addressed in a rather famous symposium in 1987 (**Biological Metaphor and Cladistic Classification**, edited by H.M. Hoenigswald and L.F. Wiener, University of Pennsylvania Press). Because languages travel with people, all sorts of fascinating and unexpected hybrids can be found. A standard game in linguistics is to look for "loan words" in weird places. But in linguistics as in biology, close relatives can look very different, while things that look very similar may be merely convergent. And in linguistics we cannot do DNA sequencing. So people wave their arms a lot.

The upshot of all this is that Beeman's thesis cannot be accepted at face value. There are several reasons for this.

One consequence of the theoretical excesses in ecology in the 60s and 70s was a belated recognition that one should not attempt to explain a phenomenon until one has demonstrated that there was a phenomenon to explain. There is no good reason to believe that there is a "butterfly problem" in linguistics; we are merely told there is one. How can one evaluate a list of 97 "butterfly" words in a vacuum? How can we judge whether the degree of diversity it displays is unusual, unless we are given other lists for comparison? Suppose we had lists of words from the same set of languages signifying ten or twenty or a hundred different things: rocks, cars, fish, TV antennas. Assuming we were sophisticated enough to quantify diversity in our lists (i.e. to recognize cognates and non-cognates), we could presumably then do a statistical comparison to see if the butterfly list was indeed unusually diverse. But how would we pick the words to compare? Should we pick random nouns out of a dictionary? Or should we only pick words with the same sort of mythic/poetic resonance Beeman claims for "butterfly?" He himself worries about

that. He says: "...one then wonders about the other great poetic images found in so many cultures: flowers, clouds, trees, mountains, birds and so many other objects of beauty and wonder." But he makes no attempt to make parallel lists and quantify them. As a comparison to "butterfly," he gives just the terms for "cat" in 11 European languages; they are all cognates. But he does not give the Korean, Fijian or Xhosa words for "cat." Nor, to get closer to home, the Finnish, Hungarian, Albanian, Latvian, Estonian... Single-case induction is a poor method.

Let's return to our hypothetical statistical test of diversity between our "butterfly" list and others. Beeman was able to get 97 words in his search (I got over 20 more in an hour at my campus library). How structured is the set of languages represented? There is a singular lack of representation of Native American languages (Beeman gives two; I quickly got five more). The extremely diverse languages of New Guinea are similarly underrepresented, as are the South Asian ones. These are regions with high densities of languages in close proximity; they thus should be excellent for testing Beeman's idea. We can do a statistical test among lists so long as the lists cover the same set of languages, but the outcome might vary very significantly were it some different set; would proportional representation of the major language families, for example, produce a different outcome from the haphazard set Beeman uses? Who knows?

Close analysis of Beeman's list, however, suggests he is overestimating the diversity represented there. The entire exercise was triggered by the observation that Spanish and Portuguese, as putative sister languages, had different "butterfly" words—*mariposa* and *borboleta*. Of course, we have no idea what proportion of nouns in the two languages are non-cognates, or if they have any special characteristics (like being natural objects, or smaller than a bread box, or of feminine gender). Beeman's haphazard assortment includes Cape Verdean *Criolu* ("creole"): its "butterfly" word, *gorgoleta*, is obviously a cognate of the Portuguese, which is not surprising since Cape Verde was colonized by Portuguese, in 1456. Beeman's list does not include Catalan, which in many ways is "intermediate" between French and Spanish, though not actually a phylogenetic intermediate. There are two basic "butterfly" words in Catalan: *papallona* (or *papalló*) which is clearly close to the French *papillon*, and *voliaina* (or *voliana*), which means "something that flies." Provencal has *parpalhon*, close to *papillon*. (Basque, with *txipilota*, is utterly different—but it is completely unrelated to the Romance languages, or indeed—perhaps—to any extant language. There is a second Basque word, *pinpilinpauxa*, which has a suspicious P-P-L at its core. It might be a loaner.) Staying within the Romance group, one of Beeman's correspondents reported 30 (!) "butterfly" words in Sard, the idiom of Sardinia, which is an amalgam of Italian, Spanish and Catalan. They include the Italian *farfalla*, the Spanish *mariposa*, *farina* (which may refer to the wing scales or "flour"), *volare* (Italian or Catalan, referring again to flight), and *pappagallú* ("parrot," referring to the bright colors; *papagayo* is occasionally used in Latin America—in Chile it refers to a colorful Castniid day-flying moth). (*Paloma*—"dove"—is sometimes used in rural Mexico, apparently transmogrified from the Nahuatl *papalotl*.)

Unsurprisingly, Malay (*kupukupu*), "Indonesian" (*kupukupu*) and Javanese (only one *kupu*) are the same. Indonesian and Malay also use *ramarama*. The Maori and Hawaiian, equally unsurprisingly, are identical: *pulelehua*, but there are additional words in both languages, not given by Beeman. In the tiny sampling of SW Pacific "Austronesian" languages, Lan (*fufu*) and Mekeo (*fefe*) are probably cognates. The Turkish *kelebek* and the Azeri *kepenek* (not reported by Beeman) probably are. In the Celtic group, Gaelic *seillean-de* and "Irish" (Erse) *feileacan* may be cognates. *Luvivane* (Swazi) and *uvevane* (Zulu) are related, and may be more distantly akin to *ibhabhathane* (Xhosa), *phapharati* (Xitchangani) and even *osampurumpuri* (Maasai). At any rate, it is clearly not true that "there is a different word for butterfly in every language," as **Lingua Franca** put it. (Incidentally, in several languages, there are separate words for big showy butterflies and for the others.)

There are two very odd resemblances in Beeman's list. Albanian, a Thraco-illyrian language, uses *flutur*; Romanian, a Romance language, *fluturi*. This seems to be either a loan word, or the persistence of a very old relict word in Romania. Neither word is a cognate of the English word *flutter*—we think. At least these two are geographically proximate. The Hebrew *parpar* (which is very different from the Arabic) is very like the word *paruparó* in Tagalog, the indigenous Philippine language. Unless ancient Hebrews reached Luzon, this one *must* be a coincidence. (The great American crank, Ignatius Donnelly, used such cases to bolster his argument for the lost continent of Atlantis. Even today, some people see a connection between the Latin *Papilio* and the Nahuatl *papalotl* (Mexico), or for that matter the Nepali *putali*. No one has yet, to my knowledge, claimed that the Polynesian *lepelepe-o-hina* is a cognate of Lepidoptera (from Greek lepis, scale) or the Serbo-Croatian *leptir*. Someday, someone will.)

Beeman is correct in pointing out how frequently "butterfly" words consist of repeated short syllables, which he interprets as a symbolic representation of fluttery movement. Perhaps. This is a very controversial notion in linguistics, as the **Lingua Franca** article explains.

The derivation of even the English and German words is controversial. Beeman and Erard buy into a folkloric explanation — that butterflies were

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The Marketplace

IMPORTANT NOTICE TO ADVERTISERS: **If the number following your advertisement is "423" then *you must renew your advertisement* before the next issue! Remember that all revisions are required in writing.**

Books/Videos

Eliot, I. M. and C. G. Soule, Caterpillars and Their Moths, 1902 ($75); Clark, A, Butterflies of the District of Columbia and Vicinity, 1932 ($45); Packard, A. S., A Monograph of the Geometrid Moths or Phalaenidae of the United States, 1876 ($150). John Calhoun, 977 Wicks Dr., Palm Harbor, FL 34684-4656, ***bretcal@gte.net***. 431

For Sale: **Journal of the Lepidopterists' Society**, 1972-1974 and 1976-1999. In good condition. $100.00. Payment by money order or perseonal check. Thomas S. Williams, Sunnyside Village, 5149 Menno Place Sarasota, FL 34232-0000. 423

For Sale: **J. Lepid. Soc.**, vols 22 (1968)–53 (1999), including Suppl. to vols. 23 (1,2,3), 25 (1,2,3) and 33; and Commemorative Volume, 1977. Best offer by March 13, 2001. Also, **J. Res. Lepid.**, vols. 22 (1983)–31 (nominally 1992) + 27 Volume Index, 1962-1988 (89): will be sent to first respondent for cost of shipping. D. A. West, 607 Giles Rd., Blacksburg, VA 24060. (540) 552-2023. Fax: 552-1040. 423

Livestock

For sale: cocoons of *Hyalophora cecropia* and *Callosamia promethea*. Send SASE to: Joseph W. Markowicz, 343 Summer St., East Bridgewater, Mass 02333. Evenings 508-587-8658 431

For sale or exchange: Large selection of Iranian butterflies, perfect quality, with data. ALL *Louristana, Hypermnestra, Heloos* ssp. *bushirica, A. apollinaria, Colias sagartia; C. cholorocona, C. aurorina, C. thisoa* ssp. *shahkuhensis, Euchloe lessei; Papilionidae, Agrodiaetus* and more. Many species from other families at fair prices. Local or rare species that are allowed for exchange. Exchange or buy pupae for breeding. Buy or exchange livestock and books—especially about the butterflies of North and South America, butterflies of Turkey, India, Saudi Arabia and etc. Please send me your collection list and I will be glad to send you my list. Ahmad Karbalaye, PO Box 11495-175, Tehran, Iran. Tel and FAX 0098-21-7531604. ***Karbalaye@yahoo.com*** 431

For Sale or Trade (USA only): Cocoons of *Antheraea harti*. Will trade for same of *Hyalophora cecropia*. Send SASE to Karl Ploran, 110 Route 20, Chester, MA 01011-9642, 413-354-7852 (evenings, 7-9 pm EST). 424

For Sale: Cocoons of *Actias luna* and *Automeris io*. Also pupae of *Papilio glaucus* and *P. troilus*. SASE for prices. Larry J. Kopp, Rd. 1, Box 30, Klingerstown, PA 17941-9718. 423

Cocoons of *Actias luna*, *Antheraea*

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 advertisement 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, charge cards or similar financial instruments or accounts, insurance policies and those for travel or travel arrangements cannot be accepted because 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 resolved 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.

polyphemus, available fall/winter 00/01. Visit ***www.wingart.com*** for more info or SASE to Alan Vosefski, P.O. Box 10527, Virginia Beach, VA 23450, (757) 468-2861. ***Alanv@peoplepc.com***. 423

Captive bred Philippine butterfly pupae for sale, available all year. Imogene Rillo, P.O. Box 2226, Manila 1099, Philippines. Fax: (632) 824-02-22. ***Clasinse@mindgate.net*** 423

Wanted: Coccoons and specimens of *Urbanus proteus* and *Appias drusilla*. Dried and papered ok if in very good to excellent condition. Common in the southeastern US but not often reared, I am trying to complete a collection of butterflies common to the region. I have the necessary PPQ form 526 APHIS permit for living pupae. Dried specimens do not need a permit. Please fax (408) 927-0429 and note on top of page "Contact Jay at (408) 927-5884." Jay Gmerek, 6683 Mt. Hope Dr., San Jose, CA 95120. 423

Specimens

Wanted to buy: Exchange: rare and common *Colias*, Pierids, *Papilio* and Dynastidae of US and Canada. In exchange for them, I can send various butterflies and beetles of Japan, Korea and China. *Phoebis avellaneda*, *Papilio machaonides*, *Battus devilliersi*, *Parides gundlachianus*, *Papilio garamas* and *Agrias rodriguezi*. In exchange, I can send various rare *Parnassius* and *Colias* of Himalaya, Tibet and China, also rare *Papilio* of Sikkim, Assam, Indonesia and China. Shin-ichi Ohshima, Shimohideya 707-99, Okegawa, Saitama, Japan. Fax: (+81) 48 787 0290. ***o_shima@nifty.com*** 423

For exchange: Butterflies and moths (*Hyalophora cecropia*, *Antheraea polyphemus* and *Callosamia promethea*) from eastern North America for exchange with interested collectors from other countries. Contact: Prof. Bob Ratterman, Department of Natural Sciences, Jamestown Community College, 312 North Barry Street, Olean, NY 14760. ***BobRatterman@mail.sunyjcc.edu***. 423

For sale: solid oak custom display cases for viewing lepidoptera and and other anthropods from both sides. Butterfly and moth displays, custom framing of this lepidoptera of your choice. Visit ***www.wingart.com*** for details or SASE to Alan Vosefski, P.O. Box 10527, Virginia Beach, VA 23450. (757) 468-2861. ***Alanv@peoplepc.com***. 423

Framed specimens of lepidoptera for display, especially colorful showy species. Coll., wanted to buy. Darrell Arnold, P.O. Box 1653, Novato, CA 94948-1653. 423

Equipment

For Sale: About 100 Riker mounts, new but lacking cotton fill. Black trim, size: 10"x12"x1". $2.00 each plus shipping: Jim Ebner, Box 556, Okauchee, WI 53069. 262-567-1884. ***Jae103030@cs.com*** 431

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*** 423

Help Needed

I am looking for a buyer of live butterfly pupae of Nymphalidae, Pieridae, Papilionidae, and other species of Philippine butterflies. Those who are interested contact Leodegario Layron, Amoingan, Boac, Marinduque, Philippines. Tel No. 042-332-1558 FAX No. 0063-423-321-558. 431

Wanted: Seeds of the following plants, Pellitory-of-the-wall or Wall Pellitory (*Parietaria officinalis*), *Aristolochia rotunda*, *Aristolochia pistolochia*, and Crotons or Goatweed (*Croton capitatus* and *C. monanthogynus*). Randy Robinette, 7302 Midland Trail Rd., Ashland, KY 41102-9294. 423

Help Offered

Wish to collect legally in Costa Rica? 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 originally coming from the north (Mexico) and the south (South America). Moth collectors: we can rent you a portable generator. Miguel E. Chumpitasi P.O.Box 1106-2150 Moravia, San Jose, Costa Rica or phone (506) 236-1447. ***echumpi@sol.racsa.co.cr*** 423

Miscellaneous

For sale: Small amount of dormant rootstock of *Aristolochia clematitis* (very hardy winter plant). SASE to Randy Robinette, 7302 Midland Trail Rd., Ashland, KY 41102-9294. 423

Research Requests

Sesiidae sp. needed for scientific work: I need the following Clearwing Borer spp., and am willing to trade good spp. in return, or pay for specimens: *Euhagena nebraskae, E. emphytiformis, Paranthrene tabaniformis, Melittia gloriosa, M. calabaza, M grandis, M. magnifica, Synanthedon pini, S. arkansasensis, S. dominicki, Carmenta ithacae*. Specimens can also be sent on loan. Both sexes needed. For trade I will send my Offerata List, which contains many good spp. Contact: Dr. John Holoyda, Innovative Concepts Laboratory, 5407 N Oketo Avenue, Chicago, IL 60656-1746; 773-774-8387. 431

I am conducting a phylogenetic analysis of the Snout Butterflies (Nymphalidae: Libytheinae), using both morphological and molecular characters for my undergraduate honors thesis at Cornell University (under the supervision of Dr. John Franclemont and Dr. Quentin

Wheeler). To successfully resolve the relationships, I need collaborators to send me specimens of any of the 12 species, dried (in envelope), spread, in alcohol, in Kahle's solution, larvae, etc. It would be best if the alcohol samples are preserved in 95-100% ethanol, and that specimens are placed in Kahle's solution immediately after collected. I will send vials containing alcohol or Kahle's solution to those who are willing to help. In return for your generous help in providing specimens, I can offer an exchange for butterfly or moth specimens from Japan. Akito Kawahara, Department of Entomology, Cornell University, 3131 Comstock Hall, Ithaca, NY 14853 USA, (607) 255-8050, ***ayk6@cornell.edu*** 431

Members....*continued from pp. 18*

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Africa...*continued from pp. 17*

benefited from a favourable exchange rate with the South African currency (Rand). The financial year is from January 1st to December 31st.

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Books...*continued from pp. 16*

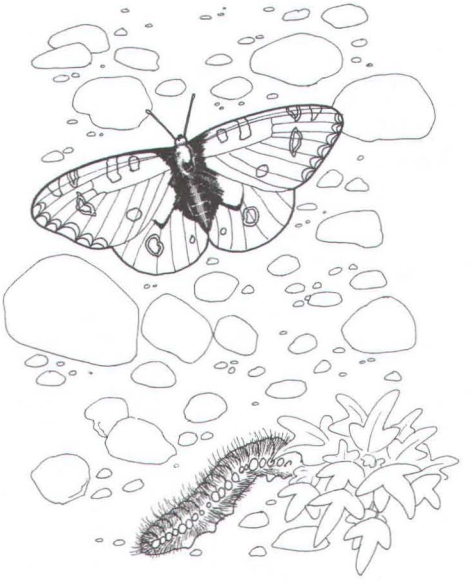
remember the wing shape, and guessed it was like the Tortie. He was wrong. Manos-Jones also ssumes the artist was a monk. There is no reason to make that assumption. By that time there were non-monastic *ateliers* turning out Books of Hours on contract in rather large numbers. The Master of Catherine of Cleves has been the subject of much artistic scholarship, but we do not know if he was monastic or secular, or even for sure if "he" was not a group of several people working together.

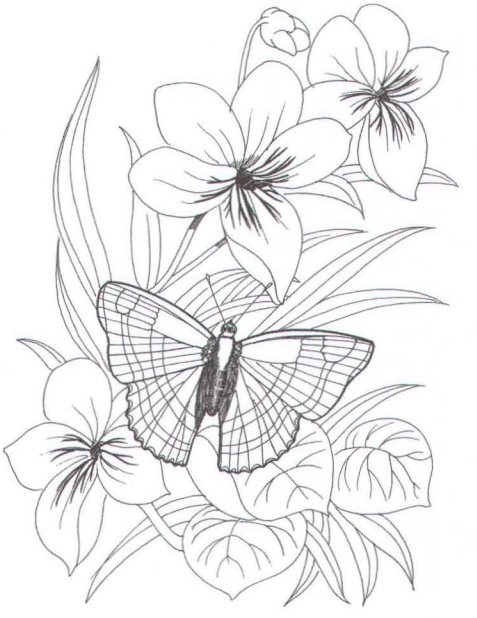
To compound the Death's Head Sphinx confusion, Vincent van Gogh painted what he thought was that species, and the painting is reproduced in this volume. It is clearly *Saturnia pavonia* (Saturniidae), and Manos-Jones doesn't know any better.

But these are quibbles, akin to complaining that a beautiful woman has a blemish somewhere. I cannot think of a better gift book for a butterfly lover than *The Spirit of Butterflies*. Even if you do not buy into the author's New Age sensibility, the glorious images cannot help but gladden the heart.

Arthur M. Shapiro,

Center for Population Biology, University of California at Davis, Davis, CA 95616





From the Editor's Desk

Phil Schappert

Hello to fellow net-swingers and butterfly-watchers everywhere!

Spring is threatening to "break out all over" here in central Texas—there are half a dozen of the early spring wildflowers in bloom and we had orange sulfphurs, red admirals, question marks and a single pipevine swallowtail flying in the yard this past week (not to mention all of those pesky moths—it wouldn't be so bad if they at least stayed outside of the house, but no, they have to come inside to say hello. It does make dinner conversation a bit of a sport, however!). All I can say about spring is that "it's about bloody time!" It's been a long, cold winter...

Pat and I are off to visit the Monarch colonies in Mexico at the end of February and we're really looking forward to it. What a way to break diapause, eh? And think of all of the photos that we'll have to bore our relatives into cutting their visits to the station short. "And, here we see Pat wearing a Monarch nose ring, and..." Well, you get the picture.

There's news on the Society front.

For those of you with sharp eyes, you'll notice that we have a new Journal editor *and* a new book review editor. I'd like to personally welcome Carla Penz, our new Journal editor, and Phil DeVries, the new book review editor, to the fold. The fact is, this husband and wife team come as a package deal. Both of them hold positions at the Milwaukee Public Museum, Carla as the Curator of Lepidoptera and Phil as the Director of their Center for Biodiversity Studies. Of course, welcoming new blood also means saying goodbye to folks that have almost become "members of the family." I'll miss my contacts with Deane Bowers, outgoing Journal editor, and Alma Solis, past book review editor, a lot. Welcome and Goodbye always seem to go together.

Much to my surprise I received no missives from members about my usually multitudinous typos, errors and misconstructs. Whether this means that I didn't make any (unlikely in the extreme), no-one was on the lookout for them (good possibility), or I'm getting better at hiding them, is up in the air. I expect you guys to do better this time!

It's always interesting to see the submissions as they arrive. This issue I was amazed to see Gary Ross's piece on the etymology of the Monarch followed closely by Art Shapiro's "The Greeks Had a Name for It." I really hadn't intended to do thematic issues of the News. Really. It was all just a coinky-dinky. Still, they are both interesting articles and offer some thought-provoking reading. I enjoyed them and trust that you will too.

Here's my question of the issue: Has Jim Taylor finally bitten off more than he can chew? Or is he just trying to get our collective goat? I suspect that he *will* get some correspondence over this months column (at least it'll prove that someone out there is reading!) I may not agree with everything that Jim says (this column being a case in point) but I'll staunchly defend his right to say it...

I happened to pick up and begin to browse through the January issue of Reader's Digest recently, while standing in the check-out line at the grocery store, and was amazed to see a letter from Richard Littlefield, a member from Richland, Washington, proudly proclaiming that he was a member of the Lepidopterists' Society. I've reprinted the letter (and the offending photo) in the Mailbag in this issue and hope everyone gives it a read. Good call, Rik! It always amazes me what people think they can get away with by depending on their perception that the public is stupid...

In the meantime, it's time to put this issue to bed. We (Jim Tuttle, Julian Donahue, Ron Leuschner and I) have taken great pains to get this issue and the Season Summary done and out a bit earlier this year. Please take special note of the earlier-than-usual submission deadlines this year. We can't keep this "pig" on schedule without your help...

Til' next time, my friends!

Phil

Net...*continued from pp. 17*

The Lepidopterists' Society
Kenneth Bliss, Publications Manager
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by members for $25 plus $4 shipping and handling. For more information go to ***www.furman.edu/~snyder/snyder/lep/buypubs.htm***.

Finally, Mr. Juha Laiho of Finland has put together a website which the butterfly contingent should check out: ***www.saunalahti.fi/jlaiho2/butterflies/colias/colias.htm***. Here he presents "an illustrated checklist of all species and subspecies described within the genus Colias."

Simply click the species name in the column on the right, and you get a picture and name, etc., on the left. The introduction to the site contains a description and history of the genus. Subspecies are listed (I mention this because I don't believe in subspecies. I intend honking off at least half of you in a future column on the absurdity of splitting species).

Over eighty references are listed, and there is a guest book to sign.

Until next time, keep your haustellum porrect.

Moth photos by Lynn Monroe.

Left: A living *Annaphila pseudo-astrologa* nectaring on desert mistletoe at Box Canyon, Anza Borrego State Park (ABDSP), CA on Feb. 23, 1999.

Below (left to right, top to bottom): *Syndoida pulchra* (Noctuidae) caught by crab spider on Buckhorn, Culp Valley, ABDSP, CA, 20 Mar. 1999; *Syndoida brunneifasciata* (Noctuidae), Oriflamme Canyon, ABDSP, CA, 21 May 1996; *Acontia cretata* (Noctuidae) under bud of *Hibiscus denudatus*, Hell Hole Canyon, ABDSP, CA, 5 May 1998; *Copibryophila angelica* (Noctuidae), Sentenac Cienaga, ABDSP, CA, 22 Mar. 1999; *Stamnodes eldridgensis* (Geometridae), caught by crab spider on *Hypotis emoryi*, Hell Hole Canyon, ABDSP, CA, 25 Feb. 1999; *Tripudia balteata* (Noctuidae), Hell Hole Canyon, ABDSP, CA, 14 Mar. 1996; *Catabena sagittata* (Noctuidae) that emerged from pupa on *Lantana*, Borrego Springs, CA, 26 Mar. 1996; lateral view of same.

Species determinations by (and submission originating from) Ron Leuschner.

Dorsal (left) and ventral (right) views of an aberrant Monarch, *Danaus plexippus* L., that emerged in February, 2000 at the Fort Worth Botanic Garden's live butterfly exhibit. The stock originated in Costa Rica. Photos by Dale Clark.

In my opinion...

We Now Know What Happened to Our Biggest Moths.

Richard S. Peigler

Department of Biology, University of the Incarnate Word, 4301 Broadway, San Antonio, TX 78209

Many of us who study Saturniidae have been wondering out loud for 30 years why our most charismatic saturniids like *Callosamia promethea* and *Hyalophora cecropia* have disappeared in the northeastern United States, including Connecticut, New Jersey, and neighboring states. John Cody grew up in New York City and has been baffled as he watched their populations decline during his lifetime (Cody 1996). Several hypotheses have been offered including habitat destruction, streetlights interfering with mating or oviposition, chemical pollution, chemical pesticides, and microbial pesticides. Some of these have probably caused saturniid populations to decline (see for example, Johnson et al. 1995), but field studies by Janzen (1984) and Frank (1988) showed that artificial lighting does not appreciably interfere with reproductive behavior of the Saturniidae. Moreover, none of the above hypotheses could explain why the urban dweller *Samia cynthia* has almost (or already?) gone extinct in the United States during the last 25 years, after being abundant in our major metropolitan centers of the Northeast for over 100 years. Oh, there were additional hypotheses offered for the Chinese immigrant *S. cynthia* too, like over-collecting of its cocoons, but a lot of industrial and railroad property was inaccessible to those greedy cocoon collectors, much of which had high fences and high voltage. Urban renewal, grubbing out ailanthus trees, and the introduction in 1890 of the beautiful and elegant European Starling also got some blame. At least everyone agreed that something pertaining to our big moths had changed, and that humans caused it.

The recent paper by Boettner et al. (2000) is a quantitative field study that painstakingly observed what happened to larvae of *H. cecropia* and *C. promethea* when they were set out in forests in Massachusetts. An especially virulent parasitic fly named *Compsilura concinnata* in the family Tachinidae destroyed the majority of the caterpillars in their study, well before they reached maturity. The team also observed the fly to be pretty rough on *Hemileuca maia*. The parasitoid was introduced on several occasions from Europe by the United States Department of Agriculture as a biological control agent against the gypsy moth (*Lymantria dispar*). According to Milius (2000), who interviewed a U.S.D.A. official about the findings of Boettner and his colleagues, this fly has a known host range of almost 200 species, and it would not be approved for introduction under U.S.D.A. guidelines and standards today. As Michael Collins recently pointed out to me, one reason this insect is so successful biologically is that it escapes hyperparasitism by killing its hosts so quickly. Now click on this: I found published records of it parasitizing many nontarget hosts in North America, including species in the Papilionidae, Nymphalidae, Hesperiidae, Sphingidae, and the saturniids *Actias luna*, *Automeris io*, *Antheraea polyphemus*, and *Anisota* (Peigler 1996: 73-74). Duh, do you suppose it might also attack *Samia cynthia*, if it can still find any?

This sweetheart *Compsilura concinnata* is now found in California, so we can expect to see additional species of Lepidoptera added to the list of known host records, and possibly more declines in populations of certain Lepidoptera. In the summer of 1868 or 1869, gypsy moths escaped from the captive cultures of Étienne Léopold Trouvelot in Medford, Massachusetts (Liebhold et al. 1989). The repercussions of that reckless blunder are still being discovered. However, before we vent any anger on the U.S.D.A., we should consider that the agency provides many valuable services for the American public every day and has probably saved our lives countless times with its essential work on food safety. As for Boettner and his co-authors, they provide convincing data from field studies to support a correlation between the fly and the disappearance of our big saturniids in New England. If you want to know what I think, please re-read the title of this article. I spent some valuable time looking for *Samia cynthia* on ailanthus trees when I first visited New York City as a tourist at the age of 17, and was bitterly disappointed that I could not find any, when all the books said the species was common. Now I think it was already too late, because *Compsilura concinnata* got there before I did. When I see European Starlings in my backyard here in south Texas, I no longer blame them.

Acknowledgements

I thank Valerie A. Passoa and Jeff Boettner for sending copies of some literature cited below.

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Monarch...*continued from pp. 21*

plagues. Days were defined by hard work and hardships. (Remember, the songster's "America, God shed His Grace on Thee" was still a long way into the future). But the "promise of life" must have been a powerful motivator. The pain of reality was most likely tempered by excitement sparked by adventure in a new world.

But not for long. As the business of living was reduced to dire acts of survival, even stalwart individuals exceptionally brave in heart and spirit, must have experienced episodes of disappointment, sadness, loneliness, and perhaps even abject depression. Memories of friends and relatives left behind must have clouded the original reasons for leaving the Motherland. Not surprisingly, death claimed many (life expectancy was a mere 35 years!) while others returned to the very land they had fled.

However, I am a firm believer in the adage "in all clouds is a silver lining."

For the tenacious agrarian colonists, I think that the silver lining assumed the shape of a common, orange, nameless butterfly that graced the fresh landscapes each summer, caused no damage to crops, and if by magic, disappeared each fall only to return *en masse* the following spring: a literal "clockwork orange," to borrow a title coined by the late Stanley Kubrick in his 1971 ground-breaking movie. I think that the presence, nature behavior, and mythology of these butterflies, not only entranced the very psyche of the colonists but sparked what may have been their most nostalgic memory of the homeland: King William III, Prince of Orange, the single personage of wealth, power and authority who had befriended non-Catholics and non-Catholic sympathizers. I think that someone, somewhere in some Irish settlement- I dare say, perhaps in Pennsylvania or Virginia-out of respect and endearment for King William III, referred to those insect harbingers of life and hope as "King Billy." I think the honorific name was an instant hit that quickly became the *lingua franca* of the day. (We know that King William III was quite popular in Colonial America: the capital of the Virginia Colony from 1699 to 1776 and then the Commonwealth of Virginia from 1776-1780 was Williamsburg, and the name of the oldest institution of higher education in the United States, dating to 1693, is The College of William and Mary.)

How long "King Billy" remained in widespread usage is, of course, again only conjecture. From Mr. Donald Davis we do know that the name was popular within his Ontario-based family until 2000. However, I think that as time passed and memories faded, King William III became for most, a hero in legend, not a real life personage. Consequently, once again, someone, somewhere in Colonial America, simply generalized the name to "The Monarch," which was then immortalized in the literature in 1874 by Mr. Samuel Scudder. Later, through everyday usage or perhaps even careless printing oversights, "The" was dropped and we are left with the single word "monarch." And in an ironic twist of history, that name proved prophetic: the butterfly has become a unique scientific phenomenon as well as the world's most celebrated insect species. The butterfly has become a "monarch" in the true sense of the word.

In conclusion, I can't prove my interpretation, of course. After all, the facts are lost in time and folklore. However, I am convinced that the vernacular name "monarch" for the butterfly known in science as *Danaus plexippus*, is the secondary name for "King Billy" and that both names were coined by colonial Americans to honor a friend and patron, King William III of Great Britain, Prince of Orange.

But for etymologists and entomologists alike, there is something more: The monarch is a traditional American butterfly with a decided European (British-Irish-Dutch) connection—a living international legend and a poignant reminder that a name is a name, is a name, is a...

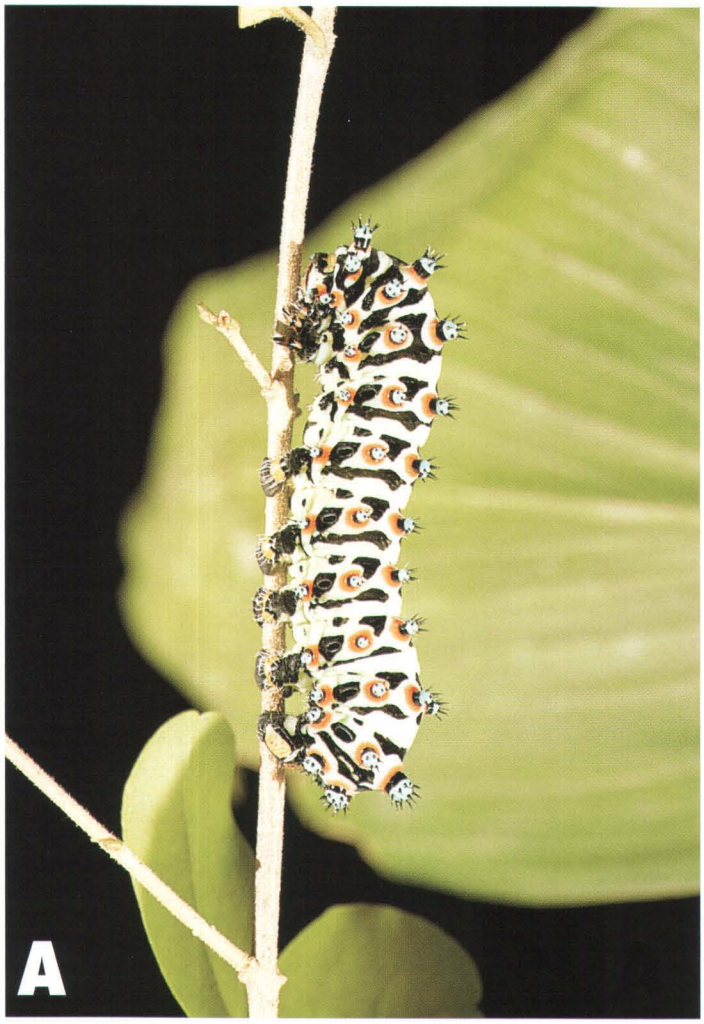
I shout: "Long Live the King!"

Greeks...*continued from pp. 23*

thought to "steal" dairy products. This seems an odd idea. They are not routinely attracted to such substrates, so where does the idea come from? Most probably from the colors of common European species, and the names may well have originated by direct color comparison of the Brimstone, *Gonepteryx rhamni*, with butter and the various Whites (*Pieris, Euchloe, Aporia*) with cream. (The oldest confirmed use of the English word is as a color, *butterfleoge* – butter yellow.) Beeman may be correct that the alternate German word *Falter* means "folder," as in folding the wings; usually butterflies are *Tagfalter* ("day-folder," as in folding the wings, and moths are...*Motte*.) (*Falter* is the older term; in old High German it appears as *fifaltra*, which is the same as the Anglo-Saxon *fifoldara*_and the (very) old English *fifalde* and the (very) old Norse *fidrildi*.)

It might be interesting to see if there is a statistical difference in linguistic diversity for "moth" vs. "butterfly" words. Has anyone ever personified the soul as a moth?...

* The Greek word for butterfly is *petalou'da*.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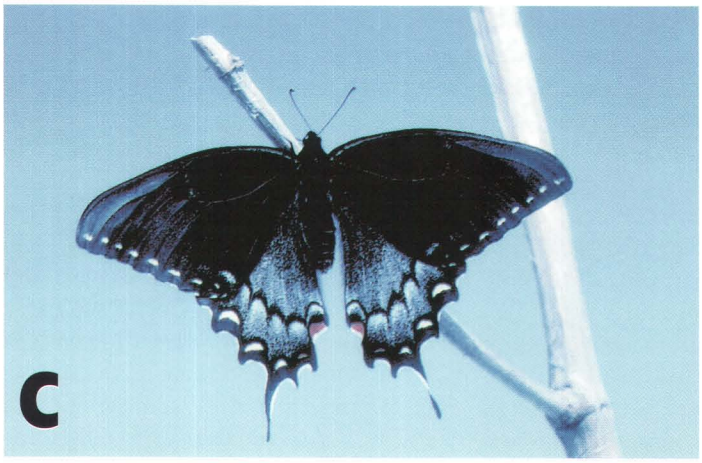
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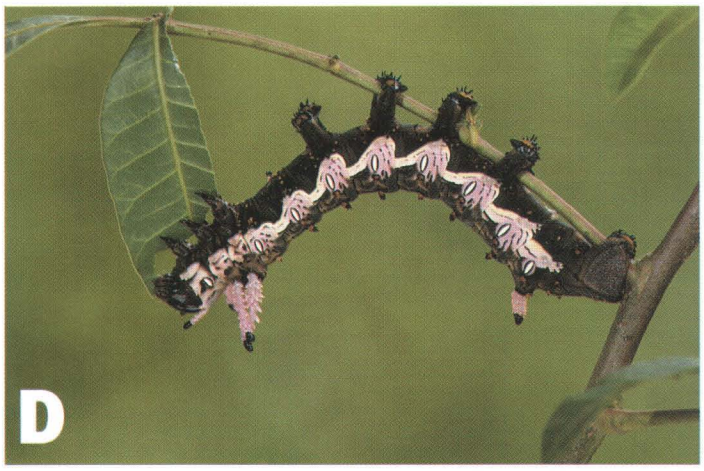
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Lep. Soc. 2000 Photo Contest Winners

Jackie Miller

Life History

First: *Eupackardia calleta* , 5th instar larva – Carter Bays, Columbia, SC A)

Second: *Callosamia angulifera* , 2nd and 3rd instars – Carter Bays (H)

Third: *Citheronia hamifera* – Leroy Simon, Belleview, FL (D)

Hon. Mention: Young 3rd instar – Carter Bays (not shown)

Moths

First: *Agapema homogena* – Leroy Simon (A)

Second: *Loepa katinka* – Leroy Simon (G)

Third: *Euthisanotia grota* – Carter Bays (F)

Butterflies

First: *Junonia coenia* – Leroy Simon (B)

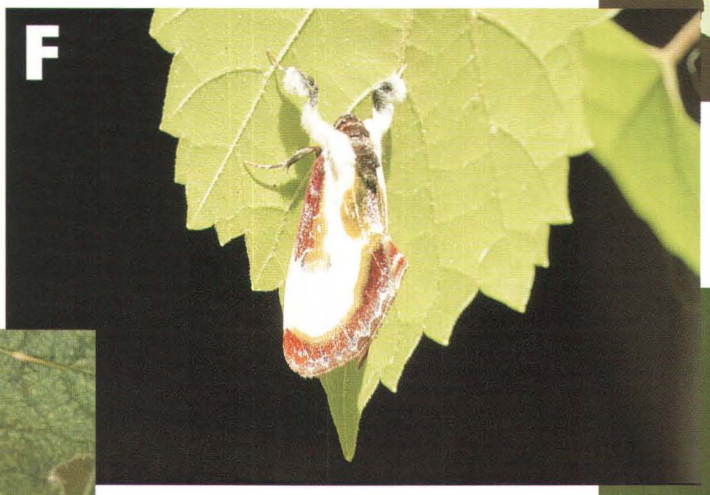
Second: *Adelpha* sp. – Leroy Simon (E)

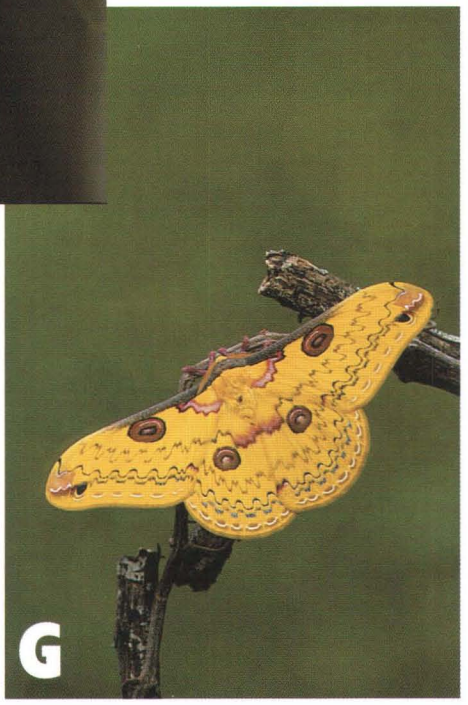
Third: *Papilio glaucus* – Tor Hansen, North Truro, MA (C)

Grand Prize

Agapema homogena – Leroy Simon (Front Cover)

Congratulations to the winners and to all who participated.





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Bakersfield, CA 93311

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Submission Guidelines for the News

Submissions are always welcome! When space becomes limiting, preference is given to articles written for a non-technical but knowledgable 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. Electronically transmitted file in ASCII or other acceptable form *via* e-mail.

2. Article on high-density floppy diskette or Zip disk 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). All disks will be returned upon request.

3. Typewritten copy, double-spaced suitable for scanning and optical character recognition. Artwork should be line drawings in pen and ink or good, clean photocopies suitable for scanning. Originals are preferred.

4. Handwritten or printed (very legible, short pieces only please, <500 words).

Submission Deadlines

Material for Volume 43 must reach the Editor by the following dates:

Issue	Date Due
1 Spring	you missed it!
2 Summer	**Apr. 27, 2001**
3 Autumn	July 27, 2001
4 Winter	Oct. 26, 2001

Reports for Supplement S1, the Season Summary, must reach the respective Zone Coordinator (see most recent Season Summary for your Zone) by Dec. 15. See inside back cover for Zone Coordinator information.

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Another page out of Liam O'Brien's field journal. These pages resulted from his first trip to southeastern Aroizona. He confessed that he was "overwhelmed" and "can't wait to return."