Volume 48, Number 3 Autumn 2006

NEWS OF THE LEPIDOPTERISTS' SOCIETY

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Inside:

NEWS OF THE LEPIDOPTERISTS' SOCIETY

Volume 48, No. 3 Autumn 2006

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Issue Date: September 26, 2006 ISSN 0091-1348

Front Cover:

A female Eastern Tiger Swallowtail (Papilio glaucus), one of many species found in a "suburban yard arthropod preserve" like the one discussed on pp. 84. This specimen was photographed in Glenn Heights, Dallas Co., TX, on August 24, 2006 by Dale Clark.

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

The **News of the Lepidopterists' Society** (ISSN 0091-1348) is published quarterly by The Lepidopterists' Society, c/o Los Angeles County Museum of Natural History, 900 Exposition Blvd., Los Angeles, CA 90007-4057, USA., and includes one or two supplements each year. The **Season Summary** is published every year as Supplement S1 and is mailed with issue 1 of the News. In even numbered years a complete **Membership Directory** is published as Supplement S2 and is mailed with issue 4 of that volume of the News. Please see the inside back cover for instructions regarding subscriptions, submissions to, and deadline dates for, the News.

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POSTMASTER: Please send address changes to **News of the Lepidopterists' Society**, c/o Los Angeles County Museum of Natural History, 900 Exposition Blvd., Los Angeles, CA 90007-4057.

Presidential Profile

William E. Conner

Department of Biology, Wake Forest University, P. O. Box 7325, Winston-Salem, North Carolina 27109-7325, USA
conner@wfu.edu

Last June when I donned the antennae and coremata at the Gainesville meeting I became the president of our great society. I am delighted to serve a society filled with so many interesting and friendly people. I know many of the regulars at our yearly meetings, but I thought I would let the rest of you know a bit about your new president.

I have not been interested in Lepidoptera from birth as some of my predecessors. I first got seriously interested in them in 1975 when my graduate mentor Tom Eisner "the bug man of Ithaca" captured and introduced me to my first arctiid, *Utetheisa ornatrix*. He gently squeezed the male exposing its coremata and said something like "I think that this insect has an interesting story to tell". Boy was he right! I studied that species for the next four summers at the Archbold Biological Station near Lake Placid, Florida. I also met my future wife Mindy during the first summer and together we chased *Utetheisa* through the fields of *Crotalaria* in the surrounds of the Station. We studied the chemical ecology of *Utetheisa* and eventually figured out their courtship.

Since those early days with *Utetheisa* I have not strayed far from tiger moths. For me it was exciting to study tiger moth courtship in a comparative way. Each new species had an interesting way to find and seduce its mate. Along the way my students and I enjoyed the sexual exploits of *Syntomeida epilais*, *Empyreuma pugione*, *Cosmosoma myrodora*, *Cycnia tenera*, *Estigmene acrea* and others. Although I started studying chemical signals, pheromones, the moths quickly led me to sound. Yes, they communicate acoustically using high pitched squeaks and clicks. They even answer bats, the current focus of my laboratory in the Department of Biology at Wake Forest University in Winston-Salem, NC. We have good evidence that their sounds warn bats that they are distasteful much like the bright coloration of a monarch warns birds of bad taste. Some tiger moths may also "jam" the echolocation sonar of bats. The jury is still out on that one.

One of the great things about studying Lepidoptera is that you get to visit some wonderful spaces and call it work. Mindy and I have had the pleasure of visiting the cloud forests of mainland Ecuador, Iguassu Falls in Brazil, the great barrier reef off Australia (not many leps there but it was worth looking) and recently we have enjoyed the Galápagos Islands with my collaborator Lazaro Roque. I still see *Utetheisa* practically everywhere I go.

Of course the hard work gets done by students. My stories of tiger moths cannot be told without mentioning Harry Itagaki, Kate Loudon, Mark Sanderford, Becky Simmons, Ruth Boada, Reed Johnson, Nicholay Hristov, Jesse Barber, Alex Jordan, and Sarah Garrett and a raft of others. They are the ones who have made the discoveries and they all still study Lepidoptera.

So next time you see a tiger moth in the field give it a little squeeze or hold it to your ear. You never know what you might learn and where it might take you.

See you in the field.

Bill Conner

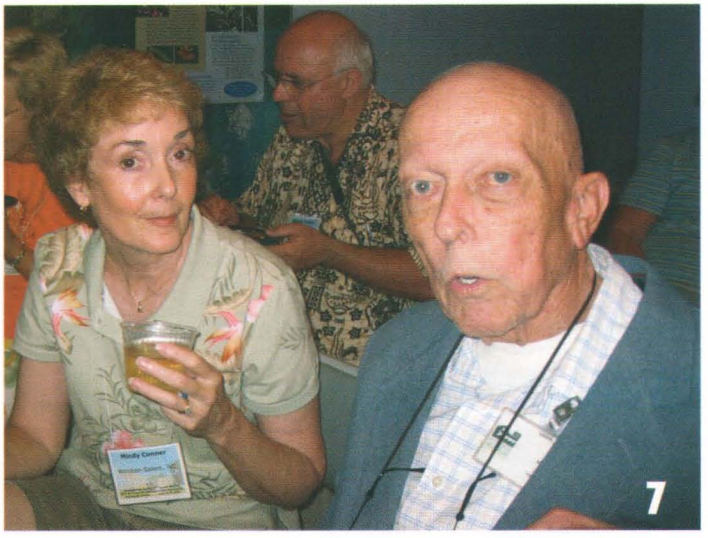
Announcement

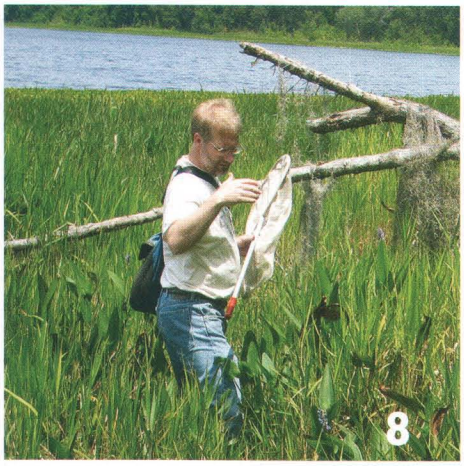
New Membership Directory Coming Soon: Is Your Listing Current?

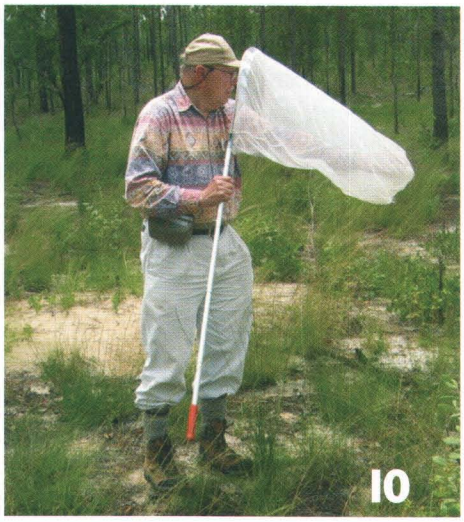
A new Membership Directory will be published towards the end of 2006. Do you have a new area code, a new phone number, or a new e-mail address? Have your interests changed? Have you changed your mind about having all or part of your listing omitted? If any of these is true, update your information by sending an e-mail to Julian Donahue (**Julian@Donahue.net**) or mailing the information to him at 735 Rome Drive, Los Angeles, CA 90065-4040. Misplaced your Membership Directory or not sure what your present listing is? I can send you a "screen shot" of your membership record on request.

2006 Meeting Photos

1) Matt Douglas with a hitchhiking *Caligo* in the McGuire Center's butterfly conservatory; **2)** Martha Weiss, Eric Lind, Deane Bowers and Bob Pyle; **3)** Outgoing President Felix Sperling speaking to the members; **4)** Robert and Rachel Tippit enjoying the gathering of lepidopterists from all over the world; **5)** Louise Fall, John Masters, Ken Fall and Malcom Douglas; thanks to Louise and Ken and BioQuip for hosting the reception; **6)** Becky Simmons presenting the Dave Winter Service Award to Assistant Secretary Julian Donahue; **7)** Mindy Conner and Lee Miller.







More photos from the 57th Annual Lepidopterists' Society meeting...

8) Brian Scholtens in search of leps during the field trip to the Ordway Preserve; **9)** the presentation of the "butterfly ties"; **10)** Fred Stehr plucks a specimen from his net at the Ordway Preserve; **11)** a table of "joyous" revelers; **12)** Linda and Byrum Cooper; **13)** the women showing off their butterfly wardrobe. All photos by Ranger Steve.

57th Annual Meeting Butterfly Field Trips, Gainesville, Florida 2006

Ranger Steven J. Mueller

13010 Northland Drive, Cedar Springs, MI 49319-8433 USA/ ***Odybrook@chartermi.net***

Forty four species were encountered by watchers and collectors on three Field trips jointly held with Southern Lepidopterists' Society and Association for Tropical Lepidoptera during the 57th Lepidopterists' Society Annual Meeting (Table 1). Leaders were Jim Dunford, Kathy Malone, Marc Minno, and J. Akens Pence. The observer/ photography group visited Kathy's home gardens and the Kanalpuha Botanical Garden. The other groups observed, photographed, and collected in the Kathryn Ordway Preserve/Karl Swisher Preserve and Ocala National Forest.

Following a drought in Florida, tropical Storm Albert moved through Gainesville causing cancellation of the first day's field trips but things cleared for the 14 June outing. Butterfly abundance was low and it was necessary to beat the bush to find butterflies. The observers group saw 36 species by visiting areas where water provided moisture that increase butterfly encounters. The Ordway Preserve provided 26 species and Ocala National Forest provided 11 species. Few nectar plants were in bloom away from cultivated areas.

Plan to join the experiences in Bakersfield California July 12-15, 2007. Kelly Richers presented a description of the variety of collecting and observing areas that await us next year.

Table I - 57th Lepidopterists' Society Field Trips Butterfly Sightings, June 14, 2006

Common Name	*Scientific Name*	**K.Malone's & Botanic Garden**	**Ordway/Swisher Preserve**	**Ocala National Forest**
Papilionidae				
Eastern Tiger Swallowtail	*Papilio glaucus*	X	X	X
Zebra Swallowtail	*Eurytides marcellus*	X	X	
Pipevine Swallowtail	*Battus philenor*	X	X	
Spicebush Swallowtail	*Papilio troilus*	X		X
Palamedes Swallowtail	*Papilio palamedes*	X	X	X
Polydamas Swallowtail	*Battus polydamas*	X		
Giant Swallowtail	*Papilio cresphontes*	X		
Pieridae				
Southern Dogface	*Colias cesonia*		X	
Sleepy Orange	*Eurema nicippe*	X		
Barred Yellow	*Eurema daira*		X	
Orange-barred Sulphur	*Phoebis philea*	X		
Lycaenidae				
Ceraunus Blue	*Hemiargus ceraunus*		X	
Gray Hairstreak	*Strymon melinus*	X	X	
Red-banded Hairstreak	*Calycopis cecrops*	X		
White M Hairstreak	*Parrhasius m-album*	X		
Great Purple Hairstreak	*Atlides halesus*		*X*	
Nymphalidae				
Zebra Longwing	*Heliconius charithonia*	X		
Gulf Fritillary	*Agraulis vanillae*	X	X	

Table I - 57th Lepidopterists' Society Field Trips
Butterfly Sightings, June 14, 2006

Common Name	*Scientific Name*	K.Malone's & Botanic Garden	Ordway/Swisher Preserve	Ocala National Forest
Common Buckeye	*Junonia coenia*	X	X	X
American Lady	*Vanessa virginiensis*			X
Red-spotted Purple	*Limenitis arthemis astyanax*	X	X	
Hackberry Emperor	*Astrocampa celtis*	X		
Carolina Satyr	*Hermeuptychia sosybius*	X		X
Monarch	*Danaus plexippus*	X		
Hesperiidae				
Silver-spotted Skipper	*Epargyreus clarus*	X	X	
Southern Cloudywing	*Thorybes bathyllus*		X	
Noerthern Cloudywing	*Thorybes pylades*			X
Confused Cloudywing	*Thorybes confusis*		X	
Horace's Duskywing	*Erynnis horatius*	X	X	
Zarucco Duskywing	*Erynnis zarucco*	X		
Common Checkered Skipper	*Pyrgus communis*	X		
Tropical Checkered-Skipper	*Pyrgus oileus*	X		
Fiery Skipper	*Hylephila phyleus*	X	X	
Sachem	*Atalopedes campestris*	X	X	
Whirlabout	*Polites vibex*	X	X	
Least Skipper	*Ancyloxypha numitor*		X	
Clouded Skipper	*Lerema accius*	X		
Dotted Skipper	*Hesperis attalus*		X	
Meske's Skipper	*Hesperis meskei*		X	
Southern Broken-dash	*Wallengrenia otho*	X	X	
Delaware Skipper	*Anatrytone logan*		X	
Dusky Roadside-skipper	*Amblyscirtes alternata*		X	
Ocola Skipper	*Panoquina ocola*		X	

Get in the Swing of Things with a Society T-Shirt!

High Quality, 100% cotton, generous length, pre-shrunk, proudly displaying a 7-inch (18cm) diameter Society logo on the front. Have you noticed that the butterfly design of the logo is a pair of mirror-imaged stylized initials ("LS") of our Society?

Available in four adult sizes (small, medium, large and extra large) in either *Papilio glaucus* yellow (with black logo) or *Melanchroia chephise* (navy) blue (with white logo) for only $10 each, plus postage ($4 for first shirt, $2 for each additional shirt within the U.S. or to Canada).

Please indicate quantity, color and size desired and send, along with your check drawn on a U.S. Bank, in U.S. funds, to:

Kelly Richers,
Treasurer, The Lepidopterists' Society
9417 Carvalho Court,
Bakersfield, CA 93311-1846
U.S.A.

Introducing the Conservation Committee

John Shuey

Indiana Office of the Nature Conservancy, 1505 N. Delaware Steet, Suite 200, Indianapolis, IN 46202

The US Endangered Species Act extends protection to 61 species of insects; more than a third of these are Lepidoptera (23 butterflies and 2 moths). The forthcoming Connecticut Butterfly Atlas—based on five years of sampling and 16,000 current and historical records—categorizes more than one-quarter of its resident butterflies as rare, threatened, declining, or otherwise worthy on conservation efforts. Results from Britain and Ireland's millennium atlas of butterflies and other continental surveys document significant losses of Lepidoptera from across the European continent. This spring the International Union for Conservation of Nature and Natural Resources released their newest compendium of threatened wildlife—623 insects were listed, up 64 species from the 2004 Red Book—many of these are butterflies and moths. The need for lepidopteran conservation efforts has never been greater.

This spring, an old committee of the Lepidopterists' Society was reborn. With the encouragement of Felix Sperling, our president at the time, a few members explored the possibility of reconstituting a conservation committee that could serve to advance the mission of the Society and promote the conservation of Lepidoptera locally, nationally, and internationally. After a few months of work in defining its composition, scope, roles, and objectives, the Conservation Committee was approved by the Executive Council in February 2006. Many of the Committee members met in July at the recent Annual Meeting in Gainesville to propose and discuss goals and assign near-term tasks.

The mission of the Conservation Committee is to facilitate an international dialog among lepidopterists, land managers, and policy makers with the goal of enhancing conservation of native butterflies and moths.

The initial goals identified by the Committee members are to:

* Position the Society and its membership as a resource for scientific information on butterfly and moth conservation.

* Promote the idea that conservation (the wise, sustainable and equitable use of natural resources) warrants the Society's highest level of attention by according the committee the same status as membership, education, and publications

* Use the committee to educate land managers, federal and state agencies, NGO's, conservation professionals, and others about

- The value and appeal of the Lepidoptera as conservation targets;

- The environmental threats facing Lepidoptera worldwide;

- The need for including Lepidoptera in conservation initiatives and /or land management plans;

- The science of lepidopteran conservation.

It is our hope that the current incarnation of the Conservation Committee will build on the achievements of the Society's first group of dedicated members. That committee metamorphosed into the Xerces Society, and has gone on to achieve much for many of what E. O. Wilson has called "the little things that run the world." Beyond all else, we hope to provide service to our membership, society at large, land managers, and all those interested in preserving biodiversity.

If you have questions about the Committee or would like to actively contribute contact John Shuey Chair **(Jshuey@tnc.org).**

The Committee:

Andrew Brower, Keith Brown, John Calhoun, Eric Metzler, Ron Panzer, Robert Pyle, Jens Roland, John Shuey, Thomas Simonsen, Keith Summerville, Doug Taron, David L. Wagner, Ernest Williams.

The Lepidopterists' Society

Minutes of the 2006 Annual Business Meeting
June 18, 2006, Gainesville, FL

1. President Felix Sperling called the meeting to order at 10:47 a.m. in Ballroom A of the Hilton Conference Center.

2. In his presidential report, President Sperling thanked all those involved in bringing this meeting to being, especially Jackie Miller, and he thanked Becky Simmons for her work with awards and with all forms of visual projection. He reminded everyone that next year's meeting will be held in Bakersfield, CA.

3. He then called for a moment of silence to honor all those members of the Society who had passed away during the past year.

4. President Sperling next called on Secretary Ernest Williams to summarize the actions of the Executive Council.

Secretary Williams reported that the E.C. met from 10:07 a.m. to 2:40 p.m. this past Wednesday, with 22 people present. He reminded everyone that these meetings are open to any Society member.

During the meeting, the E.C. received numerous reports from officers and committees, and along the way, many people were thanked for their good work on behalf of the Society. Our financial status is strong, helped greatly by the bequest two years ago from the estate of Bryant Mather; some of the interest from our investments is used towards our annual expenses. The Society's primary publications, the *Journal* and the *News*, are also in very good shape. Much of the discussion this year focused on issues concerning membership, particularly on publications and member services and retention, and several motions (given below) were passed. The E.C. also received a report on the education workshop that preceded this meeting's formal sessions. Bob Pyle explained further the idea of an "outernet" project, with insect nets being provided free to kids who want them and to their teachers.

The E.C. accepted a proposal by the Meetings Committee to hold the 2008 meeting at Mississippi State University. Thus, our meeting schedule is as follows:

2007 – July 12-15, in Bakersfield, CA, coordinated by Kelly Richers
2008 – June 23-28, in Starkville, MS, coordinated by Rich Brown.

With the ease of group communication by e-mail, during the past year the E.C. has been running an electronic meeting place. Three motions had been passed before this annual meeting began. The first established a new standing committee on Conservation; this committee will be added as Art. VI, Section 9, in the By-Laws. The E.C. also allocated $475 to help make all past journal articles available electronically on the web (with a 5-year moving window of availability). Finally, the E.C. approved a special membership offer as an incentive to gain new members; payment of one year's dues during 2006 will entitle a new member to all of 2007 in addition to the rest of 2006, including all publications from the membership application onward. Several people have already taken advantage of this offer.

At the meeting this past Wednesday, the E.C. passed motions for the following. The new president has been charged to appoint a publications review committee to examine the content and method of delivery of our publications, and the Budget and Publications Committee has been charged with reviewing our current dues structure. The need for these reviews has been generated by the increasing value of the *News* to members and by the possibility of electronic publication. Also, the E.C. will promote increased advertising of the Society, build closer ties with regional lepidoptera societies, and institute a welcoming reception for students at the beginning of the meeting. To learn more about the demographics of current Society members, the next dues notice will include a request for age.

This concluded the Secretary's report about the Executive Council meeting. In response to a comment about membership brochures, a number of the brochures were then distributed.

5. President Sperling then opened the floor for discussion among the membership. Someone asked about the cost of color plates for the *Journal*; the cost used to be $550 per plate, but that amount has been reduced to $250, and in special cases, the editor can make arrangements for the cost to be even less. The quality of color reproduction has been high.

Numerous comments and questions addressed membership categories and the Society's publications. Several people commented for and against the splitting of the *Journal* from the *News* for all members. In particular, Ron Leuschner said a *News*-only membership has been raised and rejected before; Jon Pelham said we should support the *Journal*; and John Masters, Tor Hansen, and Stan Gorodenski contributed their opinions to the discussion. Felix added that the E.C. discussed making an electronic version of the *Journal*. Charlie Covell suggested adding short papers and other material of broader interest to the

Continued on pp. 74

Journal, which is the Society's permanent record, to increase its value to members. Bob Pyle commented that it would be helpful to have a pullout section of the *News* with brief interpretive statements and a glossary of terms encountered in modern scientific work. All these issues are included in what the Budget and Publications Committee will review this coming year. Felix thanked David Lohman and Larry Gall for getting the *Journal* converted to electronic form and on line.

With regard to other matters, Felix said the new president will have much to do to respond to Wednesday's directives from the E.C. Tor Hansen said we should support the showing of more videos at the annual meeting. During the discussion, Felix thanked Ernest Williams for his work as the Society's secretary; Dave Lawrie will take over the Secretary's duties later this year.

6. A group then came forward to offer their version of resolutions about the Gainesville meeting, to a version of Dr. Suess' book, *Oh, The Places You'll Go.* The group of graduate and postdoctoral students included Marie Djernaes, Jason Dombrowski, Sarah Garrett, Akito Kawahara, Eric Lind, Amanda Roe, Eric Runquist, Emily Saarinen, and Chris Schmidt. Their version is printed separately.

7. President Sterling then called new President Bill Conner forward to receive the signs of office: deely-bopper antennae, coremata, toy larva, and gavel. President Conner waved his coremata and was impressive, indeed, as he displayed these signs.

8. New President Conner said he feels right at home and that he's delighted to work with everyone. For now, though, until we meet again in Bakersfield, we have butterflies, moths, and planes to catch.

9. It was moved and seconded to adjourn, and we did so, with President Conner wielding the gavel authoritatively, right at 11:30 a.m.

Ernest H. Williams, Secretary

Announcement

Nominations for William D. Winter Service Award

The William D. Winter Award is now given biannually by the Lepidopterists' Society in recognition of outstanding service to the society and its membership. This award, established in 2005, honors the memory of William D. Winter Jr. Dr. Winter's contributions to the Lepidopterists' Society and to the overall community are numerous. Dave was an avid naturalist and shared his love of Lepidoptera through publications, Lepidopterist Society meetings, and public outreach. Dave served as Secretary for the Lepidopterists' Society from 1989-1994. He and his wife Jo Brewer co-wrote the book, *Butterflies and Moths: A companion to your field guide*, in 1986. His last contribution to the Society and public *Basic Techniques for Observing and Studying Moths and Butterflies* was published posthumously. The Techniques manual has quickly become a classic reference for serious Lepidopterists and amateurs. In keeping with the example of Dr. Winter's service, there is not a monetary award, although funds will be provided to assist the recipient in attending the Annual Meeting at which the presentation is to be made. Funds for the W. D. Winter Jr. Service award are provided by the Lepidopterists' Society endowment and annual meeting contributions.

Nominations of appropriate individuals are now requested for consideration by the Winter Award Committee for recognition at the 2007 meeting.

Applications must include:

1. A curriculum vitae for the candidate
2. Two supporting letters by current or former members of the society
3. A cover letter summarizing the candidate's contributions to the society

Applications must be complete by **February 15, 2007**. Please send these to:

Winter Award Committee
c/o Dr. Rebecca Simmons
Dept. of BiologyUniversity of North Dakota
PO Box 9019
Grand Forks, ND 58202
rebecca.simmons@und.nodak.edu

Announcement

We Have Lost Your E-mail Address (if it's on this list)

E-mail to the following current members has been returned to the Society, and those addresses will not appear in the new Membership Directory. If your name is on this list, please send me an e-mail (from the address you want us to have on file) to **Julian@Donahue.net**. This will ensure that we have your correct and current e-mail on file, and eliminate problems deciphering handwriting. Julian P. Donahue, Asst. Secretary and data czar.

Barksdale, Charles M.; Barrows, Edward M.; Beutelspacher B., Carlos R.; Chapman Mike; Crabtree, Laurence; Darmstadt, Chip; Deaver, Ken; Dole, John M.; Gallusser, Stephanie; Glaeske, Daniel M.; Grishin, Nick V.; Horton, Tom; Jones, Monty; Lynn, Mel; Nice, Chris; Nonnenmacher, Hermann F.; Prevatt, William D.; Rumpsa, Paul; Schneider, Elnora; Sears, Terry A.; Sleeter, Ronald T.; Taki, Toshihiko; Turner, Henry; Watanabe, Michihito; Yamaoka, Masuo.

Membership Update...

Julian Donahue

This update includes all changes received by 20 August 2006.

New and Reinstated Members: *members who have joined/renewed/ been found/or rescinded their request to be omitted since publication of the 2004 Membership Directory (not included in the 2004 Membership Directory; all in U.S.A. unless noted otherwise)*

Alexander, James Linn: P.O. Box 1653, Cortez, CO 81321-1653.

Babson, Jeffry: 840 North Solar Drive, Vail, AZ 85641-9608.

Beckemeyer, Roy J. (Ph.D.): 957 Perry Avenue, Wichita, KS 67203-3141.

Bentler, Fred: 3441 39th Avenue SW, Seattle, WA 98116-3415.

Cho, Soowon (Ph.D.): Department of Plant Medicine, Chungbuk National University, Cheongju 361-763, **South Korea.**

Cohen, Sylvia: 17 East 97th Street, Apt. 2D, New York, NY 10029-6968.

Daniel, Steven: 181 Railroad Mills Road, Pittsford, NY 14534-4153.

Dempwolf, Bill: 4403 Cumbria Lane, Austin, TX 78727-5241.

Estrada, Catalina: 1 University Station Stop C0930, University of Texas at Austin, Austin, TX 78712-0253.

Forbes, Jason: [address omitted by request]

Fraser, Ann (Ph.D.): Biology Department, Kalamazoo College, 1200 Academy Street, Kalamazoo, MI 49006-3295.

Graham, Victoria (Ms.): 28W650 Main Street, Warrenville, IL 60555-3414.

Grealey, Jessica (Ms.): 395 Wintergreen Drive, Waterloo, Ontario N2V 1L7, **Canada.**

Kuseff, Grant: 626 Main Road, Lindeow South, Victoria 3875, **Australia.**

Lewis, Delano S. (Mr.): McGuire Center for Lepidoptera & Biodiversity, Florida Museum of Natural History, P.O. Box 112710, Gainesville, FL 32611-2710.

Leadbeater, Donna Lisa: c/o 3 Langley Garden, Fordingbridge, Hants SP6 1QL, **England.**

Lind, Eric: 707 Roxboro Place NW, Washington, DC 20011-1215.

Moore, Stephen E.: 400 Hudson Street, Northboro, MA 01532-1536.

Rhodes, John: Curator of Butterflies, Tucson Botanical Gardens, 2150 North Alvernon Way, Tucson, AZ 85712-3153.

Scheinin, Lisa A. (M.D.): 2210 Marshallfield Lane, #A, Redondo Beach, CA 90278-5016.

Volkle, Barbara M.: 400 Hudson Street, Northboro, MA 01532-1536.

Wahl, Nate: 8971 Lentzville Road, Athens, AL 35614-4101.

Wight, Alan: P.O. Box 751540, Petaluma, CA 94975-1540.

Zeller, Joan: 181 Railroad Mills Road, Pittsford, NY 14534-4153.

Address Changes

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

Casdorph, David G.: P.O. Box 2480, Monrovia, CA 91017-6480.

Churchill, Mark: 3047 Grenada Drive SE, Grand Rapids, MI 49546-5721.

Crabtree, Laurence: P.O. Box 213, Bieber, CA 96009-0213.

Ekin, Robert J.: 1111 East Soapstone Court, Kuna, ID 83634-2478.

Falk, Diane: 160 McKinney Chapel Road, Marion, IL 62959-8799.

Godfrey, George L. (Dr.): 24108 Burr Oaks Lane, Athens, IL 62613-9210.

Forister, Matthew L.: Dept. of Natural Resources & Environmental Science, University of Nevada, Reno, Mail Stop 186, 1000 Valley Road, Reno, NV 89512-2815.

Harris, Brian P.: 6714 Cockerille Avenue, Takoma Park, MD 20912-4603.

Mattoni, Rudi (Dr.): 9620 Heather Road, Beverly Hills, CA 90210-1757.

McCaffrey, Joanna: 1845 South Michigan Avenue, Apt. 1809, Chicago, IL 60616-3594.

Morgan, Dave: 4355 Cobb Parkway, Suite J401, Atlanta, GA 30339-3496.

Overton, Michael D.: 1930 Garner Field Road, Apt. 18A, Uvalde, TX 78801-6229.

Ruffin, Jane M.: 306 Overlook Lane, Gulph Mills, PA 19428-2634.

Siebert, Margaret Koontz (Ph.D.): 1857 Indian Hills Trail, Akron, OH 44313-8018.

Teti, Paul C.: 712 East 24th Street, #A, Chester, PA 19013-5212.

www.lepsoc.org

Resolutions...

Oh the Connections We'll Make

Welcome!
Today is your day!
You've come to McGuire
A fantastic place to stay!

You have a net in hand
And a lamp on your head
You catch all you see
And curate long before bed

You are not on your own, there are many here with you
We'll build our connections and collections we do.

And when you are in Florida there is a very good chance
You'll meet gators that scare you right out of your pants
There are some, down by the McGuire Center
That beautiful, wonderful place of our mentors

Alberto blew up and down the streets
Preventing us for raising our sheets.
With our heads full of brain
And our brains full of trees
We are flexible enough
to go down many streets

Denude ting kan ske
Og ofte de gor
For folk så kvikke
Og let på tå som dig

I learned a lot,
my brain is so full
With facts like male glands
Are like tits on a bull

The button was stuck
The slides all zipped by
We sure are in luck
Becky could fix it on the fly

I found that the love
Jennifer Aniston was after
Is John Brown
And his impression of claspers

Jackie has worked so hard
No detail overlooked
But I pity your soul
If you did not sign the book

With his soft spoken ways
And his leadership that guides us
To Tom we say thank-you
For all of your kindness

Of many memorable moments
I'll remember this one,
I now know that three balls
Are better than one

There is one more thing to add
I don't like to be mean
But Paul's new name
Should be Mr. Pinkstein.

Zaspel, you're on your way up!
Gilligan, you're doing great things!
Li will soar to great heights!
And Garret's moths sure sing!

Oh the places you'll go!
There are things to be done!
There are specimens to collect
Under moon or sun.

Bill McGuire urged sharing with one and all
And this will make you the best colleague of all!
Fame! We'll be famous as famous can be,
Building connections and collections for all to see.

Your not alone, whether you know it or not.
There are many beside you, we'll do quite a lot

Dan got mixed up, of course as you know
But don't you get mixed up
Bakersfield is a great place to go!

So when you go in July, step with great care and excitement
And remember that Bakersfield, is full of enlightenment
Just don't forget to be there on the 12th
To sneak up on new Lepidoptera with great stealth

So.....
We are off to great places!
Till next year we say
Bakersfield is waiting
So... get on your way!

Marie Djernaes, Jason Dombrowski, Sarah Garrett, Akito Kawahara, Eric Lind, Amanda Roe, Eric Runquist, Emily

www.lepsoc.org

A Melanic *Colias eurytheme* from Northern California

Arthur M. Shapiro

Center for Population Biology, University of California, Davis, CA 95616 USA ***amshapiro@ucdavis.edu***

On July 30,2006 I was gathering routine data in North Sacramento, Sacramento County, CA without a net. Suddenly what appeared to be a *Cercyonis* of some kind flew by, backlit by the sun. Since there are no *Cercyonis* within an hour's drive in any direction, I was intrigued - to say the least. When I got closer to it I could see it had an odd greenish tint, and its flight wasn't quite right for a *Cercyonis*. So what was it?Then it dipped down into the vegetation, allowing me to get really close.It was courting an orange female *Colias eurytheme* Bdv. And that wasn't all that surprising, since it was an all-black (on top) male *C.eurytheme*!

Amazingly, I caught it in my cupped hands, scuffing it only slightly. And here it is.The photos speak for themselves. ((*See pp. 92, Editor*)) The pink pigment of the antennae and legs, etc. and the apple-green of the eyes were not altered.

Numerous named melanic aberrations of both *C.eurytheme* and *C.philodice* Latr. are in the old literature. Having examined quite a few such specimens over the years, I was not completely flabbergasted at what I had. The one specimen of *C.philodice* "ab. nigrina" Strecker in the U.S.National Museum is virtually identical to my bug, except for being the other species. It was collected July 6, 1908 at Bethlehem, PA, which is also the locality of the type specimen (in the Field Museum).

Whatever the process that generates these aberrations, it operates to a varying degree; the one constant is the blackening of the posterior compartment of the ventral forewings; the melanization varies dorsally from the veins only, through varying extent and intensity of coverage; ventrally the hindwing is very rarely blackened as well. The bizarre and presumed-extinct *Colias ponteni* Wallengren, supposedly from the Straits of Magellan, has the ventral forewing trait apparently fixed in the male. The various melanized "green *Colias*" from the Arctic, subarctic, Andes, Alps and Sierra Nevada appear to follow a different route to melanization.

Metamorphosis...

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

Robert P. Allen

of Mount Angel, Oregon, U.S.A., on 20 May 2006 at the age of 100. Paul (or Robert, or Abe as he was known to various friends and others) was born in Abingdon, Illinois, and as an infant moved with his parents to Monrovia, California in 1906. As a young boy he was fascinated by backyard butterflies, and never got over it. He was awarded B.S. (1934) and M.S. (1952) degrees in entomology at the University of California, Berkeley. In 1943 he began a career as an entomologist with the California Department of Food and Agriculture, and in 1947 was one of the first three entomologists in the new Pest Detection Program. In his 37 year career in that capacity he was instrumental in the detection and eradication of many pest infestations in California. An avid collector and curator of insects, his specimens are in the Department of Food and Agriculture (Sacramento), the California Academy of Sciences (San Francisco), and other museums. He retired in 1973, and in 1995 he and his wife Ann moved to Mt. Angel, Oregon. Paul was a member of several entomological and environmental organizations, including The Lepidopterists' Society, of which he has been a member since 1979. He is survived by daughter Karen, sons Perry and Peter (the latter provided most of this information), five grandchildren, and two great grandchildren.

Ian F.B. Common

of Toowoomba, Queensland, Australia, on 3 June 2006, a few days before his 89th birthday. Dr. Common had been a member of the Society since 1954, and was elected an Honorary Life Member in 1987, in recognition of his pioneering work on the moths of Australia. In 1996 he was awarded the Karl Jordan Medal for his work on the biology and systematics of Australian Lepidoptera, especially the Microlepidoptera.

Elaine R.S. Hodges

of Eugene, Oregon, on 27 June 2006 at the age of 69, of breast cancer. Founder of the Guild of Natural Science Illustrators and editor of the leading book on the topic, *The Guild Handbook of Scientific Illustration* (1969, 2003), Elaine was a consummate scientific illustrator. For 31 years she worked in that capacity at the National Museum of Natural History, Smithsonian Institution. Lepidopterists have marveled at her work in numerous publications by Smithsonian and U.S. Department of Agriculture scientists, most notably in the *Moths of America North of Mexico* series, particularly those volumes authored by her lepidopterist husband of 39 years, Dr. Ronald W. Hodges. Elaine had been a member of the Society since 1980, and was a frequent attendee at meetings. She is survived by her husband, two sons from her first marriage, her father, Samuel Snyder of Frederick, Maryland, a sister, three brothers, and two grandchildren. In lieu of other gestures of condolence, donations may be made in her memory to the Wedge Entomological Research Foundation, c/o Kelly Richers, Asst. Managing Director, WERF, 9417Carvalho Court, Bakersfield, CA 93311-1846.

Luis Daniel Otero

of Mérida, Venezuela, in early June 2006. Dr. Otero, a specialist in euryteline Nymphalidae, had been a member of the Society from 1990 through 2000.

Abbye "Pudgy" Stockton

of Santa Monica, California, on 26 June 2006 at the age of 88, from complications of Alzheimer's disease. Abbye's fame is legendary as a weightlifter and women's gym owner, and was variously known as "the First Lady of Iron," America's Barbelle," and "the Queen of Muscle Beach" [near Santa Monica pier]. To lepidopterists, however, Abbye was known as the wife of Les Stockton, an ardent collector of Lepidoptera and other insects who died in 2004. In 1986 Abbye was an affiliate member of the Society.

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The Current Membership Crisis

John Masters

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From inception in 1947 the Lepidopterists' Society experienced slow and steady growth until 1992. This membership growth leveled off in 1992, and since 1998 has been in a serious decline. The charter membership of the Society was 220 members in 1947. After 1947 steady annual membership increases brought the membership to 1758. After 1992 membership growth leveled off for six years, although peaking at 1796 in 1993, before 1998 when the decline started. Membership dropped from the 1993 high to 1,242 in 2004. Figures for 2005 and 2006 are not yet available, however, membership has still continued to drop.

If the annual growth rate from 1947 to 1993 had continued, we would now expect a total membership over 2100. Instead this number is closer to 1200, nearly 600 (33%) less than the previous high, but more importantly a loss of approximately 900 (43%) from the expected 2006 membership.

Table I provides membership counts for salient years from 1947 to 2005, illustrating the indicated trends.

Essentially membership is a financial problem because annual membership dues are the principal source of Society income. When operation costs increase, as they have done over the years, the Society is faced with two alternatives, to increase membership or to increase annual dues. Unfortunately these two choices are sometimes counterproductive. Annual membership fees for active members were increased from $25.00 to $35.00 in 1998 and again to $45.00 in 2000. In hindsight it is obvious that these steep increases had the unfortunate effect of exacerbating the loss of members.

The financial situation became so bad in 2003 that a letter, signed by Dave Wagner, Larry Gall, Kelly Richers and Charles Remington, was sent to the entire membership requesting a special contribution of $100.00 for immediate needs to keep the Society solvent. This promotion was very successful as 108, or more, members sent in contributions and raised over $10,000. An immediate reprieve from further financial problems occurred in January 2004 when a check, from the Bryant Mather estate in excess of $260,000.00, was deposited on account. Mather had bequeathed 1/10th of his estate to the Society. This very good fortune is not a solution, but more of a reprieve granting the Society needed time to solve membership/financial problems. It is essentially that positive actions take place before the Mather money runs out.

Most of the considerations to solving the membership crisis have involved ways of gaining more exposure for Society and attracting new members. Attracting new members has not been a serious problem, however. Since 1985 we have had over 5000 members in the Society, yet only 1200, or so, remain. This is a loss of 75% of the potential. New members are being attracted at a pretty good rate. Between 1990 and 1999 an average of 163 new members joined per year. After 2000, when membership dues were increased to $45.00 per year, this rate dropped off

Continued on pp. 82

Table I

The Lepidopterists' Society: Estimated Membership Counts

Year	Subscriptions & Exchanges	Life & Retired Members	Other Members	GRAND TOTAL
1947				222
1960				668
1972				1,177
1986	157	110	1,368	1,635
1993	142	157	1,497	1,796
1996	147	162	1,445	1,754
1998	157	165	1,390	1,712
2000	145	156	1,226	1,527
2001	128	158	1,099	1,385
2002	132	156	1,099	1,387
2003	129	154	1,082	1,365
2004	142	150	950	1,242
2005		150		1,200

Notes: Membership data from 1947 through 1972 is taken from the Commemorative Volume in 1977. Assistant Secretary Julian Donahue provided data from 1986 through 2003. Grand total for 2004 was taken from the 2004 Membership Directory. Other figures for 2004 and the Grand Total for 2005 were estimated. Active, Sustaining, Affiliate and Student members are all combined under "other" members.

In Quest of *Actias luna* and *Antheraea polyphemus* (Saturniidae) in Southern Texas

Robert D. Weast

5324 NW 78 Ct., Johnston, IA 50131 ***robertweast@dwx.com***

Had he ever seen a long-tailed, pale green luna moth during his landscaping work? Billy Snider replied "Yes," that he spotted one on a tree outside the entrance of The Nature Center in Weslaco, Texas. I showed him a photo which he said confirmed his discovery. This was in 2002. David Robacker, a very knowledgeable and extensive collector from nearby Progresso, relates that a lady phoned him and she had seen a large moth. "What was it?" Robacker said her description was that of a polyphemus moth. Mary Barkkari, of Harlingen, said she had had a large tan moth on the back porch window of her home for 2 days. I showed her a photograph of *polyphemus* and she said, "That's it."

A persistent, unresolved paradox takes form. Are *Actias luna* (Linnaeus) and *Antheraea polyphemus* (Cramer) residents of the Rio Grande Valley of Texas? Perry Glick surveyed insects in the Valley many years ago and reported that *A. luna* was rare and *A. polyphemus* to be absent in Brownsville. But Wild Silk Moths of North America indicates *A. polyphemus* to be in Brownsville and that *A. luna* is taken there only occasionally. The U. S. Geological Survey also records *A. polyphemus* there. Puzzling but tantalizing are these conflicting published records.

"I really would not be surprised if they did occur there, at least occasionally." - John Jackman of Texas A & M University. Kirby Wolfe questions the presence of either species, especially that of *A. luna*. Richard Peigler adds this: "My skepticism says that neither *A. luna* nor *A. polyphemus* occur in the southern tip of Texas...specimens probably get blown down into the Valley, or have been mislabeled."

The purpose of this study is to put these various countervailing views to the test.

The Tamaulipan Desert Thornscrub Forest: The Original Rio Grande Valley

The Rio Grande Valley is a semi-tropical, alluvial soil delta, approximately 45 miles wide and 70 miles long. The Valley is bounded in the south by the Rio Grande River. Originally this land was rich in bio diversity, but was laid bare and planted to cotton, citrus, sugar cane, sorghum and truck gardening. Pitifully few virgin remnants remain.

For 10 years I have collected or observed cocoons of *Eupackardia calleta* (Westwood) and *Rothschildia forbesi* (Benjamin) but have never seen a *A. polyphemus* cocoon. Primary hosts of *A.luna* and *A.polyphemus* are not indigenous to the Valley, but several potential secondary hosts are present for *polyphemus*. One of its primary hosts, live oak, is now commonly planted in yards and parks.

Proven Habitats North of the Valley

Jack Jackman says the TAMU collection has *A.polyphemus* and *A. luna* from 7 counties in the Edwards Plateau, aka Texas Hill Country, an area that extends from west of San Antonio and NE to Austin. Peigler says that both species occur in San Antonio, 240 miles north of the Valley. The late James E. Gillaspy of Texas A & M University, Kingsville, took *polyphemus* in San Patricio Co., just north of Corpus Christi and in Kelberg Co., just south of that city. Gillaspy collected 8 males at blacklight 18 September 1976 at Risken Ranch in Kenedy Co. This places the moth 36 miles north of the Valley.

It is possible however, that both species may occur south of these proven points. Michael Heep of the University of Texas at Edinburg, tells me that oak mottes, i.e., thickets of live oak trees, *Q. virginiana* and *Q. fusiformis*, descend in scattered groupings south from the Plateau to 45 miles north of Edinburg on the Valley's west end and to 10 miles north of Raymondville on the east end. Oak is a common host of *A. polyphemus*, but is occasionally used by *A. luna* in the other regions of the country. These mottes also contain Texas persimmon, *Diospyros texana*, which is a potential host of *luna*. Thus, both moths might occur right down to the southern edge of the mottes. Soil conditions preclude the natural extension of the mottes farther south. Thus, there is a non-host barrier of 10 to 45 miles over which the moths must fly or be blown.

Trapping

Location and timing is everything when attempting to attract males to females. Perhaps flight dates might articulate with other Texas habitats. Mike McCormick records *polyphemus* flying early March in Houston and east of Austin, Texas. Jim Klinger records flights in Dallas in early March. Vernon Brou says flights begin in Louisiana late January with *A. polyphemus* continuing at 47 day intervals and *A. luna* at 36 day intervals. They produce 5 broods ending in early December. McCormick reports that on 2 December his caged female attracted a wild male in Houston. There are records of *A. polyphemus* in Palm Bay Florida, 20 January, Naples 24 February and Palm Beach 10 November.

Perhaps *A. luna* and/or *A. polyphemus* colonies occur in widely spaced niches in just one or more of the Valley's 14 cities. I determined it would be necessary to maintain traps for several months duration and that these traps should be located in 3 widely spaced sites in the Valley: Harlingen, then west 22.85 miles to Weslaco and then 16.46 miles to McAllen. Mary Barkkari monitored a trap at her horse ranch in Harlingen; Martin Hague and staff maintained a trap at The Nature Center in Weslaco; Fred Klusmann set up a trap as well as a blacklight at his residence in McAllen. Dozens of cocoons were continually shipped to the 3 monitors. With the aid of the wide spectrum antibiotic ciprofloxacin I was able to rear many hundreds of disease free stock for this project.

Traps were baited in February through August of 2004. Barkkari, Klusmann and Hogue and staff tended the traps faithfully for 7 months – a reliability that is truly remarkable. Alas, not a single male of either species was attracted in any of the three locations.

In January of 2005 Fred Klusmann and I visited Encino Charter School which is 45 miles north of the Valley and gave a hands-on presentation to the science class of Isaac Salinas. We asked the 4th and 5th graders if they had ever seen a green moth like the live *A. luna* held before them. Five excited hands shot up "Yes." Again, *A. polyphemus*? Had they ever seen one? Seven hands fanned the air. Encino, which is Spanish for oak, is a small town of 605 and is located amid an extensive range of live oak. Moths are likely to be attracted to the relatively few lights in this small rural community and thus be more easily discovered.

We left Mr. Salinas and his class with dozens of cocoons plus 2 traps. Traps were used commencing in mid-February, but males didn't arrive until 12 and 23 of March and again 18-19 April. Salinas trapped a total 6 *polyphemus*. The father of one of his students saw a pair mating in March.

We also gave a presentation to a science class at Falfurrias, 18 miles to the north of Encino. Daniel Drogue, a senior, maintained two traps and Taylor, of friend of his, trapped a male *polyphemus* on 5 April. Outside of those dates, none was ever captured. *Luna* traps were used throughout the season and not a single male was ever taken in Encino or Falfurrias.

On 6 August 2005, my son-in-law Brian Kellerman and grandson Bradley left Kansas with about 60 cocoons. To prevent eclosure en route cocoons were placed in an ice chest. Arriving in Harlingen they were transferred to an emergence cage and promptly hatched in the 90 degree heat. At dusk Brian and Bradley tethered 4 *luna* and 6 *polyphemus* to stakes in rich oak country in Encino and on the road to Falfurrias. At dawn 8 August wings of 3 of them were found scattered on the ground - a predator no doubt. Two *polyphemus* and two *luna* were found alone so they were bagged in case their mates had flown away before dawn. They laid well, but all eggs were infertile.

Two of the tethered *polyphemus* were in copula with a third male resting alone next to a mating pair. Two females laid a combined total of only 194 eggs which Brian mailed to me in Iowa. Fertility was very poor. Only 74, or 38.24%. of the ova developed. The larvae, however, were vigorous and grew well on bur and pin oak. I reared 62 of the 74 ova and they grew to an immense size, many topping 5 inches. The cocoons were as large as the species can produce.

These Encino captures place *polyphemus* 45 miles north at the west end of the Valley.

Absence of Evidence Is Not Evidence of Absence

You can't prove a positive with a negative. To date, the presence or absence of either *A. luna* or *A. polyphemus* in the Valley remains the same. There is no hard evidence of their presence.

Perhaps in the near future the Valley may provide an excellent of example of the dynamics of invasion and colonization of a species. *A. polyphemus* is a likely candidate, as live oak is now commonly planted in suburbs and parks. The observations of *A. polyphemus* by Barkkari and the friend of Robacker are probably valid. The spotting of *A. luna* by Snider remains questionable. The outlook for this beautiful moth as a colonizer is slim to nonexistent.

The floral architecture of the Valley is slowly metamorphosing from discordant tropical flora to native plants. At present, cities of the Valley present a disjunctive mosaic of butterfly gardens - such as that at Mission - and urban habitats such as Weslaco Nature Center and the newly discovered enthusiasm for backyard wildlife habitats. Numerous home owners maintain a section of their yard for native plants. Exotic plants, as beautiful as they are, consume valuable water and are discouraged.

Cities and suburbs of the Valley are gradually fusing into one long continuous development. I predict that in 10 years these developments will significantly replace the vast agricultural seas of mono culture, so hostile to wildlife. This transformation will provide more benign conditions for native birds, butterflies, moths and hosts of other living things.

Of principal importance is the ongoing creation of a continuous wildlife corridor along the Rio Grande River which will connect invaluable areas like the Santa Ana National Wildlife Refuge and Sabal Palm Audubon Sanctuary to isolated patches of habitat. Indigenous wildlife, birds, butterflies, moths and native plants can again repopulate, albeit to a limited extent, this unique subtropical gem.

Acknowledgements

I requested advice, information or help from each person mentioned in this paper; their input was invaluable.

Continued on pp. 91

The Marketplace

***IMPORTANT NOTICE TO ADVERTISERS:* If the number following your advertisement is "481" then *you must renew your advertisement* before the next issue! Remember that all revisions are required in writing.**

Books/Videos

For Sale: Hewitson's 5 Volume "Exotic Butterflies." Good condition, but somewhat foxed. Will be available for examination at the annual meeting in Gainesville. Contact me previously at Reisele@aol.com or Robert C. Eisele, 10620 SW 27th Avenue, J-9, Ocala, FL 34476. 481

JUST OUT! DVD of the butterflies of the Amazon Basin. "O Que Passa? What's Going On Here?" 30 minutes, in English and Portuguese, of the butterflies at the Cristalino Jungle Lodge, Mato Grosso, Brazil. See the website for details and purchase. Also others in "The World's Butterflies on Film. Ongoing series in VHS (PAL or NTSC) at US$12 each + freight. 100s of species in Peru, Malaysia, Ghana, Kenya, Philippines, South Texas, Europe. Kenya also available in DVD. Contact John Banks at johnbanks@cinebutterflies.com - or on Cinebutterflies.com - or mail to John Banks, 28 Patshull Road, London NW5 2JY, UK 483

New Issues of Papilio (New Series): #12, Taxonomic studies and new taxa of North American butterflies. James Scott, Michael Fisher, Norbert Kondla, Steve Kohler, Crispin Guppy, Stephen Spomer, and B. Chris Schmidt, 74 p. + 6 color pl., $14.00; #13, *Phyciodes* (*Phyciodes*): more progress, J. Scott, 38 p., $7.00; #14, Butterfly hostplant records 1992-2005, with a treatise on the evolution of *Erynnis*, and a note on new terminology for mate-locating behavior, J. Scott, 74 p., $10.00; #15, Building the California Academy Drawer, J. Scott, 40 p., $6.00; #16, Portable (six drawer) cabinets for California Academy Drawers, J. Scott, 10 p., $1.50; #17, Proposals for a new INSECT STUDY, COMMERCE, AND CONSERVATION LAW that deregulates dead insects, and proposals for fixing the Endangered Species Act as applied to insects, J. Scott, 17 p., $3.50. #12-17 $38, #1-17 $69, postpaid in U.S. (add $2 abroad, foreign orders please send International Postal Money Order in dollars), James Scott, 60 Estes St., Lakewood, Colorado 80226-1254 482

Livestock

Eggs/Cocoons of northeastern North American Saturniidae, available at various times. *Actias luna*, *Automeris io*, *Antheraea polyphemus*, *Callosamia angulifera*, *Callosamia promethea*, *Citheronia regalis*, *Hyalophora cecropia*, *Hyalophora columbia*, *Samia cynthia* and various butterflies and Sphingidae. Bill Oehlke, Box 476, Mointague, PEI, C0A 1R0, Canada, (902) 835-3455, ***oehlkew@islandtelecom.com*** 481

For Sale: Cocoons of Hylaphora cecropia and Callosamia promethea. Larvae were reared at a low population density on Wild Cherry. Email or SASE for prices. Ed Komperda 111 Crestmont Road Greene, NY 13778 **BigEdK7@aol.com** 482

For Sale: Cocoons (pupae) of *Saturnia walterorum* (Saturniidae) from

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

No mention may be made in any advertisement in the **News** of any species on any federal threatened or endangered species list. For species listed under CITES, advertisers must provide a copy of the export permit from the country of origin to buyers. **Buyers must beware and be aware.**

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.**

Note: All advertisements must be renewed before the deadline of the third issue following initial placement 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. ***Renew it Now!***

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

Send all advertisements to the Editor of the News!

The Lepidopterists' Society and the Editor take no responsibility whatsoever for the integrity and legality of any advertiser or advertisement. Disputes arising from such notices must be resolved by the parties involved, outside of the structure of The Lepidopterists' Society. Aggrieved members may request information from the Secretary regarding steps which they may take in the event of alleged unsatisfactory business transactions. A member may be expelled from the Society, given adequate indication of dishonest activity.

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

Southern California. Send SASE for prices. Will consider trades for desired specimens like *Saturnia pavonia* (Saturniidae) and *Graellsia isabellae* (Saturniidae) from Europe, *Stigmodera murrayi* (Coleoptera - Buprestidae) from Australia, and others. Richard Priestaf 833 La Roda Ave., Santa Barbara, CA USA 93111 483

Specimens

For Exchange: Ornithoptera, Troides, Papilio, Parnassius, Charaxes, Prepona, Hepialidae. I need Australian rare beetles. yoshiaki FURUMI 97-71 komizo, Iwatsuki-Shi, Saitama-Ken, 339-0003 JAPAN. 482

Wanted: I am looking for spread (very good to perfect) specimens of Queen Alexandra's Birdwing (Ornithoptera alexandrae) - pair, and Hercules Moth (Coscinocera hercules) - pair. They will be used in educational rainforest lepidoptera presentations that are presently enjoyed by over 5,000 school children annually. Steve Fratello 11 First St., W. Islip, NY 11795 USA (631) 321-1509. 482

For Sale or Trade: Saturnids, Sphingids, several butterfly spp., and Coleoptera native to Central New York State. Email or SASE for list. Want to trade for Saturnids, Parnassians, Papilio and Coleoptera not native to northeastern United States. Ed Komperda 111 Crestmont Road, Greene, NY 13778 **BigEdK7@aol.com** 482

Offered for sale or exchange: Charaxes, Papilionidae and many more African lepidoptera. Numerous aberrations, sexual mosaics and gyandromorphs also available. List and pictures on request. Wanted: South America *Prepona*. Giancarlo Veronese, viale Venezia 138,33100 Udine (Italia). ***gc.veronese@virgilio.it***, Fax: ++39/ 0432-23 2654. 481

Equipment

Light Traps, 12 volt DC or 110 volt AC with 18 inch length (15 & 25 Watt) and 24 inch length (20 & 40 Watt). All with 365 Quantum black light bulbs. Rigid vane assembly of stainless steel, aluminum or plexiglass. The traps are portable and easy to use. Rain drains and beetle screens to protect specimens from damage. For info contact; Leroy C. Koehn, 522 Stillwater Drive, Winterville, NC 28590-9704; Tel: 252-321-8645; ***Leptraps@ aol.com*** 481

Bait Traps, 15" Diameter, 36" tall collapsible traps with cloth top and plastic coated nylon screen and supported with 3/16 steel rings. A plywood platform is suspended with eye bolts and S-hooks. The bait container is held in place by a retainer. Three types are available: Flat Bottom, Invert funnel and Tropical. For info contact; Leroy C. Koehn, 522 Stillwater Drive, Winterville, NC 28590-9704; Tel: 252-321-8645; ***Leptraps@aol.com*** 481

Flourescent Collecting Lights: UV Night Collecting Light. Units are designed with the ballast enclosed in a weather tight cast aluminum enclosure and the flourescent bulbs in a clear shatter proof tube Leroy C. Koehn, 522 Stillwater Drive, Winterville, NC 28590-9704; Tel: 252-321-8645; ***Leptraps@aol.com*** 481

Mercury Vapor Collecting Lights: 160 Watt & 250 Watt MV Self Ballast bulbs with medium base mounts. Light weight and idea for trips out of the country. Leroy C. Koehn, 522 Stillwater Drive, Winterville, NC 28590-9704; Tel: 252-321-8645; ***Leptraps@aol.com*** 481

Miscellaneous

World'sLargest Saturniidae Site: a private online membership depicting over 1300 species of worldwide Saturniidae. State by state, country by country checklists, flight times, rearing data,etc.. One time life membership fee of $40.00 U.S. Details at: ***http://www.silkmoths.bizland.com/indexos.htm*** 481

LepSoc 2006 Memorabilia:There are still a few t-shirts and some photographs available from the recent Annual Meeting of the combined Lepidopterists' Societies meetings. If you are interested, the t-shirts are available at $15 each (+ $4.05 post) and photos are $2.50 ($1.00 postage). Please your check to Dr. Jackie Miller, McGuire Center for Lepidoptera and Biodiversity, University of Florida, P. O. Box 112710, Gainesville, FL 32611-2710

Wanted: I would be interested to acquire the first 38 volumes of the Journal (of the Lepidopterists' Society). I would gladly pay for mailing to an address in Canada, at least. Bernard Landry; Tel.: +41 22 418 6342 483

bernard.landry@ville-ge.ch."

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Butterfly Diversity in a Suburban-yard Arthropod Preserve in Eastern United States Compared to Regional Diversity

Edward M. Barrows

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Abstract

Butterfly habitat in farmlands and natural areas is shrinking as urban sprawl is expanding in many parts of the world. In view of that land-use change, this study records the butterfly species richness and abundance in a suburban-yard arthropod preserve in eastern United States. Further this study compares the preserve's butterfly diversity with that of the preserve's metropolitan region of about 4,00,000-km2, the Washington, D.C., Area (WDCA), which comprises urban, suburban, farmland, and natural areas. Forty-four (13 uncommon and 31 common WDCA species) of the 104 known WDCA butterfly species appeared in the preserve during 12 flight seasons. Twenty-five (57%) of the 44 yard species had the same abundances (either common or uncommon) as those from the entire WDCA. The preserve had significantly more WDCA common species than uncommon ones. At least eight species had larvae in the preserve, including the WDCA-uncommon Battus philenor Linnaeus.

Introduction

Farmland and natural-area butterfly habitats are shrinking as urban sprawl is expanding worldwide. In view of this land-use change, Schneck (1992) and Boring et al. (1997), for example, recommend wildlife gardens to help maintain Earth's biodiversity, including arthropods. To celebrate, promote, and learn more about these little-known animals, I maintain my surburban yard as a biotically-rich preserve emphasizing them. Others who maintain, or have maintained, their yards as arthropod preserves include Owen (1991), Grissell (2001), and Richman (2006a, b, c).

My report records the butterfly species richness and abundance in my arthropod preserve, and it compares the preserves's butterfly diversity with the preserve's metropolitan region of about 4,000,000-km2, the Washington, D.C., Area (WDCA). It comprises urban, suburban, farmland, and natural areas. Butterflies are common insects in many suburban areas and other habitats where they have many ecological roles including being food for other organisms, cannibalism, herbivory (including nectivory, phytosuccivory, and pollinivory), pollination, predation, and scavenging (including medivory and zoosuccivory) (Opler and Krizek 1984, Preston-Mafham and Preston-Mafham 1988). Further, butterflies inspire art, butterfly gardening, conservation, curiosity, delight, imagination, literature, music, and research. My study found 42% of the 104 WDCA butterfly species, a bias toward common WDCA butterflies, and eight species that produced larvae in the preserve.

Materials and Methods

My 1045-m2 study preserve (NAD83.38.95798°N77.12435°W; UTM 18) is in Bethesda, Maryland, in the Piedmont Province, Mid-Atlantic Region, Eastern United States. The preserve is about 0.00000003% of the Washington, D.C., Area (WDCA), comprising Washington, D.C., surrounding counties in Maryland and Virginia and the City of Alexandria, Virginia (a total of 3,942,000-km2). I maintain a large plant diversity in the small preserve, and it had at least 587 plant species during the study period, including many species used by butterflies for larval and adult food. The plants included 115 species of local native plants (Shetler and Orli 2000, 2002), 192 species of plants native to the contiguous U.S. (Fernald 1950, United States Department of Agriculture 2006), and 280 exotic species, including widespread "weed" species. The preserve's surrounding neighborhood, which is not maintained as an arthropod preserve, has a great diversity of plants including large trees of Acer spp. (Aceraceae), Carya spp. and Juglans nigra L. (Juglandaceae), Liriodendron tulipifera L. (Magnoliaceae), Pinus spp. (Pinaceae), Quercus spp. (Fagaceae), and Tsuga canadensis (L.) Carr. (Pinaceae). Neighborhood yards include highly manicured, overgrown, and wooded ones. The neighborhood's total plant richness is unknown; however, 2,794 species of native and naturalized vascular plants (of which 36% are exotic species) occur in the vicinity of Baltimore, Maryland and Washington, D.C. (Shetler and Orli 2000, 2002). The study preserve slopes downward about 6 m from its front (west side) to its back (east side), and the lowest part of the preserve is moist throughout the growing season except in extreme drought years such as 1999.

For 12 noncontinuous years (1987–1994, 1999–2004), I recorded the species and numbers of butterflies in the in the

preserve, searching for butterflies during sunny periods at least 2 hr per week during most weeks in March, April, May, September, October, and November and at least 5 hr per week in June, July, and August during almost every week of each year. To identify butterflies I used Opler and Krizek (1984), Glassberg (1999), and Wright and Pavulann (1999).

I compared study-preserve butterfly species and abundances to the online list of butterflies of the WDCA presented by the Washington Area Butterfly Club by Smith (2006). He based his list on many personal observations made in the WDCA since 1975 and information that he obtained from species lists and other references (Richard H. Smith, personal communication, 2005). He scores a species as "abundant" in the WDCA if he found 10, or more, individuals during a single visit to its habitat when adults are likely to be in peak numbers; "common," 3–9 adults; "uncommon," 1–2 adults; "rare," rarely seen; and "extirpated," 0 adults seen in the WDCA in the last 5 yr.

To reduce estimation error, I assigned "uncommon" to preserve butterfly species that had 1–2 adults and "common" to species that had 3 or more adults per year for any one year of the study years (Table 1). For X2 analysis, I grouped Smith's rare and uncommon species into an "uncommon" category and his common and abundant species into a "common" category. Although I found about 10 larvae of Battus philenor Linnaeus (Papilionidae) in my preserve in 2003, I scored that species as uncommon because I saw no more than 2 adults in the preserve in any study year. To test the null hypothesis that common species occurred at the same frequency in the preserve and WDCA, I used the X2 test program in Conner-Linton (2006).

Results and Discussion

I saw 44 (42%) of the 104 WDCA species in the preserve. The species comprised 31 (79%) of the 39 WDCA common species and 13 (20%) of the 64 WDCA uncommon species (Table 1). All preserve species were in Smith's (2006) list of WDCA butterflies. Of the 44 preserve species, 25 (57%) had abundances (common or uncommon) that were the same as those from the WDCA. About 30 species in Table 1 are rare and local, require food plants and habitats that are not in my preserve or neighborhood, are probably extirpated, or a combination of these things; therefore, they are highly unlikely to occur in my preserve (P. M. Durkin, personal communication, 2005). However, I include those species in the list to make a complete comparison of my preserve with WDCA butterflies. Further, I saw some skippers that I could not approach close enough to identify, and they may be species not included in the 44 preserve species.

The preserve had 13 uncommon species, including Asterocampa clyton (Boisduval & LeConte), Enodia anthedon Clark (Nymphalidae), and Callophrys henrici (Grote and Robinson) (Lycaenidae). I saw five of the preserve species only once during the study period — Asterocampa clyton, Callophrys henrici, Enodia anthedon, Nymphalis antiopa (Linnaeus) (Nymphalidae), and Phoebis sennae eubule (Linnaeus) (Pieridae). The preserve had significantly more WDCA common species than uncommon ones compared to the total 104 WDCA species (X2 = 13.13, P £ 0.001). The Celastrina individuals that I saw within 0.3 m, photographed, or both were all C. neglecta (Edwards). However, there were many Celastrina that flew in the preserve that I did not photograph or see at close range, and some of them might have been C. idella (Wright and Pavulann), C. ladon (Cramer), or both. Smith (2006) has not yet added Celastrina idella, which occurs in Fairfax County, Virginia (Wright and Pavulaan 1999) and Amblyscirtes hegon (Scudder), which occurs in the WDCA to his online list (R. H. Smith, personal communication, 2005).

The preserve had recorded food plants of at least 54 (52%) of the 104 WDCA butterfly species (Opler and Krizek 1984). Butterfly food plants (e.g., many grass species) that do not occur in the preserve do occur within 1 km of the preserve. Because food plants of many butterflies species are incompletely known, the preserve could have had food plants of more than 54 local butterfly species.

I found larvae of eight species (8% of the total of 104 WDCA species) in the preserve. Battus philenor L., a WDCA uncommon species, had about 30 larvae 1998 and several larvae in 2003 on the preserve's Aristolochia durior Hill (Pipevines). Since 1992 when I planted the A. durior, I saw B. philenor larvae on the vines in only those 2 yr.

In another study of yard butterflies, Jennifer Owen (1991) recorded 21 butterfly species in her yard's garden based on hand-collected and Malaise-trap samples from 1972 through 1979 in Leicestershire, U.K. Only four pierid species had larvae in her garden. Other researchers recorded a total of 27 butterfly species in Leicestershire in the 1980s. Therefore, she found 78% of the town's recently-known butterfly species in her garden.

In conclusion, a small preserve, managed to harbor high arthropod diversity, can have at least 42% of the butterfly species within its approximately 4-million-km2 regional area. The preserve had both uncommon (including rare) and common (including abundant) butterflies of its regional area. The preserve had 13 regionally uncommon species including two regionally rare, local species (Asterocampa clyton and Enodia anthedon) and one regionally rare species (Callophrys henrici).

In the WDCA, many yards are "well-groomed" and consequently suffer from low arthropod "friendliness." Many yards have carpet-like, pesticide-treated lawns; thick mulch layers; and predominately exotic ornamental plants. Those yards evidently are aesthetically pleasing to some people,

but are ecological disasters for native butterflies and other animals. If more people in the WDCA were to manage yards to promote biotic diversity, population sizes of butterflies and other desirable animals may increase. Further, it would be useful to monitor butterflies in many yards worldwide to investigate their butterfly diversities and value for butterfly conservation.

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Table 1. Abundance scoring of butterflies of the Washington, D.C., (WDCA) and number of uncommon and common species.

Smith's (2006) abundance categories	Definition[a]	Smith's (2006 combined categories	Number of uncommon and common WDCA species[b]	This study's abundance categories	Definition[c]	Number of uncommon and common preserve species
rare (R)	rarely seen	uncommon	63	-		
uncommon (U)	1-2 adults	uncommon		uncommon	1-2 adults	13
common (C)	3-19 adults	common	39	common	>3 adults	31
abundant (A)	>19 adults	common		-		

[a]Smith (2006) defines abundance categories based on the highest number of observed adults of a species at a particular site during the main part of its flight period on any sample day during his study.

[b]Smith (2006) lists a total of 102 butterfly species; *Amblyscirtes hegon* and *Celastrina idella* are not yet in his list.

[c]This paper defines abundance categories based on the highest number of observed adults of a species during any sampling day during my study.

TABLE 2. Abundances of the 104 butterflies of the Washington, D.C., Area (WDCA) and the study preserve and the presence of butterfly larval food plants (FP) in the preserve.

Species	Common name	Family	Abundance		
			WDCA[a]	*Preserve*	*FP*
Achalarus lyciades (Geyer)	Hoary Edge	Hesperiidae	U(U)	0	
Amblyscirtes hegon (Scudder)	Pepper-and-salt Skipper	Hesperiidae	–	0	yes
Amblyscirtes vialis (Edwards)	Common Roadside Skipper	Hesperiidae	U(R)	0	yes
Anatrytone logan (Edwards)	Delaware Skipper	Hesperiidae	U(R)	0	
Ancyloxypha numitor (Fabricius)	Least Skipper	Hesperiidae	C(C)	U	yes
Anthocharis midea (Hübner)	Falcate Orange tip	Pieridae	U(U)	0	yes
Asterocampa celtis (Boisduval & LeConte)	Hackberry Emperor	Nymphalidae	U(U)	U	yes
Asterocampa clyton (Boisduval & LeConte)	Tawny Emperor	Nymphalidae	U(U)	U	yes
Atalopedes campestris (Boisduval)	Sachem	Hesperiidae	C (A)	C	yes
Atrytonopsis hianna (Scudder)	Dusted Skipper	Hesperiidae	U(R)	0	
Autochton cellus (Boisduval & LeConte)	Golden-banded Skipper	Hesperiidae	U(E?, R)	0	
Battus philenor Linnaeus	Pipevine Swallowtail	Papilionidae	U(U)	U	yes
Boloria bellona (Fabricius)	Meadow Fritillary	Nymphalidae	U(U)	0	
Callophrys augustus (Kirby)	Brown Elfin	Lycaenidae	U(R)	0	yes
Callophrys henrici (Grote & Robinson)	Henry's Elfin	Lycaenidae	U(U)	U	
Callophrys irus (Godart)	Frosted Elfin	Lycaenidae	U(R)	0	yes
Callophrys niphon (Hübner)	Eastern Pine Elfin	Lycaenidae	U(U)	0	yes
Calycopis cecrops (Fabricius)	Red-banded Hairstreak	Lycaenidae	C(C)	C	yes
Celastrina idella Wright & Pavulann	Holly Azure	Lycaenidae	–	0	yes
Celastrina ladon (Cramer)	Spring Azure	Lycaenidae	C (A)	0	yes
Celastrina neglecta (Edwards)	Summer Azure	Lycaenidae	C(C)	C	yes
Celastrina neglecta-major (Tutt)	Appalachian Azure	Lycaenidae	U(R)	0	
Cercyonis pegala (Fabricius)	Common Wood Nymph	Nymphalidae	C(C)	0	
Chlosyne nycteis *(Doubleday & Hewitson)*	*Silvery Checkerspot*	*Nymphalidae*	*U(U)*	*0*	
Colias eurytheme Boisduval	Orange Sulphur	Pieridae	C (A)	U	yes
Colias philodice Godart	Clouded Sulphur	Pieridae	C (A)	C	yes
Cyllopsis gemma (Hübner)	Gemmed Satyr	Nymphalidae	U(R)	0	
Danaus plexippus (Linnaeus)	Monarch	Nymphalidae	C(C)	C	yes
Enodia anthedon Clark	Northern Pearly Eye	Nymphalidae	U(U)	U	yes
Epargyreus clarus (Cramer)	Silver-spotted Skipper	Hesperiidae	C (A)	C	yes
Erynnis baptisiae (Forbes)	Wild Indigo Duskywing	Hesperiidae	C(C)	0	yes
Erynnis brizo (Boisduval & LeConte)	Sleepy Duskywing	Hesperiidae	U(R)	0	
Erynnis horatius (Scudder & Burgess)	Horace's Duskywing	Hesperiidae	C(C)	U	
Erynnis icelus (Scudder & Burgess)	Dreamy Duskywing	Hesperiidae	C(C)	0	yes
Erynnis juvenalis (Fabricius)	Juvenal's Duskywing	Hesperiidae	C (A)	0	yes
Erynnis zarucco (Lucas)	Zarucco Duskywing	Hesperiidae	U(R)	0	yes
Eurema lisa Boisduval & LeConte	Little Sulphur	Pieridae	U(R)	0	
Eurema nicippe (Cramer)	Sleepy Orange	Pieridae	U(R)	0	
Eurytides marcellus (Cramer)	Zebra Swallowtail	Papilionidae	C(C)	C	yes
Euphydryas phaeton (Drury)	Baltimore Checkerspot	Nymphalidae	U(U)	0	
Euphyes bimaculata (Grote and Robinson)	Two-spotted Skipper	Hesperiidae	U(R)	0	
Euphyes dion (Edwards)	Dion Skipper	Hesperiidae	U(U)	0	
Euphyes ruricola metacomet (Harris)	Dun Skipper	Hesperiidae	C(C)	U	yes
Euptoieta claudia (Cramer)	Variegated Fritillary	Nymphalidae	U(U)	U	yes
Everes comyntas (Godart)	Eastern-tailed Blue	Lycaenidae	C (A)	C	yes
Feniseca tarquinius (Fabricius)	Harvester	Lycaenidae	U(R)	0	yes
Fixsenia favonius (J. E. Smith)	Southern Hairstreak	Lycaenidae	U(U)	0	
Hesperia leonardus Harris	Leonard's Skipper	Hesperiidae	U(R)	0	
Hesperia media Scudder	Cobweb Skipper	Hesperiidae	U(R)	0	
Hylephia phyleus (Drury)	Fiery Skipper	Hesperiidae	U(U)	U	
Junonia coenia Hübner	Common Buckeye	Nymphalidae	C(C)	0	yes
Lerema accius (J. E. Smith)	Clouded Skipper	Hesperiidae	U(U)	0	
Libytheana carinenta carinenta (Kirkland)	American Snout	Nymphalidae	U(U)	0	yes
Limenitis archippus (Cramer)	Viceroy	Nymphalidae	C(C)	U	yes
Limenitis arthemis astyanax (Fabricius)	Red-spotted Purple	Nymphalidae	C(C)	U	yes
Lycaena hyllus (Cramer)	Bronze Copper	Lycaenidae	U(R)	0	
Lycaena phalaeas (Linnaeus)	American Copper	Lycaenidae	C(C)	0	
Megisto cymela (Cramer)	Little Wood Satyr	Nymphalidae	C(C)	0	
Mitoura grynea grynea (Hübner)	Olive Hairstreak	Lycaenidae	U(U)	0	yes
Nastra lherminier (Latreille)	Swarthy Skipper	Hesperiidae	U(U)	0	

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57th Annual Meeting of the Lepidopterists' Society co-hosted with the Southern Lepidopterists' Society and the Association for Tropical Lepidoptera McGuire Center for Lepidoptera & Biodiversity, Gainesville, Fl. June 14-18, 2006

Group Photo Key

1. Gary Anweiler, **2.**Chuck Harp, **3.** John Douglass, **4.**Dan Stillwaugh, **5.**Astrid Caldas, **6.**Bob Robbins, **7.**Ernest Williams, **8.**Bill Conner, **9.**Làzaro Roque, **10.**Kim Garwood, **11.**Bob Belmont, **12.**Tom Emmel, **13.**Ulf Eitschberger, **14.**Daniel Glaeske, **15.**Lyndall Brezina **16.**Christian Salcedo,**17.**Amanda Roe, **18.**JamesAdams, **19.**Sang Mi Lee, **20.**Edda Martinez, **21.**Carmen Pozo, **22.**Armando Luis-Martinez, **23.**John Beck, **24.**Brian Scholtens, **25.**Bob Borth, **26.**Hugh McGuinness, **27.**Steve Muller, **28.**Suzette Slocomb, **29.**Steve Fratello, **30.**Joaquin Baixeras, **31.**Krushnamegh Kunte, **32.**Jim Taylor, **33.**Michael Fibiger, **34.**Emily Saarinen, **35.**Ryan Runquist, **36.**John Calhoun, **37.**Deborah Matthews Lott, **38.**Jon "Buck" Lewis, **39.**Eleaner Adams, **40.**Mindy Conner, **41.**John Burns, **42.**Don Davis, **43.**Mignon Davis, **44.**Irving Finkelstein, **45.**Jim Miller, **46.**Eric Quinter, **47.**Jane O'Donnell, **48.**Ruth Ann Peacock, **49.**Jeff Slotten, **50.**Rich Gilmore, **51.**Alma Solis, **52.**Martha Weiss, **53.**Barbara Eisele, **54.**Bob Eisele, **55.**Jeanne Leuschner, **56.**Catalina Estrada, **57.**Kathy Wildman, **58.**Mirna Casagrande, **59.**Olaf Mieke, **60.**Karolis Bagdonas, **61.**Kelly Richers, **62.**Andy Warren, **63.**Robert Dirig, **64.**Marie Djernaes, **65.**Jean-Francois Landry, **66.**Joy Anne Cohen, **67.**Jim Wiker, **68.**Susan Weller, **69.**John Peacock, **70.**Andreas Zwick, **71.**Alfred Moser, **72.**Patricia Lussey, **73.**Reed Watkins, **74.**Don Lafontaine, **75.**Erick Runquist, **76.**Ron Rutkowski, **77.**Chris Schmidt, **78.**Betsy Betros, **79.**Thomas J. Simonsen, **80.**David Lawrie, **81.**Tor Hansen, **82.**Karl Gardner, **83.**Unknown, **84.**William Tippitt, **85.**Edgar A. Cohen, Jr., **86.**Michelle DaCosta, **87.**Leland Tippitt, **88.**Fred Stehr, **89.**John Fazzini, **90.**Joseph Scheer, **91.**Michito Watanabe, **92.**Richard Brown, **93.**Akers Pence, **94.**Sally Warren, **95.**Eric Lind, **96.**Dan Rubinoff, **97.**Sarah Burns, **98.**J. D. Turner, **99.**Felix Sperling, **100.**Paul Goldstein, **101.**Michael Lockwood, **102.**Jen Zaspel, **103.**Unknown, **104.**Bruce Wiley, **105.**Michael Lefort, **106.**Unknown, **107.**Monica Miller, **108.**Unknown, **109.**Linda Fink, **110.**Dave Wagner, **111.**Michael Holy, **112.**Missed Number, **113.**John Wenzel, **114.**Unknown, **115.**Malcolm Douglas, **116.**Sarah Garrett, **117.**Ken Bliss, **118.**Bill Miller, **119.**Daniel Hyman, **120.**James Dunford, **121.**Julieta Brambila, **122.**Michael Rich, **123.**Mike Toliver, **124.**Bernard Landry, **125.**Thomas Neal, **126.**John Masters, **127.**Lee Miller, **128.**Delano Lewis, **129.**Julian Donahue, **130.**Deane Bowers, **131.**Ron Leuschner, **132.**John Nelson, **133.**Peter Prescott, **134.**Bret Boyd, **135.**John Hyatt, **136.**Lincoln Brower, **137.**Todd Gilligan, **138.**Barbara Laudan, **139.**Soowon Cho, **140.**Gerald Burnett, **141.**Akito Kawahara, **142**Bob Pyle, **143.**Ian Segebarth, **144.**Jason Dombroski, **145.**Charlie Covell, **146.**Keith Willmott, **147.**Jason Hall, **148.**Missed number, **149.**Becky Simmons, **150.**Kevin Simmons, **151.**John Brown, **152.**Betty Koehn, **153.**Richard Anderson, **154.**Jackie Miller.

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Butterfly Diversity in a Suburban-yard....*continued from pp. 87*

TABLE 2 (continued). Abundances of the 104 butterflies of the Washington, D.C., Area (WDCA) and the study preserve and the presence of butterfly larval food plants (FP) in the preserve.

Species	Common name	Family	Abundance		
			WDCA[a]	*Preserve*	*FP*
Nymphalis antiopa (Linnaeus)	Mourning Cloak	Nymphalidae	C(C)	U	yes
Oligoria maculata (Edwards)	Twin-spot Skipper	Hesperiidae	U(R)	0	
Panoquina ocola (Edwards)	Ocola Skipper	Hesperiidae	U(U)	0	
Papilio cresphontes Cramer	Giant Swallowtail	Papilionidae	U(R)	0	yes
Papilio palamedes (Drury)	Palamedes Swallowtail	Papilionidae	U(R)	0	
Papilio polyxenes asterius (Stoll)	Black Swallowtail	Papilionidae	C(C)	U	yes
Papilio troilus Linnaeus	Spicebush Swallowtail	Papilionidae	C(C)	C	yes
Parrhasius m-album (Boisduval & LeConte)	White M Hairstreak	Lycaenidae	U(U)	0	
Phoebis sennae eubule (Linnaeus)	Cloudless Sulphur	Pieridae	U(U)	U	
Pholisora catullus (Fabricius)	Common Sootywing	Hesperiidae	C(C)	U	
Phyciodes tharos (Drury)	Pearl Crescent	Nymphalidae	C (A)	C	yes
Pieris rapae (Linnaeus)	Imported Cabbage Butterfly	Pieridae	C (A)	C	yes
Poanes hobomok (Harris)	Hobomok Skipper	Hesperiidae	U(U)	0	yes
Poanes massasoit (Scudder)	Mulberry Wing	Hesperiidae	U(R)	0	
Poanes viator (Edwards)	Broad-winged Skipper	Hesperiidae	U(U)	0	
Poanes zabulon (Boisduval & LeConte)	Zabulon Skipper	Hesperiidae	C(C)	U	
Polites coras (Cramer)	Peck's Skipper	Hesperiidae	C(C)	C	
Polites origines (Fabricius)	Crossline Skipper	Hesperiidae	C(C)	0	
Polites themistocles (Latreille)	Tawny-edged Skipper	Hesperiidae	U(U)	U	
Polygonia comma (Harris)	Comma	Nymphalidae	C(C)	U	yes
Polygonia interrogationis (Fabricius)	Question Mark	Nymphalidae	C(C)	U	yes
Pompeius verna (Edwards)	Little Glassywing	Hesperiidae	C(C)	U	
Pontia protodice Boisduval & LeConte	Checkered White	Pieridae	U(R)	0	yes
Pterourus glaucus Linnaeus	Tiger Swallowtail	Papilionidae	C (A)	C	yes
Pyrgus communis (Grote)	Common Checkered Skipper	Hesperiidae	U(U)	U	
Satyrium calanus (Hübner)	Banded Hairstreak	Lycaenidae	U(U)	U	yes
Satyrium edwardsii (Grote and Robinson)	Edwards' Hairstreak	Lycaenidae	U(R)	0	
Satyrium liparops (LeConte)	Striped Hairsteak	Lycaenidae	U(R)	0	yes
Satyrium titus (Fabricius)	Coral Hairstreak	Lycaenidae	U(U)	0	
Satyrodes appalachia (R. L. Chermock)	Appalachian Eyed Brown	Nymphalidae	U(U)	0	
Speyeria cybele (Fabricius)	Great Spangled Fritillary	Nymphalidae	C(C)	U	yes
Speyeria idalia (Drury)	Regal Fritillary	Nymphalidae	U(E?, R)	0	
Staphylus hayhurstii (Edwards)	Hayhurst's Scallopwing	Hesperiidae	U(U)	U	
Strymon melinus (Hübner)	Gray Hairstreak	Lycaenidae	C(C)	C	yes
Thorybes bathyllus (J. E. Smith)	Southern Cloudywing	Heperiidae	U(U)	U	
Thorybes confusis Bell	Confused Cloudywing	Hesperiidae	U(E?, R)	0	
Thorybes pylades (Scudder)	Northern Cloudywing	Hesperiidae	U(U)	0	
Thymelicus lineola (Ochsenheimer)	European Skipper	Hesperiidae	U(U)	0	yes
Urbanus proteus (Linnaeus)	Long-tailed Skipper	Hesperiidae	U(R)	0	
Vanessa atalanta rubria (Fruhstorfer)	Red Admiral	Nymphalidae	C(C)	U	
Vanessa cardui (Linnaeus)	Painted Lady	Nymphalidae	U(U)	U	yes
Vanessa virginiensis (Drury)	American Painted Lady	Nymphalidae	C(C)	0	yes
Wallengrenia egeremet (Scudder)	Northern Broken Dash	Hesperiidae	C(C)	0	
Wallengrenia otho (J. E. Smith)	Southern Broken Dash	Hesperiidae	U(R)	0	

[a]The WDCA list is from Smith (2006) with my addition of Amblyscirtes hegon *and* Celastrina idella. *A = abundant; C = common; E? = possibly extirpated; R = rare; U = uncommon.*

In Quest Of*...continued from pp. 81*

Special thanks to Mary Barkkari, Fred Klusmann, Isaac Salinas, Daniel Drogue and the staff at Weslaco Nature Center for their untiring work monitoring traps over many months. Livestock for this study was generously donated by Janine Weast Searcy, Don Adams, Bev. Powers, Tom Tewskbury, Chuck Finucane and Bruce Passareli.

Literature Cited

Gillaspy, J.E. 1977. Antheraea polyphemus (Saturniidae) and Biblis Hyperia (Nymphalidae) in Texas. Journal of the Lepidopterists' Society, vol 31, no. 3.

Tuskes, P.M., J.P.Tuttle & M.M. Collins. 1996. The wild silk moths of North America: a natural history of the Saturniidae of the United States and Canada. Cornell University Press, Ithaca, New York.

Membership*...continued from pp. 79*

substantially, but we have still averaged 77 new members per year since. These numbers would provide for modest growth, if it were not for a very high attrition rate.

Floyd Preston studied Society membership records and reported in January 2004 that 33.3% of new members were dropping out after their first year of membership and 48.3% (essentially half) resigned, or were dropped, after only two years of membership. Studies that I have put together show essentially the same thing. My conclusion is that our problem of sinking membership is due more to attrition than to recruitment. My studies of the membership records also indicate that the average membership life, for Society members, has been 21.8 years and that membership retention was not a problem at all in the early years.

There are a lot of viewpoints and conflicting opinions regarding solutions for the membership problem. Like many others, I have opinions, but I don't pretend to have answers. I do feel, however, that all in the Society should be aware and concerned regarding this problem.

Corrections

Steve Fratello

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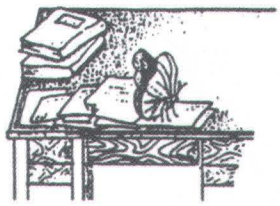
In the last issue, Volume 48, Number 2, the name attached to the *Asterope* photo on the back page was inadvertently given as *Asterope hewitsoni*. This is the same species and even possibly the same butterfly as on the cover, *Asterope markii*. *Asterope markii hewitsoni* Staudinger is the Western Amazonian race of the species and the race that is found in Yasuni but since I chose not to associate subspecific names with Steve Graser's photos, both photos should have had the name *Asterope markii*.

In Volume 47, Number 1, in "An Expedition to Guyana's Acarai Mts....", the following information pertains to **An Unusual Undescribed 'Euptychiine'**. Just after our annual meeting in Gainesville, I found two male specimens of this species while researching the *Euptychia* collection at the McGuire Center. The specimens were collected by C. Callaghan in 1976 in Brasil: Amazonas: Manicore. This is well before Andrew Neild discovered the species in Amazonian Venezuela and Manicore is on the Madeira River, south of the Amazon River and approximately 500 miles to the south of where the species was collected in both Venezuela and Guyana. The present known range is now expanded from northcentral to central Amazonas and it still seems the species is very rare in collections with none at the AMNH, only the recently collected Acarai specimens at the USNM and probably none in the BMNH.

From the Editor's Desk

Dale Clark



The leaves are falling and in the northern hemisphere the lepidoptera season is pretty much winding down, and that always brings with it a tiny bit of melancholy. As someone recently reminded me, time marches on. This year it has pretty much trampled me underfoot. It seems inconceivable to me that the year has slipped away and I'm already scrambling to meet the deadline for the Winter issue. ((Phil, you did this for **nine** years?!))

Which brings me to the pitch. You knew there had to be a pitch, didn't you? If you've got an article, photo or letter of comment, now is the time to send it in. Don't even bother to finish reading this -- I won't be offended -- just send those submissions in **now**.

I was very pleased by the response from last issues request that if you've got photos of aberrant specimens (either on a pin or in the field) to send them in for others to enjoy. Just turn the page to see some of those submissions...and keep 'em coming!

One of my favorite features in *The News* is missing this issue -- The Mailbag. This is the perfect forum for members to 'cuss and discuss' what goes on in these pages, so feel free to offer a critique of an article, or for that matter, the state of *The News* in general (I've got thick skin).

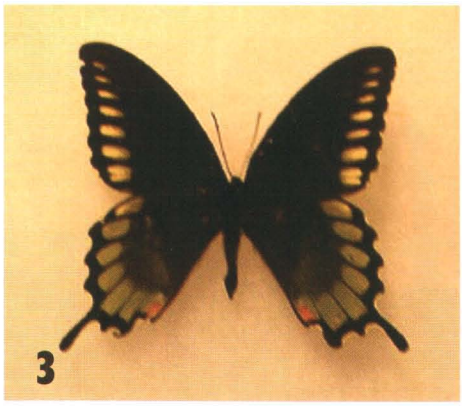
I want to hear from you.

Dale Clark

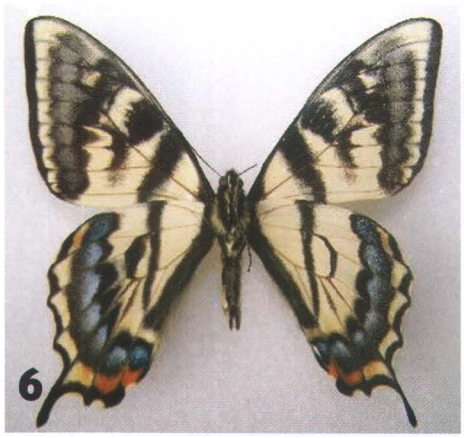
daleclark@dallasbutterflies.com

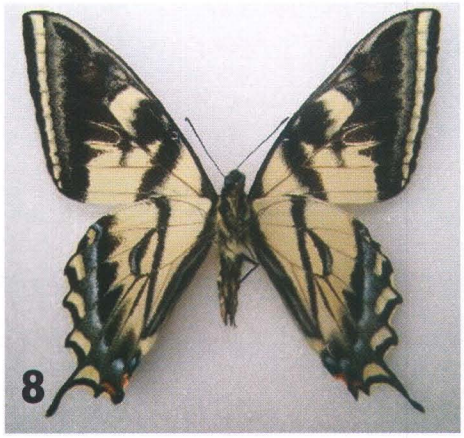
Aberrants...not your normal butterflies.

1) Dorsal and **2)** ventral view of a melanic male Orange Sulphur (*Colias eurytheme*)collected by Arthur Shapiro on July 30, 2006. For more details see "A Melanic Colias eurytheme from Northern California" on pp. 77.

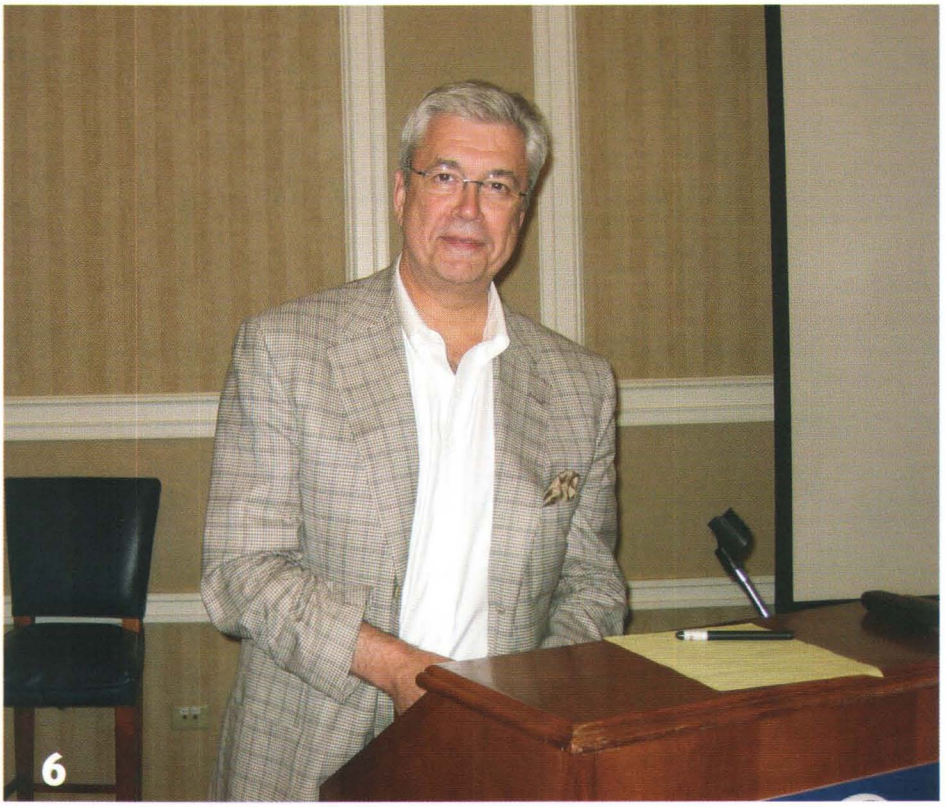


3) Dorsal and **4)** ventral of an aberrant Spicebush Swallowtail (*Pterorous troilus*) collected by Raymond Thomas at Fremont, Missouri on April 16, 2006. **5)** Dorsal and **6)** ventral view of the first of two specimens of Western Tiger Swallowtail (*Papilio rutulus*) collected by Matthew Garhart as they were "mudding" along Munsey Creek in Dark Canyon, Gunnison County, Colorado in 2004. **7)** Dorsal and **8)** ventral view of the second specimen. Whether aberrations are triggered at the genetic level or by sudden environmental fluctuation during pupation, they can certainly brighten up a dull day in the field. If you have aberrants in your collection and would like to share them with members, send a photo to the Editor.





More photos from the annual meeting of the Lepidopterists' Society



1)Suzzette Slocum and Tom Emmel; 2) Program Coordinator Jackie Miller shares a laugh with Sally Warren; 3)John Masters, Assistant Secretary, Julian Donahue and Susan Weller; 4)Ronda Spink and Jim Brock; 5) David Lawrie juggling into his new position as Secretary of the Society; 6) Bill McGuire speaking about the value of the McGuire Center for Lepidoptera and Biodiversity. All photos by Ranger Steve.

Membership

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

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

Dues Rate

Active (regular)	$ 45.00
Affiliate (same address)	10.00
Student	20.00
Sustaining	60.00
Contributor	100.00
Institutional Subscription	60.00
Air Mail Postage for **News**	15.00

Students must send proof of enrollment. Please add $ 5.00 to your Student or Active dues if you live outside of the U.S. to cover additional mailing costs. Remittances must be in U.S. dollars, payable to "The Lepidopterists' Society". All members receive the **Journal** and the **News** (each published quarterly). Supplements included in the **News** are the Membership Directory, published in even-numbered years, and the Season Summary, published annually. Additional information on membership and other aspects of the Society can be obtained from the Secretary (see address inside back cover).

Change of Address?

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

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Los Angeles, CA 90007-4057.
Julian@donahue.net

Our Mailing List?

Contact Julian Donahue for information on mailing list rental.

Missed or Defective Issue?

Requests for missed or defective issues should be directed to: Ron Leuschner (1900 John Street, Manhattan Beach, CA 90266-2608, (310) 545-9415, ***ron leusch@aol.com***). Please be certain that you've really missed an issue by waiting for a subsequent issue to arrive.

Memoirs

Requests for Memoirs of the Society should be sent to Publications Manager, Ken Bliss (address opposite).

Submissions of potential new Memoirs should be sent to:

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Computer Systems Office, Peabody Museum of Natural History, P. O. Box 208118, Yale University, New Haven, CT 06520-8118
lawrence.gall@yale.edu

Journal of the Lepidopterists' Society

Send inquiries to:

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(see address opposite)
miketol@eureka.edu

Book Reviews

Send book reviews or new book releases for the **Journal** to:

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*Send book reviews or new book releases for the **News** to the News Editor.*

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Submission Guidelines for the News

Submissions are always welcome! Preference is given to articles written for a non-technical but knowledgable audience, illustrated and succinct (under 1,000 words). Please submit in one of the following formats (in order of preference):

1. Electronically transmitted file and graphics—in some acceptable format —*via* e-mail.

2. Article (and graphics) on diskette, CD or Zip disk in any of the popular formats/platforms. Indicate what format(s) your disk/article/graphics are in, and call or email if in doubt. Include printed hardcopies of both articles and graphics, a copy of the article file in ASCII or RTF (just in case), and alternate graphics formats. Media will be returned on request.

3. Color and B+W graphics should be good quality photos or slides suitable for scanning or—preferably—electronic files in TIFF or JPEG format at least 1200 x 1500 pixels for interior use, 1800 x 2100 for covers. Photos or slides will be returned.

4. Typed copy, double-spaced suitable for scanning aand optical character recognition. Original artwork/maps should be line drawings in pen and ink or good, clean photocopies. Color originals are preferred.

Submission Deadlines

Material for Volume **48** must reach the Editor by the following dates:

Issue	Date Due
4 Winter	Oct.27, 2006
1 Spring	Feb. 9, 2007
2 Summer	May 11,2007
3 Autumn	Aug.10, 2007

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

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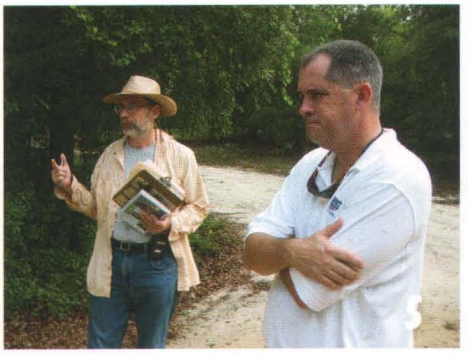

'06 Meeting Photos...

1) The McGuire Center's butterfly conservatory; **2)** Field trip participants take time out to pose for a picture before heading off into the Ordway Preserve in search of Florida leps; **3)** One of several Atlas moths just "hanging out" in the McGuire Center's conservatory; 4) Jim Wiker and Steve Fratello; **5)** Marc Minno, clipboard in hand, and Steve Coates head off into the Ordway Preserve; **6)** Paul Goldstein, Richard Brown and Alma Solis. All photos by Ranger Steve.

Information for the 2007 Annual Meeting to Bakersfield, CA will be in the Winter issue of the NEWS.