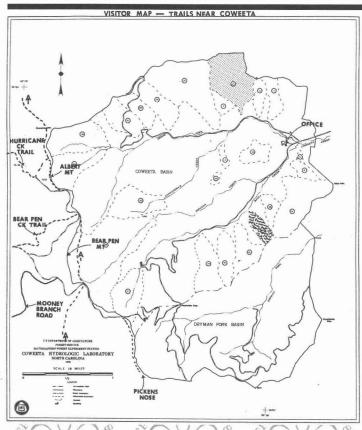
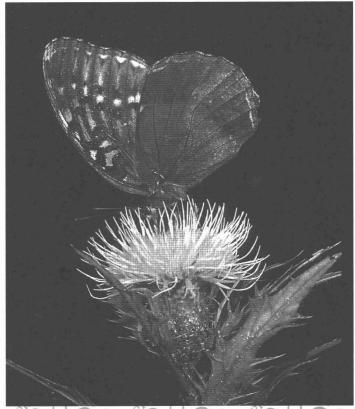


Volume 39, Number 4

Autumn 1997





nside

Butterflies of Coweeta Hydrologic Laboratory, North Carolina...

White Monarchs in Florida - more than meets the eye!...

50th Anniversary meeting photos and news... EST. 1947

Benjamin Preston Clark ... EST. 1947

EST. 1947

Giant silkmoths on US stamps?
Why not!

An lo bilateral gynandromorph...

EST. 1947

...and more!

NEWS LEPIDOPTERISTS' SOCIETY

Volume 39, No. 4

Autumn 1997

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

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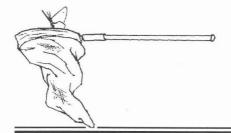
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Left: The Harkness
Tower at Yale
University, site of the
50th Anniversary
Meeting. Right:
Outgoing (in every
sense of the word!)
President Eric Metzler
presenting the Karl
Jordan Medal to
inductee Ron Hodges.
Photos courtesy of Ray
Stanford. For more
photos see pages 86-87
and the center spread.



Cover: Map of Coweeta Hydrologic Laboratory, North Carolina and Diana (Speyeria diana, Nymphalidae) nectaring on thistle. Photo by Gary Ross. See article on page 70.



Mailbag...

Dear friends of butterflies and moths,

The Annual Meeting which celebrated the 50th Anniversary of The Lepidopterists' Society is history. It was a marvelous event with representation from 15 countries, and exhibitors from the U.S., Mexico, Canada, and England. Kudos and accolades to Larry Gall and his team of planners for this outstanding event. It fully demonstrated the success and diversity of this venerable society.

The papers were excellent and they clearly showed the high level of interest in butterflies and moths by professional and amateur lepidopterists. The record attendance made the informal discussion more enriching.

The Lepidopterists' Society is well poised for 50 more years of excellence.

I offer my sincere compliments to the founders, the charter members, the officers, committee members, and all the other persons who brought The Lepidopterists' Society to this momentous occasion. My congratulations to everyone else who gets to inherit and maintain such a fine organization.

With best wishes,

Eric H. Metzler, Past President



I recently received the issue no. 39 (3) of the **News of the Lepidopterists' Society**. The new layout, and especially the colour, improved the News significantly!

Regrettably, I found a misidentification within the 1996 Photo Contest pictures: The 1st place of the category "Moths" (page 32, centre left, by Mark Schmidt) is not *Brahmaea hearseyi*! This is most

likely a specimen of *B. tancrei*, probably from Korea or Eastern Siberia. *B. hearseyi* is a tropical species, and it looks very different from the temperate species. *B. hearseyi* is more easily mistaken for *B. wallichii*.

I agree that the photograph is a good one, and it won its prize fully justified, but perhaps the Lepidopterists' Society should take a little more care for the correct identification of the illustrations within their publications, especially when Contest winners are printed! I know that commercial lifestock traders (especially from former Czechoslovakia) have mailed out eggs and pupae of B. tancrei under several, most of them wrong, names, but a society like the Lep. Soc., with its expert knowledge, should perhaps not embarass its readers by advertising such misidentifications.

Dr. Wolfgang A. Naessig
Entomologie II Senckenberg
Senckenberganlage 25
D-60325 Frankfurt

(Unfortunately, there is little that I can do regarding possible misidentifications such as this — I am not able to identify every known species of moth and butterfly (can anybody?) and there is, all too often, little time to obtain "expert" opinions. We must depend on our authors/photographers for accurate identifications...mistakes will happen. Ed.)



Dear Editor,

I was pleased to see the latest issue of the **News of the Lepidopterists' Society**, and compliment you on the varied and interesting contents, the color work, and the use of real paper (replacing the government men's room hand towel stock of the past). Several of the articles are of real scientific value, yet are of the size

and informality that suggests the author probably would not have elected to submit them to the **Journal**. The society needs this kind of publication alternative, especially for amateurs.

Michael M. Collins,

11901 Miwok Path, Nevada City, CA 95959, MMC@ORO.NET

(Thanks Michael! Please see my comments after the last letter (next page). Ed.)



Dear Editor,

Greetings to you, our editor! The color edition of the *News* looks sharp. Thanks for cutting down on the amount of graphics that were interspersed throughout the articles. Too many of them detract, rather than enhance the *News*.

The photograph by Carter Bays of the *Actias luna* larva is upside down. This genus, along with other Saturniinae, does not rest in this posture. Normally, the head extends downward, remaining straight, curved, or cocked to one side. Often, the thoracic legs are released and flush with the body. Leroy Simon's photo of the Datana species may also be upside down. The branch should be hanging downward, I believe.

Unfortunately, larval photos are often published incorrectly. Sad, but true, most lepidopterists (amateur and professional alike) study only adults, so they are not familiar with the resting postures of larvae (which are very specific to genera). For the rearer of the Saturniinae, the A. luna photo is awkward indeed. Carter Bays told me that the photo was marked for orientation. I am assuming that the photographers do not see the proofs, however, I am sure that someone from our Society could be trusted with this

task! I will look forward to the next issue for the *News*. Thanks again for the tremendous effort you are putting forth.

Valerie A. Passoa

602 Jasonway Avenue, Columbus, OH 43214

(It is entirely possible that the slide/photo(s) was marked for orientation and that the mistake is mine. My regrets if this was the case. See. Mistakes do happen! Ed.)



Dear Editor:

After a long and wonderful afternoon at the San Francisco Gay and Lesbian Pride Day Parade (an event attended to by over 700,000 people), I was thrilled to find my latest edition of **News** (Vol. 39, number 3) in the mail when I got home. Exhausted, I kicked back with a beer, and drank in all the excellent articles; I can't get enough of this stuff. Love the new layout.

I have to say, however, that the byline "Odd Couples" which introduced A. Chaudhuri and A. Kinha's article on "male-male pairing in the tropical Tasar Silkmoth, Atherea mylitta (Saturniidae). stung like an unexpected yellow jacket beneath my collar. Wow. Such subliminal, rampant homophobia right there. In bold print, right there, in 1997. Mindboggling in a journal thought to be striving for some semblance of scientific objectivity. It was no accident (or perhaps just further poor judgment) as the same phrase donned the cover of your periodical. And for what purpose? To lure an already captive audience? To titillate? I thought it was going to an account of two separate species getting it on — that would have clearly been "odd" behavior, wouldn't you agree? As opposed to what even the article attests to as "relatively common in other insects" behavior? Homophobia is an insidious thing, and whatever brain surgeon you have on your staff that chose those words needs to be slapped up to date: the word "odd" is laced with judgment, pejorative in the least and reckless at its best.

In an attempt to rectify this callous behavior do I ask the readers here (and

1997 Report of the Resolutions Committee

Andrew D. Warren

Our Society began in 1947 through the effort of a few, here in New Heaven; 50 years later here we all are, from 14 nations, near and far.

> One of the best attended meetings to date the health of our society nobody can debate.

We collect, photograph and study Lepidoptera from head to toe, we exchange ideas and specimens — we are amateur and pro.

Since last year they have worked so long and so late, this meeting's co-chairs: Charlie Covell, Susan Weller, and Larry Gall.

They covered every detail — everything was great!

It was a meeting enjoyed by one and all.

Of course it was not just these three who put this meeting together;

if it were just these few, everyone can see

to arrange this meeting would have taken forever.

Larry Gall made the program which Tim and Liz did print, via Dave Wagner's collecting guide, to the field we were sent.

The meeting logo Amy Wright did design,

and Jacki Miller's photo salon was again quite fine.

For our accommodations & food Yale Conference Services we thank, their efforts and preparations have been top rank:

Susan Adler, Roberta Hudson, Tyler Mertes, Jacob Dell, & Winnie Chang catered to all the needs of this Lepidopterists' gang.

Over the past four days 67 paper presentations have been made, Eric, Pete, Doug, and Elizabeth should surely have been paid; as our "slide curators," our technical masters, they managed to avoid any technical disaster!

It is not easy to keep presentations on time but our session moderators did their job just fine: John, Astrid, Charlie, Victor, Bernard, Eric, Jacki, Paul, Alma, Susan and Bob We thank for doing such an excellent job.

the author of the bi-line) to get out a sheet of paper and a pen: homosexual behavior (whether in moths or in humans) is not "odd" behavior (subjective bigotry) and homosexual couples are not "odd couples" but rare couples. Homosexual behavior is rare in the animal kingdom. See the difference? I know a lot of you already know this, but I'd just like to state for the record that gay people like objectivity too. Go read some Jane Goodall.

I'll have to assume that whoever did this on your staff, Mr. Editor, knew no better. In a world where I've followed the battle over "common names" for butterflies, let it be known that "odd couples" would not even make the first draft in describing homosexual behavior.

Recently, I attended the 23rd annual Berkeley Butterfly count. I saw *Polygonia satyrus* for the first time. I netted it to confirm it not being *P. Oreas* and in the interim got a handful of stinging nettle. Life's lesson: such joy combined with unexpected pain...sort of how I proceeded reading the rest of the *News* that day.

Liam O'Brien 545 Guerrero St. Apt. #1, San Francisco, CA 94110



Of course we thank Ray Pupedis for his generosity in opening up the Peabody collection to those with curiosity. Kathleen and Joyce ran the Museum Shop Annex and Registration desk, and all the Peabody Volunteers made this meeting one if the best.

For our food we thank Brandi's Deli, Yale Lawn Club, and Yale Dining Halls, the raffle prizes were donated by Mikkola, Classey and Louise and Richard Fall.

The opening reception was sponsored by Bio Quip as well;

how long will they sponsor this great event?—Only time will tell. For most of our meeting it was the Osborn Biological Lab we raided.

Thanks to lab personnel, Don, Nancy and Nick, our enthusiasm never faded.

For the group photo and video we thank Bill and Ron, who arranged our group on a small patch of lawn.

The Connecticut Butterfly Association's program to the public was open to educate non-members, and I'm not joking

Ray Stanford's slide fest on Thursday night

was a great deal of fun-indeed quite a sight!

Dave, Alma, and Elaine ran the silent auction so well, was it their first time? Nobody could tell.

To those who donated items we certainly do thank

so that our society could put a little more money into the bank.

There are many more people to thank, yet no time remains,

to everybody who helped with this meeting we thank just the same;

we appreciate all the efforts by everyone

who made this meeting so much fun.

Few people know how this Society runs from day to day, but it is all by volunteers who work without pay Our Society Officers keep our organization strong and to them I dedicate this song.

A special thanks to Larry Gall (Journal Editor), Phil Schappert (News Editor), Eric Metzler (Retiring President), John Burns (immediate past President), Mike Smith (Secretary), Dave Iftner (Treasurer). Also thanks to retiring Executive Council members Jon Shepard, M. Alma Solis and Susan J. Weller as well as retiring Vice Presidents John W. Brown, Kauri Mikkola, and Jean-Francois Landry for their service.

(Webster's Dictionary defines "odd" as: "incidental; casual; strange; peculiar", and "couples" as: "two of the same class or kind; a pair". Given these simple definitions, I don't understand how "odd" could be considered "laced with judgement" or "reckless", or how two separate species "getting it on" could be considered a "couple". This descriptor is the title of an ongoing series of articles and photos in the News that are, simply, that - "odd couples". No homophobic intent is, or ever has been, implied or intended. I hope that this is not a case of being overly sensitive or "politically correct" after a "long and wonderful afternoon at the San Francisco Gay and Lesbian Pride Day Parade"? Or perhaps I should take exception as the perceived author of that "byline"? Ed.)



Dear Editor,

I want to commend you on a superb job done on the recent color issue of the *News*. It was spectacular . . . Bravo!!!

Through personal communication, I believe it is the goal of the Steering Committee to return to our roots and publish information, leaving the politics and hatred to others. Conscientious and responsible editing is paramount to our survival.

Ed Knudson and I have several articles we wish to publish in the near future, and these would be best suited for color publication. Let me know the intricacies involved in getting color photos pub-

lished.

We are both very pleased with the new turn of events, and hope to see this trend continue. Irresponsible editing has contributed to division and dissension these last three years, and we cannot afford to lose valuable members because of political rhetoric.

News about lepidoptera is exactly what it means. Keep up the good work!

Your comrade in nets,

Charles Bordelon 8440 Washington Beaumont, TX 77707

(The "intricacies" are not very intricate. Just submit it the way you'd like to see it in print. Providing there is space available for the text, and in the color plates, I'll try to fit it in. Ed.)



Dear Editor,

I am particularly pleased with Volume 39, #3 of the News. Well done sir, to you and your staff of writers, etc.!

I'm afraid, however, that subsequent issues may be somewhat dull unless they have the same quality of photo, stories and information such as this one. Thank you.

William Randall

15 Fassett Avenue, Hamilton, ON L9C 4E6

(To all who have sent in letters of support. Thank You! You make it worthwhile. Of course, I'd be totally worthless if it wasn't for my "staff of writers, etc." — my thanks to all of you who have contributed such fine work. I can try to make it pretty to look at, but you people are what make it worth reading! Ed.)



Preliminary Inventory of the Butterflies of Coweeta Hydrologic Laboratory, Nantahala National Forest, North Carolina

Gary Noel Ross

6095 Stratford Ave., Baton Rouge, Louisiana 70808, USA

Coweeta Hydrologic Laboratory (CHL) is located on the eastern flanks of the Nantahala Mountain Range of southwest North Carolina (at 35° 03' N. latitude, 83° 25' W longitude) within the Blue Ridge Physiographic Province (see Swank and Crossley 1988 for full description and history). The site is on the outskirts of the small community of Otto, North Carolina — just 10 km north of the North Carolina-Georgia border, 22 km south of the gem-mining center of Franklin, NC. and 60 km west of picturesque Highlands, NC.

Originally established in 1934 as the Coweeta Experimental Forest to collect data on rainfall, streamflow, climate and forest growth, the name was changed to Coweeta Hydrologic Laboratory in 1948. Today the site is one of 19 in the nation participating in the Long-Term Ecological Research Program (LTER) sponsored by the National Science Foundation. In addition, CHL has been part of the International Biological Program, the International Hydrologic Decade UNESCO'S Man and the Biosphere project (in which it is paired with the Great Smokey Mountains National Park approximately 100 km to the north).

CHL cooperates with more than a dozen universities, other federal and state organizations, and other institutions. Because of these numerous affiliations, CHL has assumed an important role in the training of new scientists in many biological disciplines (each year approximately 30 projects are in progress involving 45 graduate students and 40 senior investigators). Nearly a thousand papers are listed in the annotated bibliography for CHL (Stickney et al. 1994).

This unique outdoor laboratory consists of 2185 ha with two adjacent, east-facing, bowl-shaped basins. Elevations range from 675 m in the administrative area to 1592 m at Albert Mountain. Access to the facility is by paved road — a spur west from US highway 441/23 just south of Otto. Within the actual "Laboratory," there are two main gravel roads: Shope Fork and Ball Creek. Both provide access to the higher elevations and are open to the public for most of the year. Additionally, there are smaller service roads and trails that are closed to public vehicles but are open for research access. Although the entire site is open to the public, no camping or fires are permitted. There is, however, a full service

campground, "Standing Indian Campground," approximately fifteen miles southwest of Franklin. (Small private campgrounds are found in both Otto and Franklin.)

Because rainfall at Coweeta is plentiful throughout the year (1,871 mm/yr at lower elevations, 2,564 mm/yr at upper elevations), the site and surroundareas are cloaked in a luxuriance of temperate forest vegetation. Four major vegetation types are identified at Coweeta: northern hardwoods, cove hardwoods, oak-chestnut and oak-pine. Eastern hemlock (Tsuga cana-densis) is scattered throughout, and understories are dominated by dense stands of rhododendrons, azaleas and mountain laurels. Ferns, bryophytes and fungi are rampant. All combine to foster the illusion of a temperate rainforest. (Biogeographers classify the region within Merriam's "Transition Life Zone.") Furthermore, within its 60 plus years of operation, CHL has manipulated numerous watersheds for forest hydrology and system research. These prescriptions created new habitats that have undergone ecological succession, adding to the diversity of plant and animal species.

List of Species		
Name	Survey A	Abundance
Family Papilionidae		
1. Pipevine Swallowtail — Battus philenor (L.)	A,B	+++
2. Black Swallowtail — Papilio polyxenes Fabricius	В	+
3. Eastern Tiger Swallowtail — Pterourus glaucus (++++
4. Spicebush Swallowtail — Pterourus troilus (L.)	A,B	++++
Family Pieridae		
5. Checkered White — Pontia protodice (Bois. & Leo	Conte)A	+
6. Cabbage Butterfly — Pieris rapae (L.)	A,B	++
7. Alfalfa Butterfly — Colias eurytheme Boisduval	В	++
8. Cloudless Sulphur — Phoebis sennae (L.)	A,B	+++
9. Little Sulphur — Eurema lisa (Boisduval & LeCo	nte) A	++
10. Sleepy Orange — Eurema nicippe (Cramer)	A,B	+++
Family Lycaenidae		
11. Harvester — Feniseca tarquinius (Fabricius)	В	++
12. Little Copper — Lycaena phlaeas (L.)	В	+
13. Red-banded Hairstreak — Calycopis cecrops (Fa	br.) B	+
14. White-M Hairstreak — Parrhasius m-album	_	
(Bois. & LeConte)	В	+
15. Gray Hairstreak — Strymon melinus Hubner	A,B	+
16. Eastern Tailed Blue — Everes comyntas (Godart		++++
17. Spring Azure — Celastrina ladon (Cramer)	B	++++
Family Heliconiidae	OC:	
18. Gulf Fritillary — $Agraulis\ vanillae\ (L.)$	В	+

Although CHL is ideal for hydrologic and ecosystem-based research, the facility also lends itself well to many terrestrial biological studies and surveys. Surprisingly, no butterfly investigations were ever conducted prior to my initial visit in 1990. At that time, September 17 and 18, I was able to undertake a general survey. Twenty-one species were identified. Then in 1996, between August 13 and September 1, I was able to resurvey the region. Forty-six species were identified. (Both surveys were conducted only at lower elevations because of time constraints or timber salvage operations brought about by Hurricane Opal in October 1995.) The two surveys bring the total number of species now known from CHL to 50 (see LIST OF SPECIES). Undoubtedly, several additional species still remain to be chronicled, particularly at higher elevations and during the earlier months of the year.

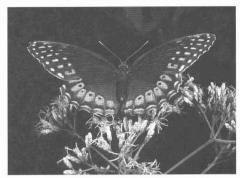
General Comments

Weather at Coweeta Hydrologic Laboratory during August and September is cool and damp. Rain showers are common and most mornings begin with a fog cover in the valley that usually does not burn off until 1030 - 1100 h EDT. During August, temperatures range between 9 C at night to 23 C during the day. During September, temperatures dip 1 - 2 degrees lower during the night.

Wildflowers in August and September are abundant throughout the Coweeta Valley. Roadsides and meadows near the administrative complex are particularly important for nectaring insects such as butterflies. During my two visits, I found the following species to be favored by butterflies (species are listed in descending order of popularity): thistle, Carduus discolor (Michl. ex. Willd.) Nuttall; Joe Pye weed or Queen-of-the-Meadow, Eupatorium fistulosum Barratt; sweet Joe Pye weed, Eupatorium purpureum L.; New York ironweed, Vernonia noveboracensis (L.) Michx.; monarda, Monarda clinopodia L.; Queen Anne's lace, Daucus carota L.; goldenrod, Solidago spp.; asters, Aster spp.; boneset, Eupatorium perfoliatum L. and white snakeroot, Eupatorium rugosum Houtt.

I conducted both surveys on foot. Except during rain showers, I was in the field

from 1000 - 1800 h EDT each day. Species' identifications were made by sight, often with the assistance of close-focusing binoculars ("Regal" by Celestron, 8 X 42, 6.25 feet). In some cases, individual butterflies were netted for in-hand examination; then were released.



Female Diana Fritillary — Speyeria diana. Photo. by Gary N. Ross

Summary

Coweeta Hydrologic Laboratory, located in the Nantahala National Forest of western North Carolina, is a 2185 ha U.S.D.A. Forest Service research laboratory that has been in continuous operation since 1934. Although hundreds of

continued on page 88...

Name Survey	Abundance	Name Survey Al	undance
Family Nymphalidae	CHILD DESIGNATION OF	Family Hesperiidae	1077777
19. Variegated Fritillary — Euptoieta claudia (Cramer) A,B	+	36. Silver-spotted Skipper — Epargyreus clarus (Cramer) B	++++
20. Diana — Speyeria diana (Cramer) A,B	++	37. Long-tailed Skipper — Urbanus proteus (L.) B	+
21. Great Spangled Fritillary — Speyeria cybele (Fabr.) A,B	++++	38. Southern Cloudy Wing — Thorybes bathyllus (J.E. Smith)E	+
22. Aphrodite — Speyria aphrodite (Fabricius) B	+	39. Northern Cloudy Wing — Thorybes pylades (Scudder) B	+++
23. Silvery Checkerspot — Charidryas nycteis		40. Horace's Dusky Wing — Erynnis horatius	
(Doubleday & Hewitson) B	+	(Scudder & Burgess) B	++
24. Pearl Crescent — Phyciodes tharos (Drury) A,B	++++	41. Common Sooty Wing — Pholisora catullus (Fabr.) B	+++
25. Question Mark — Polygonia interrogationis (Fabr.) B	+	42. Least Skipper — Ancyloxypha numitor (Fabricius) B	++
26. American Painted Lady — Vanessa virginiensis (Drury).	4 ++	43. Fiery Skipper — Hylephia phyleus (Drury) B	+++
27. Red Admiral — Vanessa atalanta (L.) A,B	+	44. Peck's Skipper — <i>Polites coras</i> (Cramer) B	++
28. Buckeye — Junonia coenia Hubner A,B	+++	45. Tawny-edged Skipper — Polites themistocles (Latreille)B	++
29. Red-spotted Purple — Basilarchia arthemis astyanax		46. Whirlabout — Polites vibex (Geyer) B	++
(Fabricius) A,B	++	47. Northern Broken Dash — Wallengrenia egeremet	
30. Viceroy — Basilarchia archippus (Cramer) A,B	+	(Scudder) B	+
Family Satyridae		48. Sachem — Atalopedes campestris (Boisduval) B	+++
31. Northern Pearly Eye — Enodia anthedon A.H. Clark B	+++	49. Zabulon Skipper — Poanes zabulon (Bois. & LeConte)B	++++
32. Appalachian Eyed Brown — Satyrodes appalachia	TET	50. Lace-winged Roadside Skipper — Amblyscirtes aesculapius	
(R.L. Chermock) B	++	(Fabricius) B	++
33. Carolina Satyr — Hermeuptychia sosybius (Fabr.) B	++	Notes:	
34. Common Wood Nymph — Cercyonis pegala (Fabr.) B	++		12 Son
	1. 1	1. Survey Dates: A = September 17 and 18, 1990; B = August	19 - Seb-
Family Danaidae		tember 1, 1996	
35. Monarch — $Danaus\ plexippus\ (L.)$ A,B	+++	2. Relative Abundance (per day): $+ = \text{Rare}$, only 1; $++ = \text{Uncondense}$	mmon, 2-
		5; $+++$ = Common, $6-10$; $++++$ = Abundant, more than 10	

Florida White Monarchs – a touch of incest?

R.I. Vane-Wright

Biogeography & Conservation Lab., Department of Entomology, The Natural History Museum, Cromwell Road, London SW7 5BD, UK

Marc Minno's note on White Monarchs found in Florida in April and May 1996 (News of the Lepidopterists Society 38: 184, 190, 1996) is interesting. But why does he suggest they originated from Hawaii?

Although white monarchs recently reached about 10% frequency on Hawaii, and were first collected there about 100 years ago (specimen ex Rothschild Collection, BMNH, London; Vane-Wright 1993), they have been known from mainland USA for at least as long. Clark (1932) reported a specimen found in Washington DC in 1896, while Gunder (1927) named this aberration or form as 'nivosus', based on a specimen obtained from Missouri in 1908. More recently John Lane photographed a white monarch on the coast of California, about 1980 (Vane-Wright 1987). Outside the USA, in addition to Hawaii, 'nivosus' is also known from Australia, New Zealand and Indonesia (Vane-Wright 1993).

The white form is a simple autosomal recessive (Stimson & Myers 1985), and we may assume that the allele responsi-

ble persists at very low frequency (or is a recurrent mutation) in various populations of Danaus plexippus plexippus, including both the eastern and western Monarch populations of North America. Data in Cockrell et al. (1993) and Malcolm et al. (1993) suggest that migrant females from Mexico could oviposit at Tampa (28°N) early enough to produce offspring in late April and May. Mating of first-wave spring migrants takes place as the mass overwintering colonies break up during FebruaryMarch (Van Hook 1993), and from time to time rare heterozygous females must mate with equally rare heterozygous males. One quarter of the progeny of such a female would be expected to be white, and so it is quite plausible that the two wild caught specimens observed in the Tampa area in April and May 1996 simply arose from such a rare but predictable "mother event", and not necessarily because "someone imported these individuals from Hawaii and released them in Tampa", as Minno speculates.

However, what is really surprising about Marc's account is the report that Ms Opplinger's white female, after eclosion from a pupa "left on her porch", was released into her yard where it laid eggs on *Asclepias curassavica*, from which batch a further white female apparently emerged. The odds against the white mother finding a heterozygous (white/typical) male with which to mate would normally be very small.

Most likely in this case it came about through an incestuous relationship with one of her brothers. But how frustrating to have no further details of this brood! In this case one would expect half the offspring to be white but, without any indication of survivorship, it is impossible to assess the real significance of "one more white monarch".

This raises a question about the fidelity of first generation spring individuals to the area in which they emerge. If such females have a strong tendency to move northwards, as discussed by Malcolm et al. (1993), why would Ms Opplinger's first white monarch lay eggs at the very spot where she was "born"? An alternative might be that the Tampa monarchs are resident, a view consistent with Brower's (1985) report of small and mobile overwintering colonies along the Florida Gulf coast. More detailed studies on the demography of Monarchs in the Tampa area would be interesting, and a mass rearing programme might determine whether the elusive 'nivosus' allele is really resident in this population or not. Discovery could pave the way for the proposed comparison with Hawaiian white monarchs (Vane-Wright 1993), in

an attempt to see if 'nivosus' is an ancient gene that crossed the Pacific along with the Monarch during the last century, or is just a recurrent mutation.

References

Brower, L.P. 1985. New perspectives on the migration biology of the monarch butterfly, Danaus plexippus L. In Migration: mechanisms and adaptive significance (M.A. Rankin, ed.), pp. 748-785. Austin: University of Texas, Contributions in Marine Science, Supplement 27.

continued on page 88...



A Florida White Monarch on Asclepias curassavica. Photo by Thomas Hecker.

Benjamin Preston Clark on Sphingidae

Russell A. Rahn, 3205 W. Rochelle Rd., Irving, Texas 75062-4127

Benjamin Preston Clark is the author of a number of taxa in the family Sphingidae, yet, after a period of searching, I had not been able to locate a bibliography or a biographical sketch published in any journal related to entomology or lepidoptera. Clark was not a professional lepidopterist but was, like many others among us, a genuine amateur — loving his hobby and pursuing specimens with an enthusiasm for collecting which produced remarkable results.

Being among the fortunate few whose pursuit of a hobby was apparently not seriously limited by funds, he possessed both time and resources for his avocation. The results of his work are given below, indicating a standard of achievement that would be envied by us all. In view of the apparent lack of both biographical and bibliographical information, I have prepared the following sketch which hopefully will fill this void.

Through the kind assistance of the reference department staff at the Irving Public Library in Irving, Texas, I was able to obtain the single reference cited below. From this reference, largely genealogical in character, it was possible to track Clark's collection, and it is from this reference that the following biographical sketch has been condensed.

Benjamin Preston Clark was born October 8, 1860, in the corner bedroom of the Mansion House on the Weld family farm, West Roxbury, (near Boston), Massachusetts. His early interest in natural history was attested to by an experiment with eggs in the nest of a Flicker (Colaptes auratus). Benjamin attempted to learn the maximum laying capacity of the Flicker, and removed one egg from the nest daily. The bird finally stopped after thirty eggs had been laid.

Graduating from the Boston Latin School in June of 1877, he enrolled in Amherst College as a freshman the following fall. Although he was offered a position as instructor in Geology at Cornell University, the failure of his father's business placed Clark in the business world in November, 1881. The business which had prospered dealing in Spanish cork, wine, olives, oakum and paper found itself in debt to the tune of

\$150,000. Only after Clark's diligent and dedicated efforts for a ten year period, was the business again debt-free. During that period, B.C. Clark and Company managed the Pearson Cordage Company of Roxbury, and then designed, manufactured and marketed the twine used in early McCormack reapers. Americans planted, crops flourished, reapers reaped, and B.C. Clark & Co. prospered once again.

Clark's entomological pursuits began in earnest in 1911. At that time he purchased a collection of hawk moths from the estate of C. Maxwell Stuart through the agency of O.E. Janson & Sons of London, while traveling abroad with his family. This collection contained about 450 specimens with 350 named forms. By 1922, his collection held in excess of 7200 specimens with 1170 named forms (out of 1315 known at that time). From 1933 onward, his collection was housed and lovingly curated in the "Moth Room" of their home at 132 Marlborough Street, Boston. In this room, Clark had a large world map to which he affixed a pin for the locality of each new and rare species he desired to obtain. He then would diligently seek out an individual there who would collect for him, supplying a photograph of the moth, a net, a poison bottle and instructions for collecting. His publications of new species were made after consultation with Karl Jordan of Tring, and Andrey Avinoff of Pittsburgh, both of whom were counted as close friends.

At the time of his death on January 11, 1939, Clark's collection contained all but 50 of the 1644 known taxa of Sphingidae. He himself had described 232, and the collection contained 849 types, cotypes and paratypes. His collection was donated to the Carnegie Museum, being

packed into pinning boxes by Mr. McBrine. It took several days to pack the specimens, books, microscope slides, maps and cabinets into a special express truck. They were then forwarded to the museum via a railroad express car without damage to a single insect. Andrey Avinoff of the Carnegie Museum then arranged to have the museum's cabinetmaker fashion a single wallmounted display cabinet which he filled with about 50 specimens from the collection. This special display was returned to the family home as a permanent reminder of Clark's work there. At the time of his death, Clark was a "Curator of Sphingidae" at the Carnegie Museum, a "Patron" of the American Museum of Natural History in New York, a "Collaborator" of the Smithsonian Institution in Washington, D.C., an active member of the Visiting Committee of the Agassiz Museum in Cambridge, and a member of the Entomological Society of France.

Reference:

Clark, Josephine F.: Benjamin Preston Clark; Thomas Todd Co., Printers, Boston, 1947, xi & 220 pp., 11 b/w plates.

Publications of Benjamin Preston Clark on Sphingidae:

- New American Sphingidae, Proceedings of the New England Zoological Club VI: 39-50 (December 5, 1916).
- New Sphingidae, Proceedings of the New England Zoological Club VI: 57-72 (December 15, 1970).
- Some Undescribed Sphingidae, Proceedings of the New England Zoological Club VI: 99-114 (March 21, 1919).
- Sixteen New Sphingidae, Proceedings of the New England Zoological Club VII: 65-78 (November 11, 1920).
- Twenty-five New Sphingidae, Proceedings of the New England Zoological Club VIII: 1-23 (January 25, 1922).
- ${\bf 6.\ Thirty-three\ New\ Sphingidae,\ Proceedings\ of}$

Continued on page 89...

Stamp Moths!

Mark D. Schmidt 8780 Red Lion-Five Points Rd., Springboro, Ohio

This is not a call to eradicate, it is a call to celebrate and educate. Earlier this year, the notion occurred to me to see if the U.S. government would be interested in commemorating giant silkmoths on stamps. After all, a butterfly, Schaus' Swallowtail, had debuted earlier last year. It is my belief that other lepidoptera may be worthy of a stamp and for reasons other than being endangered.

With this in mind, and finally finding a postal employee who could direct me to the proper authority within the postal service, a letter was written soliciting that both American silkmoths and an American artist be celebrated through the philatelic medium.

Dr. John Cody of Hays, Kansas, has applied his talents, nearly exclusively, to the creation of perfect images of Saturniids in water color. His recently published book, *Wings of Paradise* certainly attests to his worthiness. Thus, photos of four of his paintings were included in the solicitation.

Unfortunately, "solicitation" is a dirty word with the Citizens' Stamp Advisory Committee. They will accept only the suggestion of a topic. My efforts were flatly rejected without further consideration. However, by changing a few words, the solicitation became, on appeal, a suggestion and the photos examples of talent.

The appeal included patriotic themes that boasted of a truly American natural history treasure, sericultural links to the colonization of America, reflections of human immigration in *S. cynthia*, growing public interest in conservation, nostalgia for childhood insect collections, and memorable first encounters with a showy Luna moth at the porch light — a common experience for many citizens. A

common thread of Americana was being woven like a silkmoth's cocoon. The American artist, having been honored with showings at the Smithsonian, was tied in to this theme as well.

The committee met in April. The nomination of the subject of "butterflies" was reviewed and declined. Could there really be so great an ignorance and so little interest in Saturniid beauty, America's largest insect, *H. cecropia*, cosmopolitan familiarity with *A. polyphemus*, history of American sericulture, identity with the struggle to establish a colony from far off lands exemplified by *S. cynthia*, or the dedication of an American to the exclusive portrayal of these giants of the night? Perhaps.

Perhaps more patriotic themes should be portrayed on stamps. My stamp drawer is full of patriotic stamps like a tulip, a rose, a child's scribble, "LOVE", a dinosaur, a peach, non-eagle birds, a sea otter, a dolphin, and whales. Perhaps it's the insect stigma. Then came the final blow. A letter arrived with a stamp bearing a non-indigenous beetle on an exotic seedpod. Worse yet, this was an actual painting from an artist that left the country to paint it. Solicitation? I'd hope not.

Subsequently, this article is submitted as a call to every member of the Lepidopterists' Society to participate in a write-in campaign. If the Advisory Committee receives a few hundred requests for this topic, I feel it would not be ignored. I encourage all members to proudly partake in the creation of a U.S. stamp.

Very simply, please take five minutes to write on a post card the following: "Please give consideration to giant silkmoths as subjects for U.S. stamps. Please give further consideration to the talents of Dr. John Cody for the project."

Address it and send it to:

The Citizen Stamp Advisory Committee c/o U.S. Postal Service KM 4474E 475 L'Enfant Plaza S.W. Washington, D.C. 20260-2437

Further comments in longer letters would likely be more effective and of course encouraged. Dr. Cody has been personally contacted and is interested and supportive.

Promotion of lepidoptera is a worthy goal and should be supported by the Society. Bringing familiarity of silkmoths into the average American's home will help combat ignorance and promote appreciation. This, in turn, should promote conservation and at the very least, some humaninsect tolerance. What better way to lick public ignorance of lepidoptera than by licking a moth on a stamp!

New Journal Debuts...



The Lepidoptera Journal is published quarterly by Patrick Marceau and presents information, news, hint, photos, and articles on Saturniidae, Sphingidae and other species. Volume 1(1) and 1(2) are already available. Contact Patrick Marceau at 1470, St-Olivier, Ancienne-Lorette, Quebec, Canada G2E 2N9.

Watch for a review in a future issue...



The Lepidopterists' Bookshelf

Boyce A. Drummond, Editor

Florida's Fabulous Butterflies

by Thomas C. Emmel. Photography by Brian Kenney. 1997. World Publications, P.O. Box 24339, Tampa, Florida. 96 pp. Softcover, 23.5 x 30.5 cm, ISBN 0-911977-15-5, \$14.95.

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

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

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

MNHEN127@SIVM.SLEDU

I've been reading Anne Rice's Vampire Trilogy this year, and when Florida's Fabulous Butterflies showed up in the mail, I was immediately reminded of one of the things I have learned about vampires from Lestat — that all their physical senses are heightened to an extent that defies the imagination of mere mortals. Indeed, the deep, rich colors of the photographs and the larger-than life images in this new book had me checking on the length of my incisors. This is a luscious book, and at \$14.95, a real bargain.

The book's large format (9x12") is used to great advantage to display the mixture of text and pictures in a pleasing and creative layout. Crisp and beautiful photographs, most taken by Brian Kenney, but with 24 other photographers contributing additional images, are interspersed among blocks of text, with species descriptions and figure captions appearing on white background, and with numerous box notes on yellow background. Adult butterflies, many pictured at 2 to 5 times life size, get the most lavish treatment, but there is a chapter on moths and the book includes an impressive number of photographs of early stages.

I was surprised to find that the book begins immediately with descriptions of species, arranged by family, with no introduction or even a table of contents (I later found the Table of Contents on the very last page of the book). The sequence of coverage was curious, starting with Pieridae, and proceeding next through Lycaenidae, Libytheidae, Nymphalidae, Satyrinae, Danainae, Hesperiidae, and ending with Papilionidae. The twelve families of moths covered were presented in a sequence no more logical. Clearly the format and layout of this book were geared more toward creating an esthetic experience than in maintaining systematic integrity. But no matter, the pictures are beautiful and the text is informative, lively, and easy to read.

The boxed material (much of it written by Mark Deyrup) is crammed with interesting facts and anecdotes about butterflies. Although none of the topics is covered in great detail, I found them refreshing and engagingly explained. Topics include Reasons to Learn About Butterflies, Butterfly Words (terminology), The Miracle of Metamorphosis (with a lavish two-page spread of a monarch going from prepupa to adult), Butterfly Predators, and a myriad of interesting facts on colors, mimicry, courtship and mating, egg-laying, pollination, ultraviolet color patterns, butterfly eyes, leaf-rolling caterpillars, how caterpillars walk, etc. One of my favorite boxes explained "Why butterflies bounce around as they fly", drawing on topics ranging from insect evolution to the origin of the stealth bomber, all in one paragraph. In fact, one of the real strengths of this book is that most of the boxes and text focus on "how" and "why" rather than on "what." Even the choice of larval and pupal photographs were chosen in large part for their information content, with the accompanying text explaining the functional morphology of immature stages and pointing out examples of crypsis, disruptive coloration, warning coloration, and mimicry.

Likewise, many of the adult photographs illustrate interesting behaviors. There is a wonderfully informative photograph of a male Barred Sulphur displaying his isolated left forewing to a female, thereby exposing his scent patch to her antennae, and another of two Palamedes Swallowtails flying in close formation, the male leading the female in aerial courtship. Occasionally I was left with more questions than answers, however. For example, a lovely photograph shows a summer form and a fall form of Eurema daira in copulation, and explains the adaptive function of the different color patterns at different seasons, and even hints at the origin of the controlling mechanism for this phenology, but then forgets to explain how two fresh-looking adults from different seasonal populations found each other to mate! And after explaining the dietary habits of clothes moths and the early repellents used to ward them off (camphor and naphthalene), we are left with the statement "now there are more effective repellents." We aren't told what these are, nor are we told if the clothes moth even occurs in Florida and if it is a pest there.

Some of the photographs stretch a bit to make a point. The lovely micro-moth used to show that tiny moths can be "as beautiful as the gaudiest butterfly" was photographed in California, and no name is given (not even family). A photograph of an erect geometrid larva is used to show how behavior and morphology combine to produce camouflage in stick mimicry — but the green caterpillar is extended from the center of a cone flower with a dark brown disk and bright yellow rays, leaving the reader to wonder about the effectiveness of such supposed cryptic behavior.

As for the richer-than-life colors mentioned earlier, some of the photographs reminded me of magazine photography in the 1950s, when reds and yellows were so saturated as to give a surrealistic look to the pictures. Unfortunately, no technical details (film type and speed, lens, filter, etc.) were provided, disappointing

those of us interested in the mechanics of the photography.

But all of these are minor complaints in the face of a beautifully photographed, attractively designed, and delightfully informative book. This is the ninth in a series of books entitled "Florida's Fabulous Animals", with other titles treating flowers, trees, birds, waterbirds, mammals, reptiles & amphibians, insects, and seashells. I haven't seen the other volumes, but if Butterflies is typical, this is an extraordinary series, commendable for its spectacular photography, engaging text, and attractive pricing.

> Boyce A. Drummond, Natural Perspectives, 1762 Upper Twin Rock Road, Florissant, Colorado 80816

The Nature of Monarch Butterflies: beauty takes flight

by Eric S. Grace. 1997. Greystone Books, Douglas & McIntyre, 1615 Venables Street, Vancouver, BC, Canada V5L 2H1. 128 pp. Hardcover, 24.1 x 24.1 cm, ISBN 1-55054-570-1, \$32.50 CDN.

This is a photographically stunning "coffee table" book which, for a book of the coffee table genre, is surprisingly well written by Canadian science writer Eric Grace. The stars, undoubtedly, are the 53 color photos – and the Monarch butterfly itself – although Grace does not begrudge their position, however it is the thoughtful text which makes the book a worthwhile purchase.

The Life of a Monarch introduces the life history with short sections providing the usual coverage of the egg, larva, pupa and adult butterfly as well as an introduction to courtship and mating. Migration, looks first at the migratory staging areas in the north and the habitat requirements of the butterflies during the southward migration, then covers both the Mexican and Californian overwintering roosts, and continues

through the recolonization of the US and Canada. It concludes with a short, but worthwhile, digression of the need for continued monitoring of migration routes, including in its coverage the commendable work of Chip Taylor's **Monarch Watch**.

The Monarch's World is a refreshing look at habitat requirements in the breeding range, has the usual stuff about mimicry (thankfully, the manuscript was reviewed by Lincoln Brower so the common oversimplifications that generally abound in this sort of book are missing), and a thorough, so somewhat unusual, examination of the role of various sources of mortality.

The final section extends the first three sections into the future with *The Need for Conservation*. This is very timely since a major conference on this very subject has just been held in Morelia, Mexico. It covers the controversial winter kills in Mexico, discusses threats to the roosts and continues with a look at the often overlooked threats to the Monarch in its breeding areas. Finally, under the auspices of "lending a helping hand" it touches on the need for social and economic reform and its potential for conservation of the Mexican overwintering roosts.

For the beautiful photos alone, this book is worth considering, but for the depth of the written coverage it is worth purchasing. I know a number of folks who'd love to see one of these under their tree...

Phil Schappert

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



Recently Published Books

Boyce A. Drummond, Editor

Swallowtail Butterflies: Their Ecology & Evolutionary Biology

edited by J. Mark Scriber, Yoshitaka Tsubaki, & Robert C. Lederhouse. 1995. Scientific Publishers, P. O. Box 15718, Gainesville, FL 32604. vii + 459 pp., 32 color plates, numerous text figures, diagrams, half-tones, and tables. Hardcover, color cover, 22 x 28.5 cm, ISBN 0-945417-89-6. \$65.00.

The goal of this book is to consolidate the primary scientific literature about swallowtail butterflies across many levels of biological organization and provide an enjoyable text that even the non-professional audience can use.

It provides a cross-disciplinary tour of behavior, biochemistry, physiology, and genetics, which together shape the fascinating world of swallowtail butterfly ecology and evolution. The audience is intended to include "the most specialized research scientists as well as casual hobbyists, passionate preservationists, and perhaps even international political policy czars."

The book's 35 chapters (by 40 authors) are organized into 5 sections: "Chemical Ecology and Behavioral Physiology" (Chapters 1-8), "Life History and Population Dynamics" (Chapters 9-12), "Mating Biology and Mimicry" (Chapters 13-17), "Ecological Genetics and Evolution" (Chapters 18-27), and "Conservation and Diversity Preservation" (Chapter 28-35). A Species Index and Subject Index complete the book.

The range of subject matter covered is immense and the book is beautifully produced — handsome in aspect, easy to read, and with careful attention paid to layout and organization.

Heterocera Sumatrana

Volume 8, Noctuidae, Parts 2-4: Acronictinae, Heliothinae, Plusiinae

by L. W. R. Kobes, G. Behounek, & H. Thony. 1995. 80 pp., 2 color plates. Softcover, 16.5 x 24 cm, ISBN 3-925055-05-3, \$DM 90 (about \$58).

Volume 9, The Oenochrominae (auct.) of Sumatra (Lep., Geometridae)

by M. Sommerer. 1995. 77 pp., 5 color plates. Softcover, 16.5 x 24 cm, ISBN 3-925055-07-X, DM 70 (about \$45).

Volume 10, The Saturniidae of Sumatra

by Wolfgang A. Nassig, Rudolf E. J. Lampe, & Stefan Kager. 1996. 174 pp., 23 color plates. Softcover, 16.5 x 24 cm, ISBN 3-925055-09-6, DM 85 (about \$55).

Volume 11, Noctuidae, Part 5: The Chloephorinae of Sumatra

by Lutz W. R. Kobes. 1997. 240 pp., 10 color plates. Softcover, 16.5 x 24 cm, ISBN 3-925055-06-1, DM 150 (about \$97). All published by Heterocera Sumatrana Society, 6 Kreuzburger St., D-37085 Gottingen, Germany.

These four issues constitute volumes 6-9 of the Green Book Series of the Heterocera Sumatrana Society, which contain faunistic treatments on the level of complete families, subfamilies, and tribes of the Lepidoptera Heterocera fauna of the Indonesian island of Sumatra. The editorial board consists of Lutz W. R. Kobes, Gaden S. Robinson, and Gerhard Tarmann.

Chasing Butterflies in the Colorado Rockies with Theodore Mead in 1871

edited by Grace H.Brown, annotated by F. Martin Brown. 1996. Bulletin Number 3, Pikes Peak Research Station, Colorado Outdoor Education Center, P.O. Box 167, Florissant, Colorado 80816. 73 pp. Softcover, spiral bound, 14 x 22 cm, ISBN 0-910715-10-6, \$8.95 (postpaid from the publisher).

This narrative of Theodore Mead's trip to the Colorado Rockies in 1871 to collect for William Henry Edwards, who was later to become Mead's father-inlaw, is told through the letters that Mead, then only 19, wrote home during that adventurous trip. Of the butterflies Mead collected during the summer of 1871, five years before Colorado became a state, many were new species that were described by Edwards. Mead's collection and the collection of his mentor, W. H. Edwards, were purchased by the Rev. William Jacob Holland for the Carnegie Museum of Natural History, Pittsburgh. "Without those collections, Holland's long popular The Butterfly Book would never have seen the light of day," writes F. Martin Brown in his preface to this important primary source of information about one of America's earliest collectors in the west.

The Forgotten Pollinators

by Stephen L. Buchmann & Gary Paul Nabhan, with a foreward by E. O. Wilson. 1996. Island Press, 1718 Connecticut Avenue N.W., Suite 300, Washington, DC 20009-1148. 292 pp. Hardcover, dust jacket, 16 x 24 cm, ISBN 1-55963-352-2, \$25.

In a lively, engaging style, Buchmann and Nabhan relate anecdotes and vignettes from scientific fieldwork around the world to convey the crucial connections between both plants and animals and humans and nature. The Forgotten Pollinators is the centerpiece of a public awareness campaign, based at the Arizona-Sonora Desert Museum, that in-

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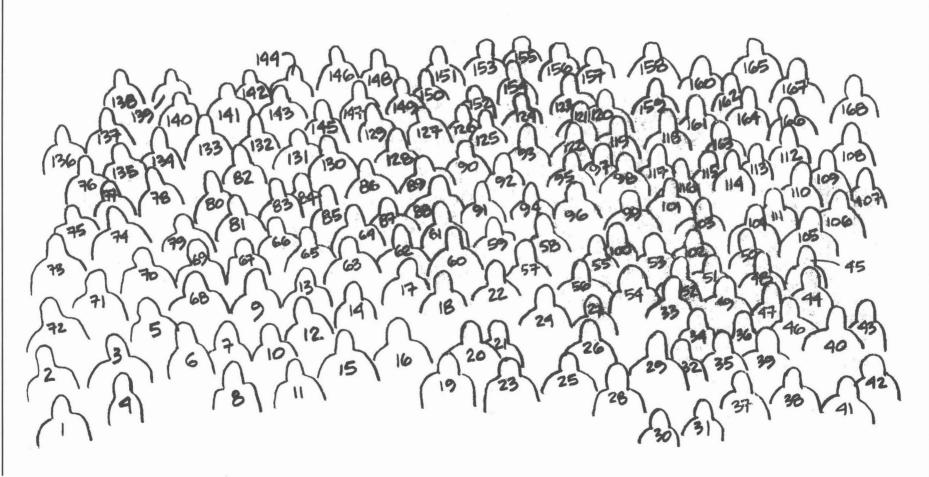




50th Anniversary (48th Annual) Meeting Group Photo, New Haven, Connecticut, July 1997

Key: 1) Mary Ann Waisanen; 2) Carol Lemmon; 3) Paul Russell; 4) Sandy Russell; 5) Beth Brinkman; 6) Barbara Deutsch; 7) Nancy Dunn; 8) Isabel Vargas-Fernandez; 9) Mark Sanderford; 10) Reiko Goto; 11) June Preston; 12) Mindy Conner; 13) Bill Conner; 14) Jean Petr; 15) Mo Nielsen; 16) Fred Rindge; 17) David Gibo; 18) Kauri Mikkola; 19) Bryant Mather; 20) David Bauer; 21) Charlotte Bauer; 22) Don Lafontaine; 23) Douglas Ferguson; 24) George Balogh; 25) Kent Wilson; 26) Terri Balogh; 27) Carol Ferge; 28) Jeanne Remington; 29) Stan Nicolay; 30) Aaron Balogh; 31) Daniel Balogh; 32) Lilian Nicolay; 33) Doug Dawn; 34) Elizabeth Munger; 35) Hazel Tilden; 36) Marisa Davis; 37) Grace Jeschke; 38) Suzette Slocumb; 39) Mignon Davis; 40) Charlie Covell; 41) Annette Aiello; 42) Dolores Savignano; 43) Ayako Hachisuka; 44) Susan Weller; 45) Ruth Boada; 46) Reggie Webster; 47) Steven Davis; 48) Jean-Francois Landry; 49) Don Davis; 50) John Brown; 51) Elaine Hodges; 52) Ron Hodges; 53) Sarah Burns; 54) Astrid Caldas; 55) Eric Classey; 56) Les Ferge; 57) Steve Mueller; 58) Jackie Miller; 59) Lee Miller; 60) Brian Scholtens; 61) Dale Schweitzer; 62) David Iftner; 63) Daniel Petr; 64) Felix Sperling; 65) Scot Kelley; 66) Chris

Maier; 67) Mauel Blacazar-Lara; 68) Bob Pyle; 69) Vitor Becker; 70) Bart Brinkman; 71) Jeff Fengler; 72) Gary Lemmon; 73) Adam Porter; 74) Tyler Mertes; 75) Roberta Hudson; 76) Larry Gall; 77) Susan Adler; 78) Raymond Pupedis; 79) Andres Sada; 80) John Nelson; 81) David Bettman; 82) Ted Herig; 83) Jim Tuttle; 84) Peg Tuttle; 85) Scott Kocher; 86) Fred Stehr; 87; Marc Epstein; 88) Victor Demassi; 89) T.L. Herig; 90) Ken Bliss; 91) John Peacock; 92) Andy Warren; 93) Mike Smith; 94) Sally Warren; 95) Bill Miller; 96) Dave Ahrenholz; 97) Joe Kunkel; 98) Ron Rutowski; 99) Richard Fall; 100) Louise Fall; 101) Edward Holy; 102) John Burns; 103) Jane O'Donnell; 104) Janice Tilden; 105) Rebecca Simmons; 106) Mike Sabourin; 107) Emily Hildebtandt; 108) Maria Plonczynski; 109) Eric Metzler; 110) Patricia Metzler; 111) Sandra Perez; 112) Chip Taylor; 113) Toni Taylor; 114) Julian Donahue; 115) Alma Solis; 116) Mike Toliver; 117) Kit Stanford; 118) Ray Stanford; 119) Mike Pogue; 120) Paul Opler; 121) Evi Buckner; 122) Jerry Powell; 123) Mineteka Bon'no; 124) Mamoru Watanabe; 125) Floyd Preston; 126) Kari Rogg; 127) Olle Pellmyr; 128) Jim Popelka; 129) Bernard Landry; 130) Larry Gilbert; 131) Bob Eisele; 132) Ben Ziegler; 133) Jerome Regier; 134) Soowon Cho; 135) Andrew Mitchell; 136) Phil DeVries; 137) Michael Boppré; 138) Ernest Williams; 139) Martha Weiss; 140) Christoph Häuser; 141) Roger Hutchings; 142) Juan Grados; 143) Ron Leuschner; 144) Mirna Casagrande; 145) Deane Bowers; 146) Olaf Mielke; 147) David Gaskin; 148) Wayne Wehling; 149) Mark Richter; 150) Mark Travassos; 151) Gerardo Lamas; 152) Naomi Pierce; 153) Andy Brower; 154) David Merrill; 155) Lincoln Brower; 156) Ted Sargent; 157) Tor Hansen; 158) Mark Scriber; 159) Roger Zebold; 160) Katherine Bash; 161) Don Miller; 162) Linda Boose; 163) Daniel Otero; 164) Charles Mitter; 165) Mark Deering; 166) Michael Collins; 167) Bengt Karlsson; 168) Reed Watkins.



Membership Update...

Julian Donahue

This update includes all changes received by 12 Sept. 1997.

"Lost" Members

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

Richard A. Anderson (St. Petersburg, FL: "no such number");

Judy Pooler (Macquoketa, IA)

Corrections and Minor Revisions to the '96 Membership Directory

(make appropriate changes in Alphabetical List of Members)

Adams, James K.: change apartment number from 1005 to 704.

Hoskin, Michael: change street address from 16 to 26.

Krings, Alexander: change apartment number from 7 to 5.

Young, James John: correct street address is "109-111" Gloucester Road

New & Reinstated Members

Members who have joined/renewed/been found/or rescinded their request to be omitted since publication of the 1996 membership directory (NOT included in the 1996 Membership Directory; all in U.S.A. unless noted otherwise)

Betzen, Nick: 61113 Falcon Road, Olathe, CO 81425-9200.

Bridges, Jane Donahue: 1705 Shadford Road, Ann Arbor, MI 48104.

Bronson, Wanda: 3456 Dwight Way, Berkeley, CA 94704.

Brosch, Ulrich: Muehlenstrasse 22, D-32479 Hille, GERMANY.

Buit, Jerry: Buit Butterfly Farm, 7127 North Terra Vista Drive #102, Peoria, IL 61614.

Campbell, Jana: 1405 Tropical Drive #135, Orlando, FL 32839.

Cassaday, David: 61 Black Oak Ridge Road, Wayne, NJ 07470.

Champagne, Madeline: 7 Pond Avenue, Foxboro, MA 02035.

Cheeseman, Fred: 7504 NW 41st Street, Coral Springs, FL 33065.

Cochran, Neil: 1105 Carriage Square, Grandview, WA 98930.

Conaway, C.F.: 6211 South Knoxville Avenue, Tulsa, OK 74136.

Dameron, Wanda: 23424 Jonathan Street, Canoga Park, CA 91304.

De Rosa, Dave E.: Insect World, P.O. Box 365, Spring Valley, CA 91976-0365. **Denis, Richard:** 133 Avenue de la Liberation, F-86000 Poitiers, France.

Dickel, Terhune S.: 7 Colonial Ridge Drive, Yardley, PA 19067.

Dunford, Jim C.: 4883 North Santa Monica Blvd., Whitefish Bay, WI 53217. East, Raymond (Randy) James: 4903 Whetstone Road, Richmond, VA 23234. Einem, Gerald E.: Box 603, Tiverton, Nova Scotia B0V 1G0, Canada.

Ekstrom, Nicolas H.: 419 East 75th Street, New York, NY 10021.

Fessler, Jill: P.O. Box 276, Silver Grove, KY 41085.

George, John (Dr.): 214 Rockwell Terrace, Frederick, MD 21701.

Gollop, Bernie: 2202 York Avenue, Saskatoon, Saskatchewan S7J 1J1, Canada.

Gomez Alfonso, Asuncion: La Hurona 57, Icod de los Vinos, Tenerife 38430, Spain.

Goyer, Marvin H.: 12706 Wanda Lane, Magnolia, TX.

Goyer, Yvonne R.: 12706 Wanda Lane, Magnolia, TX.

Harvey, Donald J.: Dept. of Entomology, National Museum of Natural History, MRC 127, Washington, DC 20560.

Hoare, Anthony M.V.: Seven Gables, The Downs, Leatherhead, Surrey KT22 8LF, England.

Homeyer, Bethany: Route 1, Box 447A, Mathis, TX.

Homeyer, Reese: Route 1, Box 447A, Mathis, TX.

Hylton, Roger: 435 South Rossiter Street, Mount Dora, FL 32757.

Inoue, Takeo (M.D.): Dept. of Gynecology, Aichi Cancer Center, 1-1 Kanokoden, Chikusaku, Nagoya, Aichi 464. Japan.

King, Colleen C.: USM Box 5387, Hattiesburg, MS 39406-5387.

Kohll, Steve: 30 rue de Dudelange, L-3630 Kayl, Luxemburg.

Kojima, Hisayoshi: 2176 Hercules Drive, Los Angeles, CA 90046.

Leicht, Dustin: 23246 Rancho, Apple Valley, CA 92308-9030.

Limtao, Sam: Science Kit Inc., PO. Box 5059, San Luis Obispo, CA 93401.

Mangold, James W.: 190 Hanover Road, Newtown, CT 06470-1131.

Marceau, Patrick: 1470 St-Olivier, Ancienne-Lorette, Quebec G2E 2N9, Canada.

Mathew, John: 1336 Melrose Parkway #3, Norfolk, VA 23508.

Nadborne, Ira: 4424 East Bellevue Street #210, Tucson, AZ 85712.

Neilson, Dixie: 2905 NW 27th Terrace, Gainesville, FL 32605.

Nielsen, Bernard C.: 1736 Riverside Road, Central City, NE 68826-2253.

O'connell, R.: 409 South Gladstone, Aurora, IL 60506.

Orellana B., Andres M.: Fapas, Apartado 210, Merida, Merida 5101-A, Venezuela.

Overton, Max: P.O. Box 21, James Cook University, Townsville, Queensland 4811, Australia. Stephenson Street, Freeport, IL 61032-4325.

Rabe, Mary L.: Michigan Natural Features Inventory, Mason Building, P.O. Box 30444, Lansing, MI 48909-7944.

Romero, Felipe Pent: Apartado 23, Turrialba 7150, Costa Rica.

Rusch-Fischer, Karen: 1085 Tasman Drive #733, Sunnyvale, CA 94089-5832. Sauer, Leslie: Andropogon Associates. Ltd., 374 Shurs Lane, Philadelphia, PA 19128.

Sherwood, Laurel: 340 West 88th Street #2B, New York, NY 10024.

Shimkanin, John: 928 Wood Street, California, PA 15419.

Shupp, Gary: 1603 North 26th Street, Allentown, PA 18104.

Sumerford, Douglas V.: USDA-ARS/ SIMRU, P.O. Box 346, Stoneville, MS 38776.

Thomas, Margaret: 40 Elm Street, Milford, CT 06460.

Thurston, Stephen: 605 East 11th Street #3A, New York, NY 10009.

Underdahl, Marie: 21 James Neck Road, RD 1, St. James, NY 11780.

Vamvakias, Ann: 180 Main Street, Cooperstown, NY 13326.

Wilbeck, Tony A. (Dr.): 5 West 22nd Street, Hutchinson, KS 67502.

Address Changes

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

Acorn, John H.: 132 Walsh Crescent. Edmonton, Alberta T5T 5L7, Canada. Baez, Ignacio: 4117 SW 20th Avenue #361, Gainesville, FL 32607.

Baird, Jane W.: 787 South Youngfield Court, Lakewood CO 80228.

Charles M.: 2408 Barksdale, Tamarack Court, Ann Arbor, MI 48105. Blum, William: 4005 Alameda de las Pulgas, San Mateo, CA 94403.

Brown, John W. (Dr.): 9206 Kristin Lane, Fairfax, VA 22032-1811.

Chilcote, Charley A.: 2426 Southview Drive, Maryville, TN 37803-6635.

Cho, Soowon: ESPM-Insect Biology, 201 Wellman Hall #3112, University of California, Berkeley, CA 94720.

de Mordaigle, Rodolph C.: 5155 O'Sullivan Drive, Los Angeles, CA 90032-4013.

Prestwich, Howard H.: 216 West De Swarte, David H.: CMR 427, Box ment of Zoology, University of Texas, 3284, APO, AE 09630.

> **Einem, Gerald E.:** 96 River Bend Drive, Brownsville, TX 78520.

> Furuya, Kenji (Dr.): Genetech Inc., QC Methods Develop #73, 460 Point San Bruno Blvd., South San Francisco, CA 94080-4990.

> Grimes, Tate: 247 Daniel Drive, Madisonville, KY 42431.

> Heck, Mary L.: 25 Christopher Drive, Oxford, OH 45056.

> Hodges, Elaine R.S.: 85253 Ridgetop Drive, Eugene, OR 97405.

> Hodges, Ronald W. (Dr.): 85253 Ridgetop Drive, Eugene, OR 97405.

> Jablonski, Michael M.: 8735 US 30 North, Forest, OH 45843.

> Johnson, Kurt (Dr.): Environmental Affairs, The Ethical Culture Society, 53 Prospect Park West, Brooklyn, NY 11215.

> Kavalovski, Charles D.: 11560 Lockridge Avenue North, Stillwater, MN 55082.

> Klingler, Mark A.: RR 1, Box 312, Tyrone, PA 16686-9208.

> Kondla, Norbert G.: Box 244, Genelle, British Columbia V0G 1G0, Canada.

> Lane. John: 15954 Wolf Mountain Road, Grass Valley, CA 95949.

> Matula, Thomas L.: School of Business, New Mexico Highlands University, Las Vegas, NM 87701.

> O'brien, Liam E.: 385 East 2nd Street, Benicia, CA 94510.

> Pagels R., Olaf: Apartado 14, 4059 San Pedro de Poas, Costa Rica.

> Peigler, Richard S. (Dr.): 2630 Moss Bluff Street, San Antonio, TX 78232-4690.

> Perkins, Edwim M., Jr. (Dr.): 2610 Portland Street #306, Los Angeles, CA 90007-2416.

> Pickup, Mark: 2 Westbury Court, Westbury Street, Derby DE22 3PQ, England.

> Porter, Adam H. (Dr.): Entomology Department, University of Massachusetts, Amherst, MA 01003.

> Ramos, Stuart J. (Dr.): 420 Reparto Acaron, Mayaguez, PR 00680-7518.

Sada Andres M.: P.O. Box 711, 66269 Garza Garcia, Nuevo Leon, Mexico.

Schappert, Phillip J. (Ph.D.): Depart-

Austin, TX 78712-1064.

Singer. Michael S.: 1622 East Edison Street, Tucson, AZ 85719-3718.

Stepan, George Jiri: 4528 Virio Comm, Fremont, CA 94536-5640.

Thompson, Paul M.: 1723 Madison Court, Louisville, CO 80027-1121.

Wold, Eric N.: 5058 SW Technology Loop #87, Corvallis, OR 97333.

Wysocki, Paul F.: 15 Pleasant View Way, Flemington, NJ 08822.

Calendar

1998 Annual Meeting, Pacific Slope Section of The Lepidopterists' Society: 26-28 June (two days after a new moon), Grace Valley Ranch, San Bernardino Mts., southern California, elevation 8,000 feet (34 degrees 11.095 minutes N, 116 degrees 43.211 minutes W). Collecting of specimens is presently permitted at the camp and in the surrounding San Bernardino National Forest. All members of the Society who reside in the Pacific Slope region (ZIP code of 80000 or greater) will automatically receive registration materials in early 1998. All other persons desiring further meeting information should send a request to Julian Donahue, Natural History Museum, 900 Exposition Blvd., Los Angeles, CA 90007-4057; Bugbooks@Aol.com; phone (213) 763-3364.

North American Butterfly Association: 1998 Biennial Members' Meeting, Denver, Colorado, June 11-14. Holiday Inn — Denver West (14707 W Colfax Ave., Golden CO 80401; Tel. 303-279-7611). Tentative Program includes a slide presentation on how to recognize the butterflies you will see, field trips to the Colorado Front Range and high prairies on Friday, Saturday, and Sunday, workshops on butterfly gardening, identification, and photography, Gala banquets on Friday and Saturday night with guest speakers! Meet fellow butterfliers from around the continent! For more info. contact NABA at 4 Delaware Road, Morristown, NJ 07960, (201) 285-0907 (fax: (201) 285-0936).



Out of the Net...

by Jim Taylor

First of all, an abject apology for the URL error in this column in the Spring issue. I heard from several members about this, including our President (Eric, not Bill or Hillary). Editor Phil published a correction in the last issue, but I would like everyone to know the typo was mine. I'll try not to let it happen again.

HTTP://130.89.228.117/~JOHAN/BUTTERFL/GRAPHBUTTERFLIES.HTML

This site covers all butterflies seen in the Netherlands, Belgium and Luxembourg, and includes both descriptions and color plates. There is also advice on the best butterfly sites in Europe - and for the less serious, some butterfly-related poems. Take a peek.

Northern Prairie Science Center http://www.npsc.nbs.gov/

This is run by the Biological Resources Division of the U.S. Geological Survey, a bureau of the U.S. Department of the Interior. The area covered is the North American Great Plains. Available here are distribution maps and other biological information on all sorts of critters, butterflies and moths included. There is also a database of over a thousand articles by the Northern Prairie staff. This site will be of particular interest to those of you from the South (as I am). I am sure it is warmer in front of your computer screen than it EVER is in North Dakota.

Children's Butterfly Site

HTTP://WWW.MESC.NBS.GOV/BUTTERFLY.HTML

If you have children (or grandchildren) this is the place for you. Here are coloring pages, questions and answers about butterflies and moths, and links to other web sites with additional information.

Meteorological Research for Insect Movement and Management Strategies

HTTP://USDA-APMRU.TAMU.EDU/METEOROLOGY/ MET-HOMEPAGE.HTM I am including this site for all the butterfly people who think the Monarch invented flying. The focus here is on the corn earworm (Heliothis) and a few other moths with a penchant for migration and an astounding degree of fecundity. The corn earworm does not overwinter north of about 40°N latitude and migrates annually from southern or subtropical regions. Each female lays an average of over 1000 eggs. The second generation is awesome:

"The Lower Rio Grande Valley (LRGV) of southern Texas and northeastern Mexico is a major source area for corn earworm populations in the Central U.S. The LRGV annually produces about 200,000 ha of irrigated corn, which is considered a nursery crop for corn earworm populations. Infestations of whorl stage corn produce the first local generation of adult corn earworms in the LRGV. Soil excavations of pupae indicate that a second generation of 1 to 7 billion adult corn earworms emerge from mature corn fields during a 2-week period in June..."

As for migratory ability:

"Migratory events were indicated when adults were captured before the estimated date of local emergence (Hartstack et al. 1982) or in abruptly high numbers. Corn earworm moths contaminated with exotic pollen were captured in traps in Oklahoma (Lingren et al. 1993; 1994) and Arkansas (Hendrix et al. 1987), more than 700 km from their nearest source areas. The use of markers helps to discriminate between migrants and non-migrants in suspected recipient zones. These studies show that corn earworm moths migrate over wide geographic areas."

Migratory flights which occur at night at altitude have been tracked by radar.

Flights begin about a half hour after dark, rapidly reach a peak in another half-hour, then drop to about a tenth of the peak level in another half hour and hold steady until near sunrise. The average air speed is about 4.5 meters/second (a little under 10 mph to those of us of such an age the metric system seems alien). The altitudes? In traps towed by airplanes, 21 corn earworm moths (among a total of 110 Noctuidae) were taken at altitudes of 60 to 1768 meters.

Lots more information — visit!

Entomophagy

HTTP://WWW.FTECH.NET/~MADSITE/ CANDIDATE PAPERS/P009.HTML Don't visit this site immediately on either side of a meal. The unsigned article concerns the use of insects (and other arthropods) for gustatory purposes. The author points out there is nothing new about insect eating. He describes their use as a food source in ancient times, opining that insects were probably a vital part of early man's diet, and are still important to Australian aborigines and other primitive peoples. Naturally, Biblical references are included. Leviticus OK's some orthopterans, and John the Baptist ate locusts and wild honey.

The author declares the "father of European entomophagy" to be V.M. Holt, an eccentric Englishman who privately published a little book in 1885 called **Why Not Eat Insects?** The poor in England were starving at the time, and Holt's notion was that they could be fed quite adequately if they would give up their usual food and feed off the caterpillars and beetles in the fields. This would have the additional benefit of being an efficient and inexpensive means of pest control. Recipes in Holt's book include not

continued on page 87...

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The Marketplace

IMPORTANT NOTICE TO ADVERTISERS: If the number following your advertisement is "391" then you must renew your advertisement before the next issue! Remember that all revisions are required in writing.

Books For Sale

Now available: Monograph to the North American Heliothentinae by D.F. Hardwick. A comprehensive treatise on species of Schinia, Heliothis and related genera. Adults and over half of the larvae of the 147 species are illustrated in color. Species discussions include descriptions of immatures, food plants, distributions and periods of flight. The 7"x10" book has 279 pages including 25 full-page colored plates. A check list to species and a food-plant list is included. Eight new species are described, 23 lectotypes are designated, and 40 nominal species reduced to synonymy. Price Canadian: perfect binding, \$70+\$10 S&H; hard covered, cloth-bound, \$95+\$10 S&H. Price U.S. soft covered, \$50tS10; hard covered, \$70+10. Available from Ms. Julia Hardwick, 535 Highland Avenue, Ottawa, Canada, K2A 2J5. Cheques payable to D.F. Hardwick.

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

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

Apollo Books is Europe's leading mail order bookseller specializing in entomology supplying museums and university libraries as well as amateur and professional entomologists world wide. We have probably the world's largest selection of new books on insects and now and then we also produce a list of second hand and antiquarian books and journals. We also publish high quality book series such as Noctuidae europaeae and Microlepidoptera of Europe. Ask for free prospectuses as well as a copy of our 1997-98 catalogue. Easy ordering, easy payment. Apollo Books, Kirkeby Sand 19, DK-5771 Stenstrup, Denmark. Fax + 45 62 26 37 80. Phone + 45 62 26 37 37.

New issues of **Papilio** (New Series) for sale: No. 8, *Speyeria hesperus* and *S. atlantis* are distinct species, J. A. Scott, N. G. Kondla and S. M. Spomer, 26 pp., \$3.00; No. 9, New Celastrina for the eastern slope of Colorado, J. A. Scott & D. M.

cause they jeopardize our nonprofit status.

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

Advertisements <u>must</u> 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 reWright, 18 pp., \$2.00; No. 10, Phyciodes (Phyciodes): new discoveries, new subspecies and convergence, J. A. Scott, 44 pp. \$4.00; No. 11, New western North American butterflies, J. A. Scott, 10 pp., \$1.00; Nos. 8-11, \$9.00; Nos. 1-11, \$29.00. All postpaid U.S. James A. Scott, 60 Estes St., Lakewood, CO 80226-1254.394

E. W. Classey Ltd provides a service for over 10,000 entomologists worldwide. Our catalogs contain hundreds of Lepidoptera books, including the very latest titles from all around the world. Why wait until you hear of new titles through the grapevine? E-mail, fax, or write to be placed on the mailing list. We export books daily to the Unites States, and we accept checks and all major credit cards. We regularly visit the US as buying agents for several large booksellers, to buy natural history books from individuals and institutions. Let us know if you

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

Buyers, sellers, and traders are advised to contact your state department of agriculture and/or ppqaphis, Hyatsville, 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 resticting 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.

have a collection or library for sale. Contact Peter Classey, E. W. Classey Ltd, PO Box 93, Faringdon Oxon SN7 7JP, UK, +44-1367-244700.

Atlas of New Jersey Butterflies by David C. Iftner and David M. Wright. Twenty eight page Atlas consists of a checklist and plotted county maps for all 151 species of skippers and butterflies that have been recorded for New Jersey. Copies can be ordered for \$5 (postage paid) from Dr. David C. Iftner, 8 Alpine Trail, Sparta NJ 07871.

Livestock

For sale: pupae of *C.regalis* and cocoons of *Attacus atlas*. For prices and info. contact Mike Benton at 6102 NW111th Pl., Alachua, Fl 32615, (904)418-0472, SAM0128@JUNO.COM

I'm interested in trading, buying or selling saturniidae or sphingidae livestock. I'm also interested in exchanging information or articles on rearing, collecting, field guide, butterfly gardening, etc.). Contact Patrick Marceau, 1470 St-Oliver, Ancienne-Lorette, Québec G2E 2N9, Canada, PMARCEAU@CMQ.QC.CA

Cocoons and papered specimens of *Actias luna*, *Antheraea polyphemus* and *Hyalophora cecropia* for sale. Send a self-addressed stamped envelope to: Ronald Aaron Royer, R.D. 4 Box 2295, Lebanon, PA 17042-9433, or call (717)867-1021₃₉₄

Wild collected cocoons of *Hyalophora* gloveri for sale. Send a self-addressed envelope to: Bruce Duncan, 10132 Buttercup Drive, Sandy, Utah 84092

H. Cecropia for sale. Call Nathan Barry at 716-682-4285 or write at 14259 Oak Orchard on the Lake Waterport, New York 14571, SAAQ18A@PRODIGY.COM 394

Wanted: Specimens or eggs of any Saturniidae species, foreign or U.S. Especially: Citheronia species, Argema mittrei, Argema mimosae, Coscinocera hercules, Antheraea species, Copiopteryx semiramis, Eupackardia calleta, Automeris species, Actias spp., Eochroa trimeni, Arsenura spp., etc. I am especially interested in South American, African and Australian species. I'm also interested in Epicopeidae, Uraniidae and

Papilionidae. Will exchange with ova, specimens or pupas of *Actias luna*, *Antheraea polyphemus*, *Hyalophora cecropia* and many more. Send your offerings to Randy Lyttle, 901 Cayuga Street, Hannibal, NY 13074 U.S.A. 394

Cocoons & papered specimens of *Actias luna* for sale. Send a self-addressed stamped envelope to Ronald A. Royer, RD 4 Box 2295, Lebanon, PA 17042-9433, or phone (717) 867-1021.

Saturniidae, Sphingidae and Papilionidae of North Eastern U.S.A. and Canada. Available in fall of 1997 in winter diapause. Also: Reemay larvae sleeves, spun-bonded polyester caterpilar bags, sewn to your specifications or in standard sizes. In Canada send SASE for price list, in U.S. enclose 50c and SAE for price list. Bill Oehlke, Box 476, Montague, P.E.I. Canada, COA 1RO, (902) 838-3455/0861 (H/W), Fax (902) 838-0861, CLAYCOE@CYCOR.CA

Ova of *Hyalophora cecropia* for sale, cocoons of same will be available in fall. Possibly cocoons of *Antheraea polyphemus* also in fall. Send SASE for prices or call, Michael Jablonski, 8735 US 30 N., Forest, Ohio 45843-8853, (419) 326-4641.

Cocoons of 1st generation *Actias luna*, *Antheraea polyphemus*, *Callosamia promethea*, *C. angulifera*, *Samia cynthia* and *S. ricini*. Additional species may also be available. Please send S.A.S.E. for price list, or call 908-439-2462 to reserve. Will buy or exchange in small quantities. Some wintered cocoons still available. Don Oehlke, c/o Post Office, Pottersville, NJ 07979.

Specimens

For Sale: Lepidoptera from Russia at minimal prices. Large stocks, excellent quality, super-rarities (*Parnassius*, *Colias*, *Oeneis*, *Erebia*, moths, etc.). Guaranteed delivery to any place in the world. Fulfilling of firm orders possible. Mr. Sergei Gundorov, Plant Protection Department, Agricultural Institute, Teatralnaia Square, Saratov, 410710, Russia Fax 8452-264963

Free to a good home: Several hundred,

mostly western U.S. butterflies, all papered and with full data. "Home" will be chosen by a random drawing 3-4 weeks after ad comes out. All specimens show natural damage or wear. They may be used for dissections, practice mountings, jewelry, art, study, or for display for any collector to whom condition is not a prime concern. No calls please. Dr. Bruce O'Hara, 24211 Cross Street, Newhall, Calif. 91321

WANTED: Contacts for purchase, sale or exchange. I am seeking collectors and dealers world wide, who interested in a large selection of butterflies from former USSR, especially *Parnassius* and *Colias*. Request a free price lists in US\$. I am interested in purchase or exchange large quantities of all attractive and colorful butterfly, moth, beetles and other insects for decorative collections and art works. Dr. Ilya Osipov, Novogireevskaja str. 53-8, Moscow, 111394, RUSSIA. Tel./FAX: (7-095) 301-25-14, Osipov@glas. APC.ORG

Wanted to buy: Oriental Lycaenidae (Polyommatini), especially of the genera Jamides and Nacaduba. Will consider small or large quantities of these. Full collecting data are mandatory but determination is not needed. Stefan Schroeder, Auf dem Rosenhuegel 15, D-50997 Koeln, Germany; Stefan.Schroeder@UNI-KOELN.DE

For sale: Large selection of Iranian butterflies, perfect quality, with data. All Louristana sp., Hypbushirica, A. apollinaria, Colias sagartia, C. cholorocoma, C. aurorina, C. thisoa ssp. shahkuhensis, and more. Many species from other families at fair prices, local or rare species are allowed for exchange. Also, local beetles and dragonflies, books. Write for extensive price list to A. Karbalaye, P.O. Box, 11495-175, Tehran, Iran.

For Sale: Specimens of Russian Lepidoptera, including Sphingidae (Marumba daschkewitchi), Arctiidae (Grammia quenseli, Spilarctia subcarnea, Pragmatobia fulginosa, Parasemia plantaginis), Papilionidae (Papilio machaon kamschadalus, Parnassius phoebus kamschatica), and various species of Pieridae, Lycaenidae, Nymphalidae, and Satyr-

idae; also Carabidae (*Carabus macle-ander*, *Carabus arcensis*). Contact: Dean Morewood, 4705 Hillwood Road, Victoria, B.C. V8Y 2N3 Canada.

For Sale: specimens of *Idea tambusisiana* and *Papilio jourdani* from Sulawesi. Albert Dalmau, Mariano Estrada, 14, 08328 Alella (Barcellona), Spain. Tel. 555 46 52.

Collection for sale: Moderate-sized collection of Lepidoptera, primarily tropical, with a small number of North American insects other than Lepidoptera, from the estate of George F. Caldwell, deceased. Contact the Executor, Michael F. O'Neill, Mellon Private Asset Management, 1735 Market Street, PO Box 7899, Philadelphia PA 19101-7899, telephone (215)553-3080.

Serving lepidopterists since 1976. Offering many unusual butterfly specimens from Neotropical, African, and Indoaustralian regions. Many ex-pupae and bred specimens. Please send \$1 (cash or stamps) for a 12-page illustrated catalog to: Transworld Butterfly Company, Apartado 6951, 1000L San Jose, Costa Rica, Central America.

Offered: Papilionidae, Charaxes Euphaedra, Cymothoe etc. from the Republic of Central Africa and Burundi. Wanted: Charaxes from East Africa and South African Republic, as well as Charaxes and Polyura from the Philippines and Indonesia (exchange or purchase). Giancarlo Veronese, Viale Venesia n. 138, I-33100 Udine (Italy). Tel. 0432-232754.

Equipment

For Sale: 12 drawer walnut covered Cornell cabinet (Bioquip Number 2512FWL) and 12 Cornell drawers (Bioquip Number 1012AF). SASE for details. Russell Rahn, 3205 W. Rochelle Road, Irving, Texas 75062-4127.

Insect pins, black and stainless steel. Telescopic net sticks from 29 to 74cm and from 60 to 115cm. Complete nets from 30 to 65cm diameter also available. We are looking for wholesaler in North America, Australia and Japan. Contact: J. Krüger, Danziger Str. 14, D-40822 Mettmann, Germany.

For sale: Light traps, 12 volt DC or 110 volt AC with 15 watt or 8 watt black lights. The traps are portable and easy to use. Rain drains and beetle screens protect specimens from damage. Also available: Battery charging system for 12 volt batteries (for use while traveling, plugs into cigarette lighter, safely charges up to four 12 volt batteries in 3 hrs., great for the traveling lepidopterist with light traps) and custom made light fixtures. For a free brochure and price list, contact Leroy C. Koehn, 207 Quail Trail, Greenwood, MS 38930-7315, Telephone (601)455-5498.

Art

Beautiful butterflies laminated between beveled glass. Felt bodies, thread antennae, soldered and antiqued. Sun catchers, diamond shaped (4" x 7"). Mary Jane Zissoff, Trilogy of Art, Box 143, Parry Sound, Ontario, Canada, P2A 2X3, 705-746-4147, http://www.zeuter.com/parrysd/specialitystores

Information Wanted

Correspondence wanted: with individuals who have collected butterflies and skippers from New Jersey or have specimens in their collections from New Jersey. I am particularly interested in specimen data, larval host plant records, nectar resources, observations, etc. for an ongoing study of New Jersey's butterflies and skippers. Contact Dr. David C. Iftner, 8 Alpine Trail, Sparta NJ 07871.

Audio/Visual

CD-ROM: Butterflies of North America. Lepidoptery hits the computer age with the publication of this CD-ROM by James A. Scott. Everything in the 600 page Stanford Univ. Press book plus about 1000 new color photos of eggs, larvae, pupae and adults (about 5000 photos overall). Features include a new section on butterfly gardening, videos, instantaneous search capabilities for words or topics, species photos now grouped together, print photos and text, online glossary, background music. Windows only. \$49.95 + \$5 shipping/handling. Order from Hopkins Technology, 421 Hazel Lane, Hopkins, Minn. 55343-7116, 1-800-397-9211, HTTP://www.hoptechno.

Help Needed

The Nature Conservancy is in the process of producing an educational publication called the Biodiversity Status Report. The publication will assemble information from all 50 U.S. Heritage Programs into one central reference source. It will be comprised of two major products: a published book of approximately 400 pages that will provide a graphic overview and analysis of the condition and patterns of biodiversity in the U.S. as well as the threats to those species and ecosystems, and an electronic supplement on CD-ROM that will provide information and distribution maps for rare species and ecosystems of the U.S.

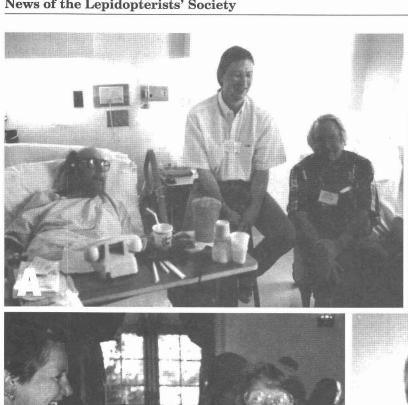
At this time, we are looking for slides/il-lustrations/images of various federally listed U.S. plant and animal species to be used in the electronic publication. Any slides donated will be processed, digitized, and returned within 4-8 weeks. All Copyright will be retained by, and Photo credit will be given to, the appropriate owner.

List of Butterfly Slides Needed:

Pyrgus ruralis lagunae(Laguna Moutains Skipper); Hesperia leonardus montana (Montana Skipper); Incialia mossi bayensis (San Bruno Elfin); Eupilotes battoides allyni (El Segundo Blue); Euphilotes enoptes smithi (Smith's Blue); Glaucopsyche lygdamus palosverdesensis (Palos Verdes Blue); Lycaeides idas lotis (Lotis Blue); Icaricia icarioides missionensis (Mission Blue); Icaricia icarioides fenderi (Fender's Blue): Apodemia mormo langei (Lange's Metalmark); Speyeria zerene hippolyta (Hippolyti Fritillary); Speyeria zerene myrtleae (Myrtle's Silverspot); Speyeria callippe callippe (Callippe Fritillary); Boloria acrocnema (Uncompaghre Fritillary); Euphydryas editha bayensis (Bay Region Checkerspot); Euphydryas editha wrighiti (Wright's Euphydryas); Neonympha mitchellii francisci (Mitchelli's Satyr); Euploea eleutho (Marianes Euploea Butterfly).

Sonal Pandya, Biodiversity Project Assistant, SPANDYA@TNC.ORG, phone: (703) 841-8758. Please note: The Nature Conservancy is a non-profit, tax-exempt organization under IRS code 501(c)(3). All gifts are tax deductible.

continued on page 88...





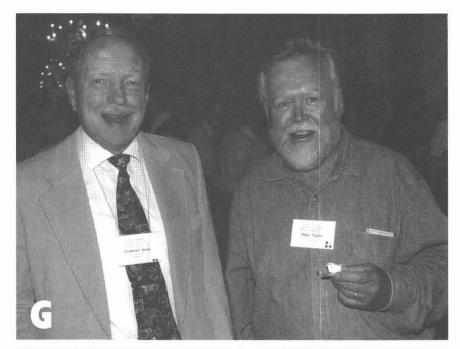








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Some 1997 Meeting Photos...

A) A number of attendees took time out to visit Charles Remington in the hospital. Pictured here are Andy and Lincoln Brower; B) Society Secretary Mike Smith with new President Jim Tuttle and his wife Peg (seated); C) Deane Bowers with Jean Remington (receiving corsage); D) Michael Collins and Lincoln Brower; E) "...and the king was in his couting house, counting out his money", Treasurer David Iftner keeping track of the finances; F) Meister of Ceremonials Charles Covell and Immediate Past-President Eric Metzler; G) Fred Stehr and Orley "Chip" Taylor; H) Ron Hodges, David Gaskin and Bryant Mather discuss the finer poits of something or another. Photos A-D courtesy of Michael Collins, E-H from Mo Nielsen. A good time was had by all. More evidence, er, photos will appear in the next issue...

Net...continued from page 82...

only insects but also slugs, snails, earthworms, woodlouse (in a sauce for sole), and curried beetles.

The author concludes with some detailed recipes. He discusses how to concoct mealworm patties, mealworm icing (for a cake!), banana worm bread, rootworm beetle dip and chocolate chirpie chip cookies - these of crickets, of course. I plan on trying a few of these, but I'll probably substitute sausage for the bedbugs. (If you are wondering about the Lepidoptera connection, he also includes a recipe for silkworm larvae.)

This site is hilarious. Punch up the address and find out how Louie Armstrong got his gravelly voice.

The de Havilland Moth Club

HTTP://AYLA.AVNET.CO.UK/TIGERFLY/DHMC/INDEX.HTML

I know, these moths are airplanes. I found the page during a routine search of the web for moths. About 45 years ago I ate bread heels and beans to keep an Aeronca Champion — with a full 65 horsepower — flying. It weighed 740 pounds and had a 13 gallon gas tank. I offer no apologies for finishing the column with these great moths of WWI.

The de Havilland Moth Club was formed in August to allow owners of de Havilland Moths to share information, experience and precious skills to further the owning and operating of classic de Havilland airplanes. Included at this page are 15 or so pictures of the old airplanes: the Tiger Moth, the Fox Moth, etc. If you have never flown surrounded by linen, you ain't lived.

Books...continued from page 77

cludes leading natural scientists, ecologists, and numerous environmental groups working to educate teachers and students, scientists, policymakers, and the general public about how to improve pollination of crops, protect pollinators globally, and help conserve rare plants. Both butterflies and moths are covered in this book, but with disproportionately less emphasis than they probably deserve.

Coweeta...continued from page 71

research projects have been conducted at the site over the years, no survey of its butterfly life was ever undertaken prior to this inventory. The author visited the site twice: September 17 - 18, 1990 and August 13 - September 1, 1996. A total of 50 species of butterflies and skippers were identified and observed for level of abundance.

Acknowledgements

I thank James R. Maudsley (Athens, Georgia) for initially sparking my interest in Coweeta Hydorlogic Laboratory and the staff at Coweeta for making my visits there convenient and enjoyable. I thank Dr. Wayne T. Swank for his comments regarding the manuscript.

Literature Cited

Stickney, P.L.; Swift Jr., L.W.; Swank, W.T. 1994. Annotated Bibliography of Publications on Watershed Management and Ecological Studies at Coweeta Hydrologic Laboratory, 1934-1994. U.S.D.A., Forest Service, Southeastern Forest Experiment Station. General Technical Report SE-86. Asheville, NC. 115 pp.

Swank, W.T.: Crossley Jr., D.A. eds. 1988. Forest Hydrology and Ecology at Coweeta. Ecological Studies, vol. 66. New York. Springer-Verlag. 469 pp.



Marketplace...cont. from pp. 85

Help Offered

Wish to collect legally in Costa Rica? Whether you decide to visit Costa Rica for leisure or work we can help you obtain your Official Collecting Permit for the time of your stay. You would be allowed to collect in all the country (except National Parks). Costa Rica rain forests are unique in what you can get species coming from the north (Mexico) or the south (South America). Contact Miguel E. Chumpitasi, P.O. Box 1105-2150 Moravia, San Jose, Costa Rica or phone/ fax (506) 235-5160.

Monarch...continued from page 72

Clark, A.H. 1932. The butterflies of the District of Columbia and vicinity. Smithsonian Institution United States National Museum Bulletin (157), 337 pp., 64 pls.

Cockrell, B.J., Malcolm, S.B. and Brewer, L.P. 1993. Time, temperature, and latitudinal constraints on the annual recolonization of eastern North America by the Monarch butterfly. In Biology and Conservation of the Monarch Butterfly (S.B. Malcolm and M. Zalucki, eds), pp. 233-251. Los Angeles County Museum, Los Angeles.

Gunder, J.D. 1927. New transition forms or "abs" and their classification (Lepid. Rhopalocera). Entomological News, 38: 129-138, 1 pl.

Malcolm, S.B., Cockrell, B.J. and Brewer, L.P. 1993. Spring recolonization of eastern North America by the Monarch butterfly: successive brood or single sweep migration? In Biology and Conservation of the Monarch Butterfly

(S.B. Malcolm and M. Zalucki, eds), pp. 253-267. Los Angeles County Museum, Los Ange-

Stimson, J. and Myers, L. 1985. Inheritance and frequency of a color polymorphism in Danaus plexippus (Lepidoptera: Danaidae) on Ohahu [sie!], Hawaii. Journal of Research on the Lepidoptera, 23: 153-160.

Vane-Wright, R.I. 1987. [White monarchs: reply to Malcolm & Brower.] Antenna, London,

Vane-Wright, R.I. 1993. The Columbus hypothesis: an explanation for the dramatic 19th century range expansion of the monarch butterfly. In Biology and Conservation of the Monarch Butterfly (S.B. Malcolm and M. Zalucki, eds), pp. 179-187. Los Angeles County Museum, Los Angeles.

Van Hook, T. 1993. Non-random mating in Monarch butterflies overwintering in Mexico. In Biology and Conservation of the Monarch Butterfly (S.B. Malcohm and M. Zalucki, eds), pp. 49-60. Los Angeles County Museum, Los

A Bilateral Gynandromorph of *Automeris io*

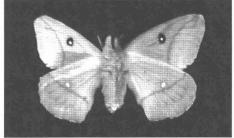
Ron Roscioli 101 Rose Ct., Easton, PA 18042

The accompanying photos are of an Io to show the female color, but ventrally is moth (Automeris io) I reared as a larva in 1995, which emerged in early July 1996. It is clearly a bilateral gynandromorph. The left side is female, while the right side is male, except that both rear wings are female, and dorsally; the thorax appears to become all female about half way back, thus having a female rear wing on that side also. Ventrally, the female rear wing does have a streak of yellow in it. The abdomen dorsally appears

split perfectly down the center, half being reddish of female and half being yellow of the male.

Its face is clearly half-and-half, having one male and one female antennae. Its legs are also red female on one side and vellow male on the other. The genitalia, also appear to be split, having a clasper on the male side, but it appears to have something stuck on it, perhaps part of the pupal case.





An almost perfect bilateral gynandromorph of Automeris io. Left, dorsal; Right, ventral. Photos by Ron Roscioli.

Clark...continued from page 73

- the New England Zoological Club VIII: 47-77 (May 12, 1923).
- Twelve New Sphingidae, Proceedings of the New England Zoological Club IX: 11-21 (May 1, 1924).
- Eight New Sphingidae Proceedings of the New England Zoological Club IX: 31-40 (June 13, 1925).
- Descriptions of Twelve New Sphingidae and Remarks upon Some Other Species, Proceedings of the New England Zoological Club IX: 45-59 (August 5, 1926).
- A Revision of the Protoparces of the Galapagos Islands, Proceedings of the New England Zoological Club IX: 67-71 (August 30, 1926).
- Descriptions of Twelve New Sphingidae and Remarks upon Two Other Species, Proceedings of the New England Zoological Club IX: 99-109 (June 24, 1927).
- Sundry Notes on Sphingidae and Descriptions of Ten New Forms, Proceedings of the New England Zoological Club X: 33-46 (April 4, 1928).
- Sundry Notes on Sphingidae, Descriptions of Sixteen New Forms, and of One New Genus, Proceedings of the New England Zoological Club XI: 7-24 (June 29, 1929).
- Sundry Notes on Sphingidae and Descriptions of Seven New Forms, Proceedings of the New England Zoological Club XII: 25-30 (August 13, 1930).
- Descriptions of Seven New Sphingidae and a Note on One Other, Proceedings of the New England Zoological Club XIII: 77-83 (August 15, 1931).
- Descriptions of Four New Sphingidae and Notes Concerning Two Others, Proceedings of the New England Zoological Club XIII: 39-42 (July 7, 1932).
- Descriptions of Three New Subspecies of Sphingidae, Proceedings of the New England Zoological Club XIII: 101-103 (December 30, 1933)
- A New Sphingid Genus, Proceedings of the New England Zoological Club XIV: 13-14 (February 23, 1934).
- Descriptions of Twenty-four New Sphingidae and Notes Concerning Two Others, Proceedings of the New England Zoological Club XV: 71-91 (May 12, 1936).





Well. Yours truly has had an eventful year! This is, without a doubt, the understatement of the century! When I was doing the last issue – it seems like years ago now – I was on the verge of completing my Ph.D. dissertation, was all excited by the prospects of attending the "big" meeting at Yale in July, and was contemplating a major move from Toronto to Texas. Events were not to play out as I'd planned, however!

The first indication that things were not all hunky-dory was a major faculty strike at York University where I was doing my doctorate. My supervisory committee was walking in circles for 7 weeks and were "not available" to discuss my thesis! My defence had to be put off until the summer. But I was set on attending the 50th Anniversary meeting so my defense was eventually scheduled for July 28th – only one week before I was scheduled to leave for Texas. Those of you who've been there will know how worried I was about the prospect of revisions to my dissertation!

The next thing to happen (although we had "expected" it for some time, since he had been terminally ill) was the passing away of my father-in-law. He was re-admitted to the hospital the weekend before the Yale meeting. I did the only thing any husband could do — I cancelled my flight to "be there" when my wife needed me. So I didn't get to meet any of the "names" that I'd become so familiar with over the years...

Finally, D-day arrived. I joyfully defended my dissertation as "closure" on a chapter of our lives. They must have liked it since they gave me my degree ("with distinction" no less – boy, I really pulled the old wool over their eyes!). No revisions, either (whew!). The following

week of packing was hectic (to say the least – yet another understatement!) but finally we loaded up all of our worldly belongings (all three of them!) in a small U-Haul and, towing our new Escort wagon behind us, we made for the border (but that's another story).

Texas, to put it mildly, is one of the most wonderful places on earth. Too bad we haven't had a chance to see much of it! We moved into the Stengl-Lost Pines Biological Station (a holding of UT's Zoology department, about 40 miles outside of Austin), a cabin on a beautiful tract of post-oak savannah – paradise for a couple of old naturalists like us. With a major cleaning, and careful eviction of the previous tenants (12 white-footed mice and 4 scorpions), we've been able to make the place "home". But if anyone had told me that it gets this cold in central Texas I might have stayed in Toronto!

Teaching (basic ecology this semester and conservation biology next) has surprised me. It takes far more time than I ever suspected – certainly a lot more time than being a student had! – to the point where I'd really love to go back and apologize to all of my undergraduate professors for being such a complete idiot! Nonetheless, it is "fun" (oh, if my mother could only hear me now, she always said I'd be a good teacher and I cringed at the idea) and I'm now learning all that stuff that I "glossed over" in those halcyon days of my undergraduate studies!

All of this is a long-winded way of saying that I've never been so busy in my life. My apologies for the lateness of this issue (current plans are to mail it with #5). I promised to have the News "back on track" by the meeting – I never expected that I'd be derailing it right after that!

I can only say "Hey! I've been busy!"

Membership

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

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

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

Submission Deadlines

Mail disks and illustrations to the **News** Editor (see right). Material for Volume 40 must reach the Editor by the following dates:

Issue	Date Due
1 Spring	January 31
2 Season Summary	
3 Summer	April 30
4 Autumn	July 31
5 Winter	October 31

Reports for the Season Summary must reach the Zone Coordinator by Dec. 15. See next page for more information.

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M. Deane Bowers Department of Environmental, Population and Organismal Biology, Campus Box 334, University of Colorado, Boulder, CO 80309-0334 (303)492-5530 (office) (303)492-8699 (fax) BOWERS@SPOT.COLORADO.EDU

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Zone I, The Far North:

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