

# Southern Lepidopterists' **NEWS**

*Est. 1978*

*Official Newsletter of the Southern Lepidopterists' Society*

Vol 24 NO. 1

March 31, 2002

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THE OFFICIAL PUBLICATION OF THE SOUTHERN LEPIDOPTERISTS' SOCIETY  
ORGANIZED TO PROMOTE SCIENTIFIC INTEREST AND KNOWLEDGE RELATED TO  
UNDERSTANDING THE LEPIDOPTERA FAUNA OF THE SOUTHERN REGION OF THE  
UNITED STATES

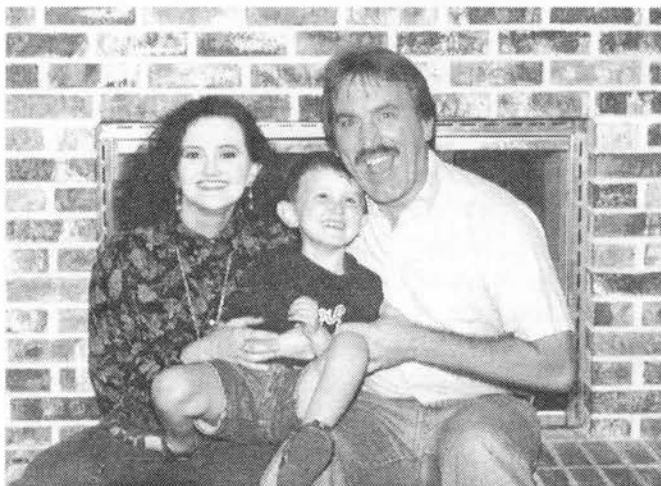
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**J. BARRY LOMBARDINI: EDITOR**

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## **CHAIRMAN FOR THE SECOND TIME – JAMES K. ADAMS**

This is my second stint as chairman of the Southern Lepidopterists' Society in the last four years (1999 was the first time). There have been a few changes of significance for the society in these last four years. For instance, Leroy Koehn, long time editor of the Newsletter, has moved to Kentucky, and, though anyone who knows Leroy knows that no one could replace him, Barry Lombardini has done an outstanding job of taking over the job of editor. I know I've been impressed! Perhaps the most exciting change has been the addition of a "webmaster" for the society (Dave Morgan of Atlanta) who now has the Society's webpage up and running (see the article in this issue). This will definitely increase our visibility and hopefully also increase our membership! If you haven't visited the site yet, please do so and send us your comments.



Kathy, Patrick and James

In Volume 21, Number 1 of the SLS Newsletter I shared a little bit about my lepidopterological history, so I won't bore you with details about my early life again! I would like to share with you some of my later, formative lep experiences, however. For those of you who have met me, you know that my interests in Lepidoptera are quite broad. I have done work with both butterflies and moths, particularly in the midwest (Missouri and Kansas, where I used to live and went to college) and the southeastern U.S. (Georgia, where I live now). I enjoy traveling, and often do so with the intent of photographing butterflies and moths, as well as swinging a net and lighting/trapping for moths, all of which helps increase my knowledge of the fauna of the U.S. I have even spent some significant time in the tropics and became quite familiar with the butterflies and some of the moths of certain areas,

including an enjoyable two and half month graduate study course in Costa Rica. It has been wonderful to have had the opportunity to be exposed to the Lepidoptera fauna of so many different places.

In 1989-1990, I was in my last year of my doctorate studies at the University of Kansas, where, during that year, I had the good fortune of being hired to overhaul the university's Lepidoptera collections. I felt I knew enough to really help with these collections, and was able to convince the powers that be to hire me. The lep collections hadn't been fully curated in about eighty years, since the time of Francis Huntington Snow. I found out all too soon that curating a large collection was quite humbling – I quickly realized how little I really knew. However, as the university has a great library with numerous wonderful identification resources, I turned a humbling experience into an incredible learning experience. Though Tiger Moths (Arctiidae) had been my main lep "love" to this point (no surprise that my dissertation was about these moths), I soon developed an appreciation for many other families, particularly the Noctuidae, thanks in no small part to an audio tape left by a visiting Eric Metzler (noctuidist extraordinaire whom I had not yet met at that time) summarizing his impressions/determinations of the numerous drawers of noctuids in the collection. Even now, when I go back and visit, if I find specimens out of place I think "Who's been messing with my collection?"

I moved to Dalton, Georgia (very northwestern Georgia) in 1990 at which point I began teaching biology at Dalton State College. I immediately began putting to good use my recently gained lepidopterous knowledge and started sampling and identifying the moth fauna of northwest Georgia. It was very exciting as much of the fauna was brand new for me. I also found out that very little work had been done in the area, which is an extremely interesting area at the southernmost extension of the Appalachians. It also turned out to be very frustrating, as much of what I collected was unfamiliar and not illustrated in readily available guides. I was also initially a bit disenchanted by the lack of Tiger Moths (though in the eleven years since I've found that the arctiid fauna is really quite rich here, you just have to do a lot of leg work to find them!). The lack of Tiger Moths, however, was partially made up for by the incredibly rich fauna of Slug Moths (Limacodidae; in the Zygaenoidea) – around 50 species of the family are found in the U.S. and 20+ can be found in my back yard. Amazed me! These zygaenoids are now one of my favorite groups as well. Over the years, with continued sampling and numerous visits to institutional collections and to knowledgeable people I have gotten a much better grasp on the identification of most of the macromoths of northwest Georgia. A recent three year moth sampling project for the U.S. Forest Service in North Carolina has even helped fill in the large geometrid-knowledge gap that I have had for many, many years. One of my most recent projects has been to make some of what I've learned available to interested parties on my Georgia Lepidoptera website (check it out at [www.daltonstate.edu/galeps/](http://www.daltonstate.edu/galeps/)). Most recently, I've been trying to sample some more specialized habitat types in Georgia, such as cane habitats and higher elevation sites (Rabun Bald in Rabun Co.), with a lot of help from Atlanta leppers Irving Finkelstein and Bill Russell. As a result, many species have continued to be added to the Georgia list in the last couple of years.

As many of us with an interest in Lepidoptera can attest to, one of the most enjoyable ways of learning more about leps is to travel. As I said above, I love to travel, often with the intent of doing a lot of lepping! Growing up, my parents always found a way to make sure we traveled quite a bit around the U.S. During a family trip out west in 1969, I encountered my first California Sister ever, chasing it out of the boundary of Yosemite National Park but missing it anyway; my first Milbert's Tortoiseshell encounter was in the Black Hills of South Dakota in the early 1970's; my, and my mother's (who many of you know is a decent lepidopterist in her own right), first alpine lepidoptera experiences came in 1976 in Colorado, with Parnassians as a highlight; Texas for the first time in 1974, with a number of memorable first encounters, including heliconians, Green Hairstreaks (*Cyanophrys*), the Malachite, *Myscelia ethusa* (Many-Banded Purple Wing), and the knock-out skipper *Astrartes fuligator* (Two-Barred Flasher). I'm certain we all have so many "first encounter" stories that we can share like this.

As my interest in moths increased, I started concentrating more and more on these night flying creatures during travels. I remember starting to travel at night on purpose, just to get a chance to visit gas stations, convenience stores, and rest areas en route. I remember with great fondness my first Royal Walnut Moth at a restaurant in Elsinoire, Missouri, and getting pulled over later that same night for "casing a convenience store" in southeastern Missouri. The puzzled look on the policeman's face when I showed him the moths I'd collected was priceless. From the mid 1990's through last year, I (and family members) made no less than seven trips to the western U.S., most through Texas and into Arizona, and this gave me an opportunity to learn something about the moth fauna of the southwestern U.S. And yet, for someone who has such a huge interest in moths, I am probably one of the very few who has yet

## The Southern Lepidopterists' Society

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The Southern Lepidopterists' Society  
is open to anyone with an interest in  
the Lepidoptera of the southern  
region of the United States.  
Membership dues are annual:

Regular	\$15.00
Student	\$12.00
Sustaining	\$25.00
Contributor	\$50.00

A newsletter, The News of the  
Southern Lepidopterists' Society is  
published four times annually.

Information about the Society may  
be obtained from the Membership  
Coordinator.

to purchase a generator for lighting. I continue to use what I affectionately call several "lazy man's" methods for collecting, most of which are probably familiar to many of you, and most of which require that you don't mind making a fool of yourself in front of other people! Besides Leroy Koehn's light traps, which I've only started using recently (since 1999), I still visit convenience stores out in the middle of nowhere (and sometimes even in the middle of towns!). When I travel, I try to choose motels in small towns – even better if I can get a motel on the outskirts of town. As a result, the lights of the motels often can be good, and I have frequently gotten permission from the motel owners to plug in my mercury vapor set-up in back of the motels. (I have plenty of recommendations to anyone whose interested!). I often awake to an alarm set in the early a.m. hours – the intent, of course, is to hop in the car and drive to the nearest all night gas stations! And, as mentioned before, rest areas offer a marvelous opportunity to sample moths from remote areas. Even strong sodium vapor lighting can be good when this is the only light source for miles, as was true on a great moth night at some I-90 rest areas in western South Dakota this past summer. Kansas has a number of great rest areas across I-70, as do most of the plains states, but the best rest areas have to be in the state of Texas, as many of them are open on the top, so that moths can get inside the buildings and often stay there during the day. However, be prepared for some very strange looks from people using the facilities, especially in those few where there are no doors on the stalls!! I truly enjoy all the idiosyncracies of the mothing experience!

As I said at the end of my last bio, by the time you read this, spring is upon us here in NW Georgia, and I and my family are enjoying the warmth. Orange Tips are flying in the yard, Nessus Sphinxes are visiting the Azaleas, and the mothing season, which really never ends here (though there is a lull in December), is in full swing. I'm looking forward to a new year of exciting lep experiences, especially those that I can share with some of you! And I also hope to see a number of you in September at the meeting in Gainesville!

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## 2002 DUES -- 2002 DUES -- 2002 DUES

**Membership please pay your 2002 dues.** If the mailing label on this issue of the Newsletter does not say **2002** then you are not current in your dues. Please send your \$15 dollars (if regular member) to the Treasurer, Jeffrey Slotten (5421 NW 69<sup>th</sup> Lane, Gainesville, FL 32653).

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## MEMBERS' NOTICES

**For Sale: LIGHT TRAPS:** 12 volt DC or 110 volt AC with 15 watt or 20 watt black lights. The traps are portable and easy to use. Rain drains and beetle screens protect specimens from damage. For a free brochure and price list contact: Leroy C. Koehn, 202 Redding Rd, Georgetown, KY 40324; Tele: 502-570-9123; E-mail: [Leptraps@aol.com](mailto:Leptraps@aol.com).

**For Sale: BAIT TRAPS:** 15" Diameter x 36" Height, collapsible for travel. Two types available: Flat Bottom and Inverted funnel. For a free brochure and price list contact: Leroy C. Koehn, 202 Redding Rd, Georgetown, KY 40324; Tele: 502-570-9123; E-mail: [Leptraps@aol.com](mailto:Leptraps@aol.com).

## NEW MEMBERS

Welcome to the following new members:

Mark C. Etheridge from Myersville, Maryland (401 Main St., P.O. Box 164, Myersville, MD 21773).

Bret Boyd from Rockingham, North Carolina (113 Evergreen Ct., Rockingham, NC 28379).

Gail L. Duggins from Flagler Beach, Florida (5500 John Anderson, Flagler Beach, FL 32136).

L.A.S. Lemmer MB from Tampa, Florida (15602 Cheswick Court, Tampa, FL 33647).

Tim Adams from Dunedin, Florida (1291 Amberlea Dr. E., Dunedin, FL 34698).

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## ABBOT AWARD NOMINATIONS

Society members (*members only*) please send in your nomination for the 2002 John Abbot award to any of the Society Officers (listed in the box on page 3) or via the Southern Lepidopterists' Society web site ([www.southernlepsoc.org](http://www.southernlepsoc.org)). Also, if you nominate an individual please include a brief biography (two or three sentences) including the contributions of the nominee to our knowledge of lepidoptera in general and southern lepidoptera in particular. Many thanks.

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## MOVING???

If you are contemplating moving please send Jeff Slotten your new **mailing address, phone number, and e-mail address**. Without your new home address your newsletter comes back to me (The Editor) and about all I can do is whistle "Dixie" (or "I Left My Heart in San Francisco" - *my birth town*). And if we do figure out your new home address, it costs the Society double postage!!!

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## ANNUAL FALL MEETING AND FIELD TRIP

The annual fall meeting (including the business meeting) and field trip of the Southern Lepidopterists' Society will be held September 20-23 at the Florida State Collection of Arthropods, Division of Plant Industries, Gainesville, Florida. Field trips will be out in the turkey oaks and other areas surrounding Gainesville. Start thinking about these dates and plan to attend. Further information will be posted in the June Newsletter.

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## ANNOUNCING THE SOUTHERN LEPIDOPTERISTS' SOCIETY WEB SITE

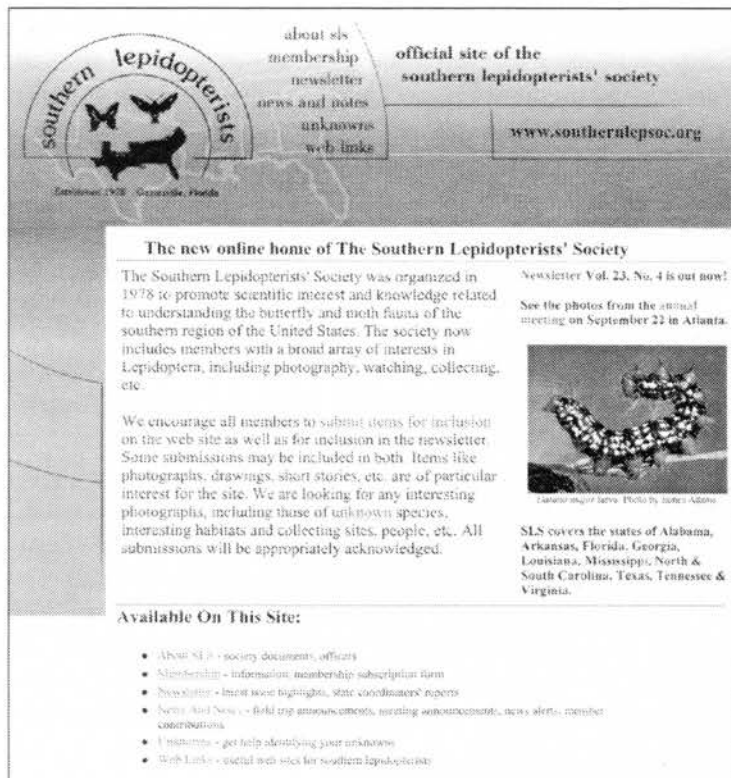
The Southern Lepidopterists' Society now has its own site at [www.southernlepsoc.org](http://www.southernlepsoc.org) on the internet! Not only is it a great source for up-to-the-minute news and information about the society and its activities, but it should also be a great tool for attracting new membership.

Featured on the site is a brief introduction to the society and its activities, with links to the latest draft of the SLS constitution and a full page description of the Abbot Award. Visitors can find all the information they need on how to become a member, including a membership form which they can printout and mail in with their membership fees.



As do most good sites nowadays, our site also offers a list of links to other web sites which should be useful to its readers (southern lepidopterists).

The site also features a page devoted specifically to the Southern Lepidopterists' News. Visitors can check-out a list of the topics covered in the current issue (and nonmembers will get an idea of what they're missing!). There's even a handy form with which members can submit articles for the newsletter. Ever wondered if the latest issue has shipped yet? Check the site and you will know.



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www.southernlepsoc.org

**The new online home of The Southern Lepidopterists' Society**

The Southern Lepidopterists' Society was organized in 1978 to promote scientific interest and knowledge related to understanding the butterfly and moth fauna of the southern region of the United States. The society now includes members with a broad array of interests in Lepidoptera, including photography, watching, collecting, etc.

We encourage all members to submit items for inclusion on the web site as well as for inclusion in the newsletter. Some submissions may be included in both. Items like photographs, drawings, short stories, etc. are of particular interest for the site. We are looking for any interesting photographs, including those of unknown species, interesting habitats and collecting sites, people, etc. All submissions will be appropriately acknowledged.

Newsletter Vol. 23, No. 4 is out now!  
See the photos from the annual meeting on September 22 in Atlanta.

*Lambert night hawk Photo by James Adams*

SLS covers the states of Alabama, Arkansas, Florida, Georgia, Louisiana, Mississippi, North & South Carolina, Texas, Tennessee & Virginia.

**Available On This Site:**

- About SLS - society documents, officers
- Membership - information, membership subscription form
- Newsletter - latest news highlights, state coordinators' reports
- News And Notes - field trip announcements, meeting announcements, news alerts, member contributions
- Unknowns - get help identifying your unknowns
- Web Links - useful web sites for southern lepidopterists

The site also has its own page for news and special announcements. Check it often for field trip announcements, meeting announcements and summaries, and other news about the society. Currently, it also features a form which members can use to submit their nominations for the 2002 Abbot Award. Members can also use the submission form to submit articles and photos to me for the site as well as to submit interesting records to the site coordinators for their reports.

A new feature which we've added at the last minute is an interactive UFO page. Visitors to the site can post digital images they've taken of unknown Lepidoptera, and members can post their suggested identifications for these unknowns. (I've already taken advantage of this page a couple of times.)

That's the site so far, but there's much more to come.

Much like the newsletter, the site is an entity which grows with submissions and input from the members of the society. Notice the "submissions" and "contact" links at the bottom of each page of the site? Those are there because we want your input. Do you have an event or trip which you want to announce? Do you have an interesting photo you would like to share? Do you have an interesting story or article for the site (or the newsletter)? Click on "submissions" and let us know! (Much thanks goes to James Adams for helping me get this site off the ground, and much thanks in advance to you the members for your contributions!)

Dave Morgan, Atlanta, Georgia (web@southernlepsoc.org)

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## SEND ME SOMETHING -- ANYTHING!!!

Well - not really anything, but I do need articles, notices, pictures (color and/or black and white), items related to butterflies/moths. *[Or you can always just send me money.]* Surely, there is some antidotal information about some aspect of your personal collecting that you can share with the membership - how about your favorite collecting site - troubles that you have had while on a field trip - hints on how to occupy a non-interested spouse/significant other while you collect, photograph, watch butterflies. How about some favorite stories around the blacklight late at night - *careful this newsletter is censored*. Sorry Leroy! Any artists out there? How about some lepidopterists' jokes, cartoons - *only make sure that they are not copyrighted*. Send me new ideas on how to curate one's collection, new bait concoctions that have been successful, new designs of equipment, what fumigants do you use and are they safe - please send this information to me for the Newsletter. Remember, I can not make up everything - although I can try (The Editor).

# VOLTINISM OF *ANTHRAEA POLYPHEMUS* (CRAMER) (SATURNIDAE) IN LOUISIANA BY VERNON ANTOINE BROU JR.

In Louisiana, *Antheraea polyphemus* (Cramer) has been captured during the months February through October at ultraviolet light traps. Numerous authors have reported that this large and fairly common North American silkmoth species has one brood in its northern range and two broods in the southern United States. In my 26-year sphingidae study (Brou & Brou, 1997), I discovered that for over a century authors assumed most North American sphingidae had one brood in northern states and two broods in the southern states. It was very apparent when reviewing a century of sphingid literature, that later authors simply parroted what was previously stated. Some statements, including punctuation, were word for word copies of earlier author's statements. No one actually questioned the validity of their statements, assuming them to be factual. It appears the same situation occurs regarding the saturnidae of North America.

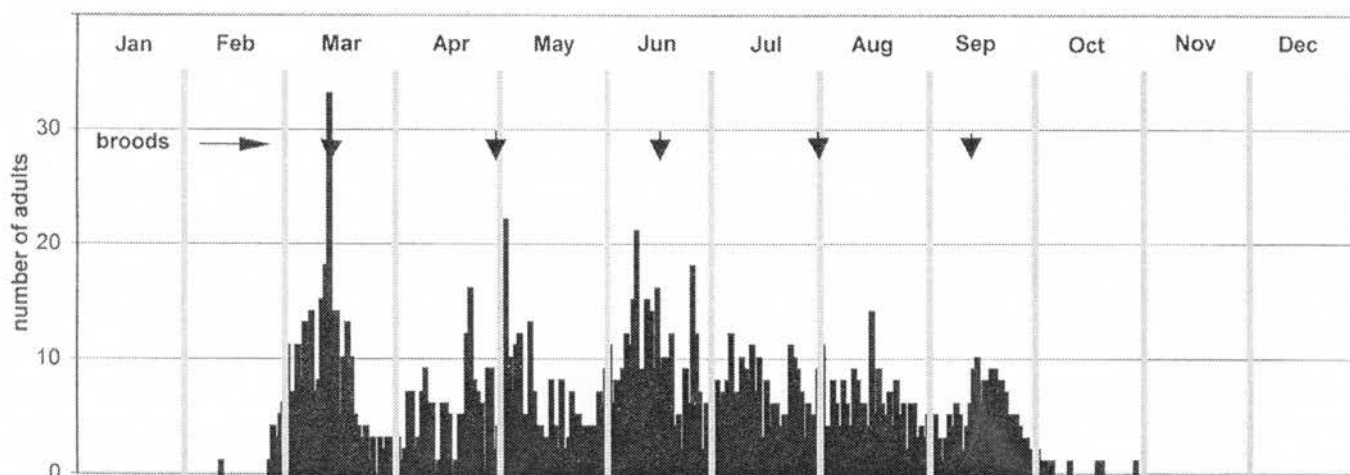


Fig. 1. Phenology of *Antheraea polyphemus* (Cramer) n = 1509, captured at sec24,T6,SR12E, 4.2 mi. NE Abita Springs, St. Tammany Parish, Louisiana, 1990 - 2001.

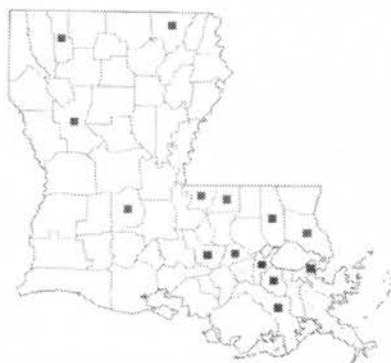


Fig. 2. Distribution of *A. polyphemus* in Louisiana based on collections by this author.

Even in our most prestigious Moths of North America series (MONA), Ferguson (1972) stated of *polyphemus*, "As far south as Florida, there still seems to be only two broods ... February to April ... October to December." The question then becomes, to which brood do the May, June, July, August, and September specimens belong. Covell (1984), stated *polyphemus* has 2 broods, April and September, without further explanation. In Louisiana, *polyphemus* actually has five annual broods at approximately 47-day intervals beginning with the first brood peaking about mid-March (Fig. 1). The parishes in which adults were captured are shown in Fig. 2.

## Literature cited

- Brou, V. A. and C. D. Brou (1997). Distribution and phenologies of Louisiana Sphingidae., J. Lepid. Soc. 51:156-175.  
Covell, C. V., Jr. (1984). A field guide to moths of eastern North America. Houghton Mifflin Co., Boston. 469 pp.  
Ferguson, D.C. in Dominick, R. B. et al., (1972). The Moths of America North of Mexico, fasc. 20.2B, Bombycoidea (in part).

*SPHACELODES VULNERARIA* (HBN.) (GEOMETRIDAE) IN LOUISIANA

BY

VERNON ANTOINE BROU JR.

*Sphacelodes vulneraria* (Hbn.) (Fig. 1) is listed by Holland (1903) as occurring from North Carolina to Florida and further to South America. Knudson & Bordelon (1999) states of *vulneraria* in Texas, "a tropical species that rarely occurs in late fall". Kimball (1965) lists *vulneraria* specimens from Florida occurring in May, June, August, September, and October, as well as a single May specimen of a second unknown species. One other species of the genus, *Sphacelodes haitiaria* Oberth. is listed for North America by Hodges (1983).

Fresh males of *vulneraria* appear dull very dark olive-green in color, with a tan-colored forewing costal triangular area. The winglength of both sexes varies around 20 - 22 mm. The females are a mottled olive-brown coloration in overall appearance, with only the occasional specimen exhibiting a feeble forewing costal tan-colored patch, never a bold patch as in the male. Both males and females exhibit more often than not, distinctly darker antemedian, median, and postmedian lines on the forewings, the median and antemedian lines continuing over the hindwings. The head, thorax, and abdomen color is consistent with the wing colors of each sex, both sexes exhibiting tan colored antennae. In Louisiana, *vulneraria* has been collected in five parishes: Natchitoches, Orleans, St. John the Baptist, St. Tammany, and West Feliciana (Fig. 2). There appear to be three distinct annual flight periods, spring, summer, and fall (Fig. 3).

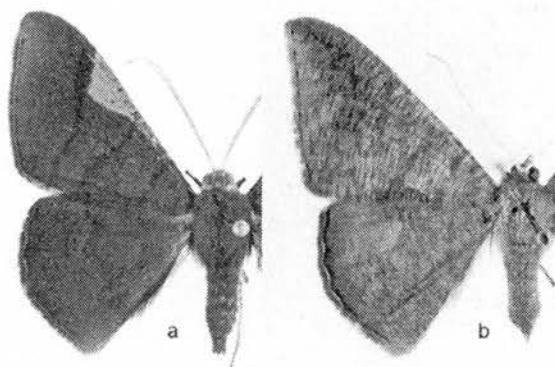


Fig. 1. *Sphacelodes vulneraria* (Hubner) a. male, b. female



Fig. 2. Five parishes in which *S. vulneraria* have been taken (●).

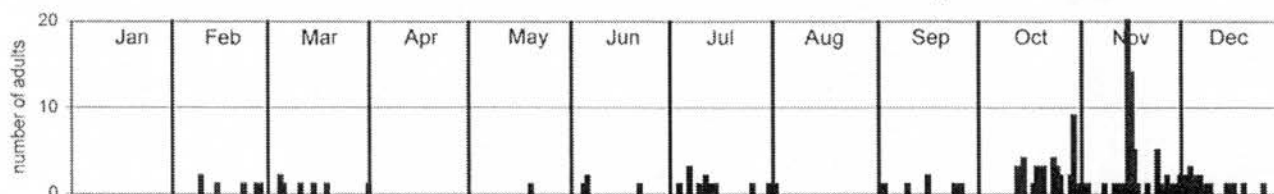


Fig. 3. Phenology of *Sphacelodes vulneraria* (Hubner) based on specimens captured at ultraviolet light traps in Louisiana 1980-2001. n = 149

## Literature Cited

- Hodges, R. W. (Ed). 1983. Check list of the Lepidoptera of America north of Mexico. E.W. Classey Ltd. & The Wedge Entomol. Res. Foundation, Cambridge Univ. Press. 284 pp.
- Holland, W. J. 1903. The Moth Book. Doubleday, Page and Co., New York, xxiv+479 pp., 48 plates.
- Kimball, C. P. 1965. Arthropods of Florida and neighboring land areas, Vol. 1: Lepidoptera of Florida. Gainesville: Div. Plant Industry, Fla. Dept. Agr.
- Knudson, E. & C. Bordelon. 1999. Texas Lepidoptera Survey, Checklist of the Lepidoptera of Texas 2000 Edit.

# THE OCCURRENCE OF *NEPYTIA SEMICLUSARIA* (WALKER) IN LOUISIANA

BY  
VERNON ANTOINE BROU JR.

The large variably shaded gray geometrid species *Nepytia semiclusaria* (Walker) is quite common in St Tammany Parish, Louisiana. The region is classified primarily a (long leaf pine) *Pinus palustris* Mill. habitat, though (slash pine) *Pinus caribaea* Morelet, is fairly common with the occasional (spruce pine) *Pinus glabra* Walt. *N. semiclusaria* is reportedly a pine feeder, and the range according to Covell (1984) is North Carolina to Florida and westward along the Gulf Coast. He further implies the species is on the wing all year, which is not the case in Louisiana, as *semiclusaria* has only one annual brood peaking in late May, specimens occurring primarily in May and June (Fig. 1). Specimens can vary in overall shading from very light gray, almost white, to dark gray, while the maculation remains a darker gray/black. Examples of various phenotypes are shown (Fig. 2). Twelve species of *Nepytia* are listed by Hodges (1983), and three species are discussed by Forbes (1948), who simply mentions "the Floridian *semiclusaria*...a distinct species".

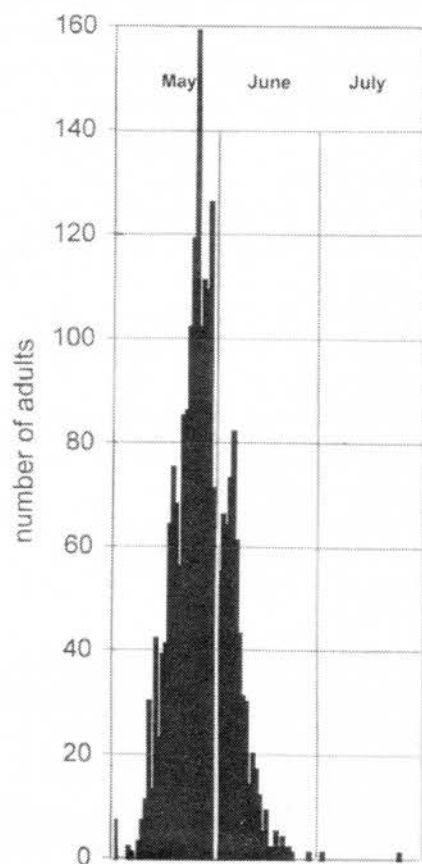


Fig. 1. Captured specimens of *Nepytia semiclusaria* 1990 - 1998 taken 4.2 mi NE Abita Springs, Louisiana, sec.24T6SR12E Using ultraviolet light trans. N=2216.

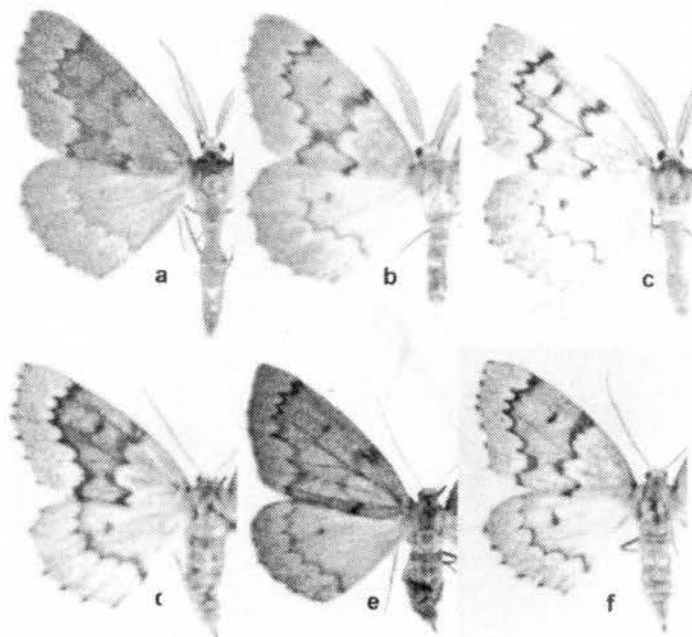


Fig. 2. Adult *Nepytia semiclusaria* phenotypes, males (a,b,c), females (d,e,f) taken 4.2 miles NE Abita Springs, Louisiana, sec24T6SR12E, using ultraviolet light.

## Literature cited

- Covell, C.V., (1984). A field guide to moths of eastern North America . Houghton Mifflin Co., Boston. 469 pp.  
 Forbes, W.T.M. (1948). Lepidoptera of New York and neighboring states, Part II. Cornell Univ. Agric. Exp. Sta. Mem. 274: 1-263.  
 Hodges, R.W. (Ed.) (1983). Check list of the Lepidoptera of America north of Mexico. E.W. Classey Ltd. & The Wedge Entomol. Res. Foundation, Cambridge Univ. Press. 284 pp.



## SUGGESTIONS FOR THE SOUTHERN LEPIDOPTERISTS' SOCIETY AS WE ENTER A NEW CENTURY\*

OR

## LEPIDOPTERA SOCIETIES VS. BUTTERFLY ASSOCIATIONS?

BY

MIKE QUINN

The doors to all entomological societies world-wide are indeed open to all comers, but it's been my observation over the last 10 years that the number of folks walking through those open doors is not even keeping up with the general population's growth. (The SLS is no exception as their membership actually declined from 234 in 1992, to a low of 88 in 1996.) As an entomologist I lament this unfortunate truth. So what are we to do? I was heartened to see that Harry Pavulaan of Virginia had augmented his State Coordinator's Report for the Dec. 2001 issue of the SLS with reports and observations from the VA-MD-DE-Bugs and the Valeps listservs. Also included were records from the NABA "sightings" web page and from the NABA 4th of July Butterfly Count. But when these records were listed in The News of the SLS, the text consisting of binomial, location and date were all run together in a similar format that has since been abandoned by the Lep Soc in their Season Summary. Retrieving the important information out of that jumble of text is most difficult.

If the SLS wants to encourage novices to walk through their doors, I would suggest a slight change in formatting. These lists should be put in columns with one record per line, similar to the current Lep Soc SS. In this manner, there might potentially be room to include common names (at least for the butterflies, moths are a different matter). If the SLS truly wants to attract new members, particularly youthful members, then all I can say is prove it. Including both the scientific and the common name dumbs nothing down. The end result is more information, not less. The SLS has demonstrated little ability to beat either NABA or the LepSoc, isn't it time to join them?

The North American Butterfly Association (NABA) is perhaps the only entomological society in North America whose membership is growing rapidly. They enlisted 500 members by the end of its founding year, 1992. It now has 29 local chapters across 16 states <http://www.naba.org/chapters.html>. I think their membership is currently over 4,000. As "American Butterflies" has a strong flavor of the editor, each individual chapter also has a local flavor. Some chapters are gardening oriented, while others are more field oriented. Although one person at the top stands out as a lightning rod for controversy, over all, I don't think there is a single NABA voice.

I find it most remarkable that local chapters are forming across the nation, particularly in the 1990's. Isn't this the era where according to the recent best selling book, "Bowling Alone", we aren't suppose to be forming clubs at all anymore! Even the great tidal wave of environmental/conservation organization formations in the 1970's didn't yield a single local chapter, at least none that I'm aware of other than perhaps within gardening organizations. The Sierra Club was founded in 1892 and National Audubon Society was founded in 1905.

NABA, because it does have 29 chapters in 16 states actually has a strong grassroots following. That grassroots base has a multi-faceted origin. According to a survey of the NABA membership, approximately one third came into butterflying from a gardening perspective; one third came in from a birding perspective; and the last third came straight into butterflying without a significant background in either gardening or birding. Although not touched on in the survey results, it would be interesting to know what portion of the final third actually had an insect collecting background as does NABA's president, Jeff Glassberg. Its somewhat ironic that Glassberg and Bob Robbins, past president of the Lep Soc, grew up together collecting butterflies in New York and later presided over two lepidoptera organizations that are supposedly so different.

I would suggest that the main reason that vast majority of people have not and will not take up collecting has little to do with any NABA policy. This reason was pointed out to me by someone noting in the pages of the News of the SLS that it takes on average 20 minutes of handling time to process a lepidoptera specimen from collecting to mounting and labeling. This "20 minute reality" has changed very little, I think in the last 300 plus years. The only significant change in lep processing has come in computer labeling. Now if a long series of specimens are collected at the same location and date, multiple labels can be quickly generated thus slightly shortening the processing time.

Unfortunately, some early lepidopterists got around the hassle of labeling by writing such gems of information as, "Feb., Texas"!

I posted a premise to the Leps-L listserv recently saying that regardless of their openness, lepidopterological societies mostly attract scientists and that NABA is in fact attracting the masses. This post yielded a rebuttal of near deafening silence... As a Texan, it's hard for me to publicly admit this, but bigger doesn't necessarily mean better. However, NABA's undeniable success has been a tremendous boon to the popularization of butterfly watching. In the end, it's my belief that as more and more people are introduced to the joys of butterflying, the public will demand that more money be spent on research, education and conservation of butterflies and their habitats.

This is already happening in a very big way in the lower Rio Grande Valley. Go to the NABA-South Texas Butterfly Club web site and look at the pictures on the "Recent Rio Grande Valley Rarities" link: <http://www.naba.org/chapters/nabast/recent.html>. Photographs of over 50 species of varying rarity are posted there. Almost every one of these pictures was submitted by someone that started seriously looking at butterflies only within the last two to three years! The most significant of these records was the Rusty-tipped Page (*Siproeta epaphus*) shot and correctly identified by a local couple. This represents the first Texas record and only the second US record. Other notable records include Chestnut Crescent (*Phyciodes argentea*), Stallings' Flat (*Celaenorrhinus stallingsi*), Cyna Blue (*Zizula cyna*), Blomfield's Beauty (*Smyrna blomfieldia*), Pale-spotted Leafwing (*Anaea pithyusa*), and several active colonies of Xami Hairstreaks (*Callophrys xami*).

As equally important as the fact that local people are now quite knowledgeable and rightfully proud of their lepidofauna, is the fact that new habitats are for the first time being created in the lower Rio Grande Valley specifically for butterflies and other insects. Nectar and host plant gardens have been built at the Sabal Palm Grove, at the Valley Nature Center, and at Laguna Atascosa and Santa Ana NWRs. In the end, isn't this what most of us are working for? Not primarily to fill our drawers with more specimens, but to see to it that there will always be a place for butterflies in our world? I know that's my goal.

\*Modified from a post originally sent to the Leps-L listserv (Date?).

(Mike Quinn, Invertebrate Biologist, Wildlife Diversity Branch, Texas Parks & Wildlife, 3000 I-35 South, Suite 100, Austin, Texas 78704, Phone: 512-912-7059, Fax: 512-912-7058, [mike.quinn@tpwd.state.tx.us](mailto:mike.quinn@tpwd.state.tx.us)).

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*The following article appeared in the Florida State Collection of Arthropods RESEARCH ASSOCIATE NEWSLETTER (Number 5, January 2002). (I thank Dr. Roy W. Rings for sending me this information - The Editor.)*

## **“THE MCGUIRE CENTER FOR LEPIDOPTERA RESEARCH IS ANNOUNCED”**

“The McGuire Center for Lepidoptera Research will be built on the University of Florida campus adjacent to the Museum of Entomology (FSCA)/Doyle Connor Building. When completed, this \$8.4 million facility will comprise one of the world's largest Lepidoptera collections and research institutions.

Thanks to the tireless efforts of Dr. Thomas C. Emmel of the University of Florida and others, an extremely generous contribution of \$4.2 million from longtime FSCA research associate Dr. Bill McGuire, together with another \$4.2 million provided by a matching grant from the State of Florida, and the co-operation of the Allyn Museum of Entomology, Florida Museum of Natural History, the University of Florida, and the Florida State Collection of Arthropods/Florida Department of Agriculture, construction of the McGuire Center for Lepidoptera Research is soon to begin. The McGuire Center will house the Lepidoptera collections of the Allyn Museum and the FSCA. This project to unify the major Lepidoptera collections in Florida has been planned for many years. Now that sufficient funding is available, what has been only a concept is on a fast track to becoming a reality. As part of this unification, the FSCA curator of Lepidoptera, Dr. John B. Heppner, will be moving next door to join Drs. Lee Miller and Jacqueline Y. Miller, Curator and Associate Curator of the Allyn Museums, respectively, Dr. Thomas C.

Emmel, and other Lepidoptera curators and researchers of the McGuire Center.

The completion of the first phase of construction and official opening of the McGuire Center is planned for early 2003. Projected holdings of Lepidoptera at that time, an estimated 3.5 million specimens including pending donations and acquisitions but not including the immatures collection of the FSCA, will place the McGuire Center among the world's largest Lepidoptera collections. See the announcement by Dr. Thomas C. Emmel at the Florida Entomological Society web site: <http://www.flaentsoc.org/mcquiredonation.html>.

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**“Exotic insect detections:** 150 species of non-Florida insects spiders, and mites arrived, escaped port detection, and became established in Florida between 1986 and 2000. In other words, a new exotic organism, serious pests included, becomes established in Florida about once every month? The FSCA, with worldwide representation of important arthropod groups, is critical to identification capability of exotic organisms.” *The above note appeared in the Florida State Collection of Arthropods RESEARCH ASSOCIATE NEWSLETTER (Number 5, January 2002). (I thank Dr. Roy W. Rings for sending me this information - The Editor.)*

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## COLOR INSERT A

The following figure (Color Insert A) of some “Variations in *Utetheisa bella* (L.), *Utetheisa ornatrix* (L.) And *Holomelina laeta* (Gr.-Men.)” has been submitted by Vernon Brou.

## COLOR INSERT B

Vernon Brou also submitted the following pictures in shown Color Insert B:

*Automeris louisiana* Ferg. & Brou: Vernon states “This species is pictured on the internet, but never in color in any print publication that I know of other than a male shown in Knudson and Bordelon from Texas. You will note, unlike *A. io*, *A. louisiana* males and females are the same khaki coloration”.

*Mursa gracilis*: Vernon states that “*Mursa gracilis* was left out of the checklist by Hodges. I have taken only 4 of them in 40+ years of collecting in Louisiana. I think it is also known for Florida”.

*Hypena umbralis*: Vernon writes “These are migrators from the tropics into Gulf coastal areas”.

*Hypena vetustalis*: “Again tropical migrants into gulf coastal areas. *Hypena* (= *Bomolocha*) *vetustalis* also is missing from the checklist by Hodges.” Vernon suggests that this species may have been taken in Texas by Ed Knudson.

*Iscadia aperta*: “... only one I know of pictured previously is in Knudson & Bordelon, but theirs is very dark and because of that looks a bit different.”

Barry Lombardini submitted the following pictures:

*Megathymus streckeri texanus* (female), *M. yucca coloradensis* (male), the **Melissa Blue** [*Lycæides melissa*, (female)], and the **Black Swallowtail** (*Papilio polyxenes asterias*) are all found in the Lubbock, Texas area.

*Danaus plexippus* is very common in different years. In May of 1997, Lubbock was inundated with many thousands of the **Monarch** butterflies.

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## WHAT'S IN A NAME: DETERMINING WHAT IS, AND WHAT IS NOT, A NEW SPECIES/SUBSPECIES

BY  
JAMES K. ADAMS

For those of you who participate in any one of a number of listserves (such as Leps-L or the newer TILS listserve) you are aware that one of the topics of sometimes heated conversation (at least once a year) is the discussion of what constitutes species or subspecies boundaries. Furthermore, the discussion often diverges into the appropriateness of naming said entities, particularly if the boundaries are a bit fuzzy. What follows is a discussion of this topic -- mainly some personal and historical perspectives, as well as some of my own diatribe.

Before I begin, let me start by saying:

1. The following represent mostly my opinions, with some significant personal input from several other people (appropriately acknowledged, of course).

2. For those who know me, most are aware that my opinions have included a general aversion to using the subspecific rank, mainly because I feel that the subspecific category has been abused and overused (see the discussion below). My aversion has been tempered a bit recently, however.

3a. Remember, species do not care if we can tell them apart; to them our names are irrelevant. All that is important is that the species can tell themselves apart. Sometimes the species themselves have a little difficulty with their own boundaries, but it makes them no less real. This "Self Recognition" is the best, albeit a not necessarily humanly useful, species concept.

3b. Just as populations of species (or subspecies) are real entities in time and space, conversely all other higher taxa (genera, families, etc.) are artificial constructs used by humans to indicate some level of relatedness among species. By artificial I mean that a genus, family, etc. is no longer evolutionarily linked together -- the individual species contained in the higher taxa have their own independent fate. This does not mean that these higher categories are not useful!

4. Putting names on "taxa" is an attempt to place a static classification on a dynamic process. There will always be disagreement when it comes to naming entities, not only due to differences in interpretation but also because the very things we are trying to put names on are themselves constantly changing.

5. The term "monophyly" refers to an ancestor and all of its descendants. A species would be, by definition, monophyletic, as all individuals of a species would have come from the original individuals of that species. An interested human should be able to distinguish any monophyletic group (species or otherwise) by a unique set of derived characters (apomorphies).

### Species

Humans have some intrinsic discriminatory capabilities. Species as diverse as Poison Ivy, Red Foxes, Sweet Gum Trees, Pronghorn Antelope, Bread Mold, and Luna Moths are all so distinct as to be easily recognizable to anyone who takes just a little time to learn the distinctive features of each. Additionally, some close relatives are easily recognizable as close relatives, yet the species boundaries are still clear cut, such as the Monarch, Queen and Soldier Butterflies. Many, many species boundaries, however, are not nearly so obvious.. As such, it is necessary to have some reasonably applicable species' definition(s) to allow us interested humans to have some framework within which to work. There are several species definitions that have been both published, and in turn utilized by different researchers/hobbyists -- my thanks to Andy Warren for summarizing them recently (on Leps-L):



Variations in ***Utetheisa bella*** (L.), ***Utetheisa ornatix*** (L.) and ***Holomelina laeta*** (Gr.-Men.)

Collected by Vernon A. Brou Jr. at sec.24,T6,SR12E, 4.2 mi. NE Abita Springs, Louisiana.







*Automeris louisiana*



*Mursa gracilis*



*Hypena umbralis*



*Hypena umbralis*



*Hypena vetustalis*



*Hypena vetustalis*



*Iscadia aperta*



*Megathymus yucca coloradensis*



*Megathymus streckeri texanus*



*Papilio polyxenes asterias*



*Danaus plexippus*



*Lycaeides melissa*



1. The Biological Species Concept (by Mayr), "Biological species [are] groups of [potentially] interbreeding natural populations that are reproductively isolated from other such groups."
2. The Hennigian Species Concept (by Meier and Willmann), "Species are reproductively isolated natural populations or groups of natural populations. They originate via the dissolution of the stem species in a speciation event and cease to exist either through extinction or speciation."
3. The Phylogenetic Species Concept (by Mishler and Theriot), "A species is the least inclusive taxon recognized in a formal phylogenetic classification. As with all hierarchical levels of taxa in such a classification, organisms are grouped into species because of evidence of monophyly. Taxa are ranked as species rather than at some higher level because they are the smallest monophyletic groups deemed worthy of formal recognition, because of the amount of support for their monophyly and/or because of their importance in biological processes operating on the lineage in question."
4. The Phylogenetic Species Concept (by Wheeler and Platnick), "Species are the smallest aggregation of (sexual) populations or (asexual) lineages diagnosable by a unique combination of character states."
5. The Evolutionary Species Concept (by Wiley and Mayden), "An evolutionary species is an entity composed of organisms that maintains its identity from other such entities through time and over space and that has its own independent evolutionary fate and historical tendencies."

You will notice that some of these have several similarities in content (1 & 2, 3 - 5), though each has certain unique aspects as well. However, the first question you may ask when confronted with the different concepts is . . . "Why? Why are there different species concepts?" The answer is actually quite simple. Different types of organisms have different, sometimes very different, mechanisms for maintaining genetic distinctness. The isolating mechanisms can be incredibly different when comparing a bird to a fungus; a butterfly to a starfish. Additionally, we also need to know something about the distribution of species we are trying to tell apart. Why? Because closely related species in sympatry (occurring together [in at least part of their ranges]) are likely to have some sort of intrinsic reproductive isolation, which is what the Biological/ Hennigian species concepts emphasize. When species occur together, you at least have the opportunity to study how the species both interact and maintain genetic distinctness. However, for species in allopatry (with no part of their ranges overlapping), they are by definition geographically (and therefore genetically) isolated from one another. It is in this situation that the other species definitions come into play, discussing the importance of analyzing genetic similarity between populations to attempt to determine how closely related they are. The problem arises if you encounter two different populations that are allopatric and appear to be very closely related (which means genetically similar, and has the assumption of shared ancestry). How do you decide whether you have one or two species? Well, I guess maybe the answer isn't quite so simple.

Hopefully, it is clear that even for similar organisms that the species concepts do not represent "either-or choices (from Ron Gatrell)." There is nothing that states that one is better than the other, and it will greatly depend upon the circumstances of the species involved. There is at least one more factor that makes it even more difficult to determine absolute species boundaries. In some cases, just a couple of DNA differences separates very distinct populations, whereas a bunch of DNA differences may not be enough to separate two populations of something else into different species. Not all DNA changes represent the same level of distinctness.

So, in the end, a species consists of those individuals who can recognize (in some fashion) conspecifics, and distinguish them from non-conspecifics. Ron Gatrell (and others) would take this further to say consubspecifics, and I would certainly agree for those subspecies that can be appropriately diagnosed. This, of course, only works for those species who are completely genetically connected. The problem of allopatry of populations is a difficult one, representing more the rule than the exception. Under these circumstances, studies that are objective as possible need to be done to determine whether two or more populations share enough unique characteristics (genetically determined) to be considered non-distinct, in other words, the same species. However, there will always be some subjectivity (since humans are involved in the process) of determining absolute species boundaries between these populations. And don't forget that the species boundaries are dynamic, not static. Indeed, it is this fact, that

evolution is ongoing, that has led to the occasional use of other terms (like semispecies) for entities that seem to be somewhere partway through the speciation process. Still, species should represent relatively distinct (in some characteristic) entities that can be recognized by us humans with appropriate diagnostic tools (remember this for the discussion of subspecies).

### Subspecies

As I mentioned previously, I have historically had an aversion to the use of the subspecific category. It has always bothered me that people name subspecies based on simple pattern element differences and the like (whatever that means) when there are no meaningful biological differences (host plant choice, some DNA differences, etc.). Some have argued with me that I am arguing about what makes species different. Okay, perhaps I am to an extent, but for subspecies the differences I'm talking about would be more subtle (whatever that means!). I would argue that the subspecific nomenclature should apply to those "taxa" that have potential to become their own evolutionary lineages (which implies allopatry as well), and those taxa that have a few, simple superficial differences with no important biological meaning should not be considered a separate entity at any level. Adding names to these populations simply muddies the water, and indicates distinctness where there isn't any that's relevant.

Part of the problem is that there is no subspecies definition or set of definitions that have been generally accepted, so application of the subspecific rank is personally subjective. Many people have used the subspecific category to represent precisely what I mentioned above -- small superficial differences that may play absolutely no role in the evolution of the entities involved. For those who want to use this category in this manner, well, I can't stop you. But perhaps I can convince you to look at the use of this category with more scrutiny. Remember, species and subsets thereof are the only entities upon which evolution can actually work, because these are the entities which are still genetically unified in some way. This is what I was referring to when I said "meaningful" -- if the subspecies concept is going to be useful, it should apply to subsets of species which, although not distinct enough to be called species, have some genetic potential independent of other subspecies. This requires that the investigator know something about the biology of (all) the named subspecies.

There are clearly circumstances when the subspecific category should not be used:

1. If differences are completely environmentally induced, even if consistent between populations, they cannot be different subspecies (from Felix Sperling). This gets back to knowing the biology of the entities involved.
2. If the variation within one population significantly overlaps or includes the variation of another, especially when the modal individuals within the populations are only slightly different, then the two populations do not deserve separate subspecific status. As far as I can tell, this is exactly the situation with some of the western subspecies of *Euphydryas* and probably *Speyeria* as well. How can you name a subspecies where the variation is so great within populations so as to completely conceal any consistent differences? And until these populations are sorted out, how can you justify naming even more subspecies within these species?!
3. If the different entities are broadly sympatric, they cannot be subspecies. Any sympatric entities that do not breed are separate species.
4. If only a few specimens are known, or the range boundaries of the entities are unknown, then it is inappropriate to name subspecies until samples are larger and it is known whether the populations overlap somewhere. Franclemont correctly pointed out that, for any species with an essentially continuous continental distribution the limits of the ranges of the geographical races/subspecies, are, more often than not, arbitrary, and usually only one or a very few characters are or can be used to define the race because the variation in the character states within and among populations of a species is not concordant and is in many instances more in the nature of tendencies or clines than absolute differences. Further, often only isolated samples are available, and in too many instances one or a very few specimens constitute the sample that is used as the basis for a diagnosis and a description; in either case it is a wholly inadequate representation upon which to base conclusions in a study of geographic variation.



Ken Phillip provides a marvelous example of exactly what Franclemont was talking about. He states, "I have not found that previously-named subspecies in the arctic are very useful--perhaps because of the well-known situation that the boundaries between described arctic subspecies tend to fall in uncollected areas!" He suggests using simply a geographic indicator name to go with the specimen. This would not require some ability to distinguish entities, but would immediately allow the researcher to locate where a specimen is from. Such a geographic indicator is free from ICZN rules as well. Unfortunately, this very logical approach will unlikely be enthusiastically grasped by many.

So what should constitute **appropriate** use of the subspecific category? There have been suggestions as to what constitutes appropriate subspecific distinctness. Felix Sperling mentioned to me that the following diagnostic number is in the literature: "a subspecies tag should only be used if you can recognize a vast majority (75%+) **without** a locality tag." I would absolutely agree that this is a necessary component, but the percent is obviously purely arbitrary. Would you fail to recognize something as a subspecies if it is only distinct in 72% of the individuals? Clearly, diagnosis would have to be at least partially on an individual basis (remember, DNA differences). I personally think what is the **most important** aspect is that in order to name new subspecies, an incredibly clear understanding of the biology of existing populations, named or not, and gene flow between them is necessary before the subspecific (or specific) status of a population can be understood. From this, I feel that **it should be more difficult to name new subspecies than new species**, because more of the subtle biological differences need to be known. You may disagree.

Felix Sperling recently pointed out to me that in some cases, when there is partial knowledge of certain populations that suggests that there may be two subspecies involved, then it may actually be appropriate to name these entities. And, surprisingly to me, I agree. Why do I agree? Because by applying names to them, this draws attention to the possibility of two distinct entities requiring further study. This may be particularly appropriate if there is looming possibility of human development of some habitat to which the entities may be restricted. I'm not suggesting that names should be thrown out there without evidence of distinctness in an attempt to use the Endangered Species Act to slow development. But if there are differences supported by real evidence, even if not quite conclusive, it is better to stimulate continued study than to ignore the differences and possibly lose genetic diversity.

So what to make of the discussion above? What is a subspecies? I doubt that I have actually helped solve anything. The real take home message is that there is no absolute boundary between subspecies, just as there is no absolute between species, either. Indeed, Chris Durden, during one of the listserve discussions, wrote the following that expands on some of what I said above: "Each 'species' will consist of a set of 'subspecies' occurring each in its own part of the species range where habitat has the configuration of a 'subniche' [with its own selective pressures]. Borders between subspecies will be [potentially] narrow zones of overlap where interbreeding occurs. In these zones of interbreeding the individuals that survive to reproduce are those that are adapted to one or the other 'subniche'. These subniches are really niches and the subspecies are really species that are so similar we are not comfortable thinking of them as full species in full niches. . . . These species in nature are really mosaics of mini-species each fine-tuned to occupy its own niche tile." Little wonder that this topic continues to cause a bit of controversy!

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**Moths vs. Butterflies:** Have we become primarily a "Moth" newsletter? Please send me some "Butterfly" articles and/or pictures (The Editor).

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**By the Way:** If your dues "year" on the address label is not correct please notify our Treasurer, Jeff Slotten.

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**MOTH COLLECTING IN CENTRAL FLORIDA**  
**PART V. ARCTIIDAE TO NOCTUIDAE**  
**BY**  
**ROY W. RINGS AND LORRAINE F. RINGS**

This article is a continuation of the checklists published in the Southern Lepidopterists' Newsletter Vol. 20(4):60-63 (1998), Vol. 23(2):24-28 (2001), Vol. 23(3):39-42 (2001), and Vol. 23(4):64-67. The species numbers are from Hodges *et al.* (1983) and the common names of moth families are from Heppner (1998). For each entry the scientific name, author, year of description, and Hodges number are in the upper left. The common name is in the upper right section. On the second and succeeding lines are the collection site(s), date, or inclusive dates of collection, and the number of individuals collected (in parentheses). Many thanks to my friend, Eric Metzler, The Ohio Lepidopterists, for identifying some notodontids and noctuids that stymied me.

**ARCTIIDAE (Continued)**

*Cisthene striata* Ottolengui, 1898) **8068** STRIATED LICHEN MOTH  
Lake Manatee State Recreation Area, Manatee County 11/21/98 (4); Myakka River State Park, Sarasota County 1/16/99 - 4/8/99 (8).

*Cisthene subjecta* Walker, 1854 **8071** SUBJECT LICHEN MOTH  
Lake Manatee State Recreation Area, Manatee County 11/6/97 - 12/21/97 (6), 1/4/98 - 12/9/98 (8).

*Cisthene packardii* (Grote, 1863) **8072** PACKARD'S LICHEN MOTH  
Lake Manatee State Recreation Area, Manatee County 2/26/98 - 12/23/98 (6).

*Hypoprepia miniata* (Kirby, 1837) **8089** SCARLET-WINGED LICHEN MOTH  
Avon Park Air Force Range, Osceola County 3/3/98 (1).

*Hypoprepia fucosa* Hübner, 1827-31) **8090** PAINTED LICHEN MOTH  
Highlands Hammock State Park, Highlands County 4/10/99 23; Myakka River State Park, Sarasota County 5/2/98 (2).

*Pagara simplex* Walker, 1856 **8099** MOUSE-COLORED LICHEN MOTH  
Avon Park Air Force Range, Osceola County 3/28/98 (1).

*Utetheisa bella* (Linnaeus, 1758) **8106** BELLA MOTH  
Archbold Biological Station, Highlands County 4/25/99 (3); Avon Park Air Force Range, Osceola County 3/28/98 (1), 5/8/99 (1); Lake Manatee State Recreation Area, Manatee County 11/20/97 - 12/4/97 (3), 1/4/98 - 12/23/98 (53); Myakka River State Park, Sarasota County 1/28/97 - 10/25/97 (4), 4/28/98 - 5/17/98 (3), 2/9/99 (1).

*Holomelina laeta* Guérin-Meneville, (1832) **8114** JOYFUL HOLOMELINA  
Archbold Biological Station, Highlands County 4/25/99 (2); Avon Park Air Force Range, Osceola County 3/3/98 - 3/28/98 (5), 5/8/99 (1); Lake Manatee State Recreation Area, Manatee County 11/6/97 - 12/21/97 (3), 1/6/98 - 12/23/98 (43), 11/11/99 (6); Myakka River State Park, Sarasota County 1/26/97 - 10/14/97 (5), 5/15/98 - 11/20/98 (4), 1/16/99 (1).

*Holomelina aurantiaca* (Hübner, 1827-31) **8121** ORANGE HOLOMELINA  
Avon Park Air Force Range, Osceola County 3/28/98 (1).

*Holomelina immaculata* (Reakirt, 1864) **8124**

## IMMACULATE HOLOMELINA

Archbold Biological Station, Highlands County 4/25/99 (1); Avon Park Air Force Range, Osceola County 3/3/98 (1); Myakka River State Park, Sarasota County 10/14/97 (1).

*Pyrrharctia isabella* (J. E. Smith, 1797) **8129**

## ISABELLA TIGER MOTH

Avon Park Air Force Range, Osceola County 5/8/99 (2); Highlands Hammock State Park, Highlands County 4/10/99 (1); Lake Manatee State Recreation Area, Manatee County 1/4/98 - 5/21/98 (3); Myakka River State Park, Sarasota County 1/26/97 (1); Myakka River State Park, Sarasota County 1/28/97 - 2/14/97 (4), 5/2/98 - 12/24/98 (4), 1/16/99 (5), 2/9/99 - 4/8/99 (3).

*Estigmene acrea* (Drury, 1773) **8131**

## SALT MARSH CATERPILLAR

Highlands Hammock State Park, Highlands County 5/15/99 (1); Lake Manatee State Recreation Area, Manatee County 2/1/98 - 5/21/98 (3); Myakka River State Park, Sarasota County 2/4/97 - 2/14/97 (1), 2/9/99 - 4/8/99 (2).

*Spilosoma virginica* (Fabricius, 1798) **8137**

## VIRGINIA TIGER MOTH

Avon Park Air Force Range, Osceola County 3/3/98 - 4/18/98 (2); Highlands Hammock State Park, Highlands County 4/10/99 (2); Lake Manatee State Recreation Area, Manatee County 11/20/97 - 12/21/97 (2), 4/19/98 - 12/23/98 (3); Myakka River State Park, Sarasota County 2/4/97 - 10/25/97 (6), 4/28/98 - 5/17/98 (2), 4/8/99 (2).

*Hyphantria cunea* (Drury, 1773) **8140**

## FALL WEBWORM

Avon Park Air Force Range, Osceola County 3/3/98 - 3/28/98 (3); Highlands Hammock State Park, Highlands County 4/10/99 - 4/24/99 (12); Lake Manatee State Recreation Area, Manatee County 11/1/97 (1), 1/6/98 - 4/19/98 (2); Myakka River State Park, Sarasota County 10/14/97 - 12/22/97 (3).

*Epantheria scribonia* (Stoll, 1790) **8146**

## GIANT LEOPARD MOTH

Avon Park Air Force Range, Osceola County 3/3/98 (1); Highlands Hammock State Park, Highlands County 5/15/99 (3); Lake Manatee State Recreation Area, Manatee County 11/1/97 (1); Myakka River State Park, Sarasota County 2/4/97 (1), 4/28/98 (2).

*Apantesis phalerata* (Harris, 1841) **8169**

## HARNESSED MOTH

Avon Park Air Force Range, Osceola County 4/18/98 (1), 5/8/99 (2); Highlands Hammock State Park, Highlands County 4/10/99 (1); Lake Manatee State Recreation Area, Manatee County 10/28/97 (1), 1/4/98 - 12/9/98 (6); Myakka River State Park, Sarasota County 2/4/97 - 2/28/97 (6), 10/14/98 - 12/24/98 (4), 1/16/99 - 4/8/99 (4).

*Apantesis vittata* (Fabricius, 1787) **8170**

## BANDED TIGER MOTH

Avon Park Air Force Range, Osceola County 3/3/98 - 3/28/98 (10); Lake Manatee State Recreation Area, Manatee County 4/19/98 - 5/21/98 (7); Myakka River State Park, Sarasota County 1/28/97 - 11/5/97 (3), 5/2/98 (1).

*Apantesis nais* (Drury, 1773) **8171**

## NAIS TIGER MOTH

Avon Park Air Force Range, Osceola County 5/8/99 (11); Highlands Hammock State Park, Highlands County 4/10/99 (1); Lake Manatee State Recreation Area, Manatee County 1/4/98 (1), 11/11/99 (1); Myakka River State Park, Sarasota County 4/28/98 - 11/10/98 (2), 4/8/99 (4).

*Halysidota tessellaris* (J. E. Smith, 1797) **8203**

## BANDED TUSSOCK MOTH

Avon Park Air Force Range, Osceola County 3/3/98 - 3/28/98 (5), 5/8/99 (2); Highlands Hammock State Park, Highlands County 4/10/99 - 5/15/99 (11); Lake Manatee 1/4/98 - 10/11/98 (15); Myakka River State Park, Sarasota County 1/26/97 - 2/28/97 (7), 3/26/98 - 10/14/98 (4), 2/9/99 - 4/8/99 (11).

*Leucanopsis longa* (Grote, 1880) **8217**

## LONG-STREAKED TIGER MOTH

Archbold Biological Station, Highlands County 4/25/99 (1); Avon Park Air Force Range, Osceola County 3/28/98 - 4/18/98 (11), 5/8/99 (1); Highlands Hammock State Park, Highlands County 4/10/99 - 5/15/99 (8); Lake Manatee State Recreation Area, Manatee County 1/6/98 - 12/23/98 (12); Myakka River State Park, Sarasota County 1/26/97 - 11/22/97 (14), 3/26/98 - 12/24/98 (16), 1/16/99 (8), 2/7/99 - 4/8/99 (21).

*Pareuchaetes insulata* (Walker, 1855) **8227** YELLOW-WINGED PAREUCHAETES  
Myakka River State Park, Sarasota County 10/25/97 (2), 11/10/98 (1).

*Cycnia inopinatus* (Henry Edwards, 1882) **8228** UNEXPECTED CYCNIA  
Lake Manatee State Recreation Area, Manatee County 12/21/97 (1); Myakka River State Park, Sarasota County.  
12/22/97 (1)

*Dahana atripennis* Grote, 1875 **8266** BLACK-WINGED DAHANA  
Myakka River State Park, Sarasota County 12/24/98 (1).

*Cisseps fulvicollis* (Hübner, 1818) **8267** YELLOW-COLLARED SCAPE MOTH  
Avon Park Air Force Range, Osceola County 3/3/98 - 4/18/98 (3); Lake Manatee State Recreation Area, Manatee  
County 11/6/97 (2), 1/4/98 - 12/23/98 (39), 11/11/99 (1); Myakka River State Park, Sarasota County 1/26/97 -  
12/22/97 (21), 1/5/98 - 11/20/98 (33), 1/16/99 (2).

*Lymire edwardsii* (Grote, 1881) **8270** EDWARDS' WASP MOTH  
Archbold Biological Station, Highlands County 4/25/99 (1).

*Eucereon carolina* (Henry Edwards, 1886) **8271** FLORIDA EUCEREON  
Myakka River State Park, Sarasota County 11/5/97 (1), 5/2/98 - 10/14/98 (3), 1/16/99 - 2/9/99 (3).

*Cosmosoma myrodora* Dyar, 1907 **8280** SCARLET-BODIED WASP MOTH  
Archbold Biological Station, Highlands County 4/25/99 (1); Avon Park Air Force Range, Osceola County, 3/28/98  
(2), 5/8/99 (3); Highlands Hammock State Park, Highlands County 4/10/99 - 5/15/99 (9); Lake Manatee State  
Recreation Area, Manatee County 11/1/97 - 12/21/97 (20), 1/4/98 - 12/23/98 (39), 11/11/99 (3); Myakka River State  
Park, Sarasota County 1/26/97 - 12/22/97 (16), 5/2/98 - 10/14/98 (8), 4/8/99 (6).

*Syntomeida epilais jucundissima* Dyar, 1907 **8284** POLKA-DOT WASP MOTH  
Lake Manatee State Recreation Area, Manatee County 5/15/98 (2).

#### LYMANTRIDAE

*Dasychira basiflava* (Packard, 1864) **8296** YELLOW-BASED TUSSOCK MOTH  
Myakka River State Park, Sarasota County 5/2/98 (5).

*Dasychira leucophaea* (J. E. Smith, 1797) **8301**  
Avon Park Air Force Range, Osceola County 3/18/98 - 3/28/98 (2); Lake Manatee State Recreation Area, Manatee  
County 1/4/98 - 12/23/98 (6); Myakka River State Park, Sarasota County 10/25/97 - 12/22/97 (3), 1/5/98 - 5/2/98  
(12), 1/16/99 (2).

*Dasychira manto* (Strecker, 1900) **8307** MANTO TUSSOCK MOTH  
Lake Manatee State Recreation Area, Manatee County 4/19/98 (1).

*Orgyia detrita* Guérin, 1831 **8313**  
Myakka River State Park, Sarasota County 5/2/98 (1).

*Orgyia leucostigma* (J. E. Smith, 1797) **8316** WHITE-MARKED TUSSOCK MOTH  
Avon Park Air Force Range, Osceola County 3/3/98 - 3/28/98 (2); Lake Manatee State Recreation Area, Manatee  
County 12/21/97 (1), 4/1/98 (1).



## NOCTUIDAE

*Idia aemula* Hübner, 1813 **8323**

COMMON IDIA

Avon Park Air Force Range, Osceola County 4/18/98 (1); Myakka River State Park, Sarasota County 2/5/97 (1).

*Idia lubricalis* (Geyer, 1832) **8334**

GLOSSY BLACK IDIA

Highlands Hammock State Park, Highlands County 5/9/99 (1); Lake Manatee State Recreation Area, Manatee County 12/23/98 (1); Myakka River State Park, Sarasota County 1/16/99 (2), 2/9/99 (1).

*Phalaenostola larentiodes* Grote, 1873) **8364**

BLACK-BANDED OWLET

Lake Manatee State Recreation Area, Manatee County 5/21/98 - 12/9/98 (2).

(To be continued)

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## BOOK REVIEW

BY

PAUL MILNER

*Butterflies of British Columbia, Crispin S. Guppy and John H. Shepard*

[Published by UBC press, Vancouver. Toronto, ISBN 0-7748-0809-8 (114 pp. )]

Although the area covered by this book is a bit beyond the sphere of the Southern Lepidopterists, it demands a place on your shelf because it is the most informative and beautifully produced book since "The Butterflies of Greece" by Lazaroe N. Pamperis.

The area covered is not only British Columbia but also western Alberta, southern Yukon, the Alaska panhandle, Washington State, northern Oregon, northern Idaho and northwestern Montana. After an introductory chapter, which deals with the overall diversity of the region and the sources of data for the book, brief chapters cover the history of the study of butterflies in British Columbia, post glacial origins of the fauna, the impact of human development on the region, conservation, butterfly gardens, biology, and seasonal changes in the butterfly fauna.

The species and subspecies are dealt with in detail, starting with the Hesperidae. Each species account follows a standard pattern of description of the adult, immature stages, range and habitat, general distribution and conservation status. This is accompanied by a map of the distribution covering the states mentioned and a graph of the number of records for each month of the flight period. Each species account is illustrated by a ventral and dorsal view of spread specimens, and photographs of the live insect in the field. These are outstanding and show the behavior of the butterfly in a way that spread specimens cannot. Distinguishing details are pointed out in drawings where necessary. Common names and scientific names are used throughout with an explanation of the origin of the name, and, in the case of the scientific name, a translation. For instance, we are told that for *Papilio machon*, Linnaeus 1758, Machaon was a physician who served on the Greek side in the Trojan war and was the son of Asclepius, the god of healing, and Epione.

Finally, there is a species checklist with authors and dates, a list of data for the butterfly photographs and genitalia drawings, a glossary, and an extensive bibliography. Covering as it does so much of the butterfly fauna of Canada and the western United States, the wealth of information in this book will be invaluable to the serious collector, and for anyone considering collecting at the Lepidopterists Society meeting in 2003 in Alberta, this book is a must.

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**SPRING HAS ARRIVED? OR "THE GOOD AND THE BAD":** It was forecast to be a reasonably pleasant day as the temperature a few days before had dipped to 23 degrees with the dreaded wind chill factor plunging the thermometer to 16 degrees. The weatherman predicted a high of approximately 68 degrees for this day, March 23, 2002. So I figured that a trip to one of my favorite canyons in West Texas (a few miles east of Lubbock) might be of interest even though it was about 2 weeks early for the start of the collecting season in this area. And it was, interesting, that is - the first butterflies that I saw for the new season were the Sleepy Orange (*Eurema nicippe*), the Dainty Sulfur (*Nathalis iole*) and a giant skipper [*Megathymus yucca coloradensis* (male) (See Color Insert B)]. *This is the good - the skipper!* However, while I was walking through the canyon I did not notice, to my approaching distress, a string of barbed wire which caught my shoe, and immediately I was turned upside down and looking up from the ground. *This was the bad!* After approximately 30 seconds I determined that I was O.K., and then for the next 30 seconds while lying on the ground I had to figure out how to remove the barbed wire from the toe of my shoe. I was definitely captured. Fortunately, the wire barb only entered my shoe and not my foot. Then to startle me once again, a jackrabbit jumped out of his burrow and ran for new cover. I also jumped about 10 feet. Well, with enough excitement for the day, I proceeded along the new trail that had been cut through my formerly pristine canyon. It appears that the park authorities have decided to make either a walking trail or a bicycle trail through this canyon. *This is also the bad!* Much of the area has been cleared. I guess that this is progress, but I would have preferred that the canyon be left alone. Some of the better catches in this canyon over the past several years were the Silvery Blue (*Glaucopsyche lygadamus jacki*) and as stated above, *Megathymus yucca coloradensis*. Later in the spring, the Dotted Checkerspot (*Poladryas minuta*), the Fulvia Checkerspot (*Thessalia fulvia*), the Melissa Blue [*Lycaeides melissa* (female)] (See Color Insert B)], and the Soapberry Hairstreak (*Phaenostemon alcestitis*), should also be found in this canyon (The Editor).

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## STATE COORDINATORS' REPORTS

**STATEMENT OF PURPOSE AND PHILOSOPHY:** We encourage any and all members to report occurrences of species in your area. One time records of common species can be included for documentation purposes. Most of the records you send in will be included in the state reports, but records are open to editing by the respective state coordinators. Species that have been reported numerous times in a given location and are recorded in season are "not" likely to be included. Any unusual reports (uncommon species, state records, etc.) may require a good photograph or a specimen for confirmation.

**Alabama:** C. Howard Grisham, 573 Ohatchee Road, Huntsville, AL 35811, E-Mail: cgrisham@HIWAAY.net

**Arkansas:** Mack Shotts, 514 W. Main Street, Paragould, AR 72450, E-Mail: cshotts@grnco.net

**Florida:** Robert Beiriger, 16356 Trafalgar Drive, East, Loxahatchee, FL 33470, E-Mail: brts@gnv.ifas.ufl.edu

**Georgia:** James K. Adams, 346 Sunset Drive SE, Calhoun, GA 30701, E-Mail: JADAMS@em.daltonstate.edu (Please check out the new GA leps website at: <http://www.daltonstate.edu/galeps/>)

Other contributors include Irving Finkelstein (IF), Ron Gattelle (RG), and Jim Taylor (JT). Most records presented here represent new or interesting records (range extensions, unusual dates, uncommon species, county records, etc.) or newly identified species, mostly for NW Georgia. Records are from Calhoun, Gordon Co., GA, unless otherwise specified; this includes my back porch plus specimens from gas stations around town. "Car." represents Carbondale, exit 326 (formerly 136) off I-75, Whitfield; "Atl" is Atlanta, Fulton Co. Definite county/state records are indicated.

**LYCAENIDAE:** Holly azure (*Celastrina idella*), 7 March 2002, Screven County, GA, Wade Plantation Rd. N. off 301 (RG).

**SATURNIIDAE:** *Callosamia angulifera*, 10 Dec. 2001 (A Confused Emergent!; Car.). **NOCTUIDAE:** *Doryodes bistrialis*, 10 Feb. 2002, Savanna, Chatham Co. (JT, **EARLY!**); *Lithophane viridipallens*, several, beginning 11 Jan.

2002 (all at Car.); *L. unimoda*, 23 Jan. 2002 (Car.); *L. lepida*, 11 Feb. 2002 (Car.; very uncommon in GA); *Metaxaglaea violacea*, 20 Dec. 2001, Exit 285 off I-75 at Red Top Mtn. State Park road, Bartow Co. (COUNTY); also 26 Jan. 2002 (Car.) And 28 Jan. 2002; *M. australis*, 16 Feb. 2002 (second known for state); *Feralia major*, great year, beginning 11 Jan. 2002 and still going strong at the time of this writing (on my back porch, at Car., and in Atl. [IF]); *Psaphida styracis* (many), 10 Feb. 2002, Savanna, Chatham Co. (JT), and 7 March 2002 (my back porch); *Orthosia alurina*, several (usually uncommon), beginning 13 Feb 2002 and still flying; *O. garmani*, 3 March 2002; *Cerastis tenbrifera*, 4 March 2002. **GEOMETRIDAE:** *Paleacrita merricata*, several, beginning 4 Jan. and continuing to 27 Feb. 2002 (all in Calhoun), also several in Atl. (IF).

**Louisiana:** Michael Lockwood, 215 Hialeah Avenue, Houma, LA 70363, E-Mail: mikelock34@hotmail.com

Michael Lockwood found *Automeris louisiana* on February 18,20,23,22, and 25, 2002 ,in Lafourche Parish, Leeville, Louisiana.

**Mississippi:** Rick Patterson, 400 Winona Rd., Vicksburg, MS 39180, E-Mail: rpattel@Entergy.com

Slow start in Mississippi. Ricky reports that only a few *Colias eurytheme*, *Nymphalis antiopa*, and single *Graphium marcellus* have been observed by him thus far.

**North Carolina:** Steve Hall, North Carolina Natural Heritage Program, Div. of Parks & Recreation, 1615 MSC, Raleigh, NC 27699-1615, E-Mail: Stephen.Hall@ncmail.net

**South Carolina:** Ron Gattelle, 126 Wells Rd., Goose Creek, SC 29445, E-Mail: gattelle@tils-ttr.org

**Tennessee:** John Hyatt, 5336 Foxfire Place, Kingsport, TN 37664, E-Mail: jhyatt@eastman.com

John Hyatt states that he observed *Colias philodice* on the wing on 17 December 2001 and on 31, January 2002, in Kingsport, Sullivan Co., TN. He believes that both sightings are records.

**Texas:** Ed Knudson, 8517 Burkhart Road, Houston, TX 77055, E-Mail: eknudson@earthlink.net

Ed Knudson reports: Aside from a few cold snaps, east and south TX has had a mild winter up to recently, as we have had some hard freezes in the Houston area in late Feb. and early March.

In the Lower Rio Grande Valley, from late Dec. to mid Feb. Many interesting species have been reported, mostly from the South Texas Butterfly Association (some excellent photos were received). The biggest news was the find of a specimen of *Siproeta epaphus*, just north of Santa Ana Refuge in Hidalgo Co., in late Dec. This is the second USA record, the first being from southeast NM. Other species, such as *Anartia fatima*, *Adelpha fessonia*, *Epiphile adrasta*, and *Papilio anchisiades idaeus* were photographed.

In the Houston area, a few interesting butterflies have been seen this winter, including *Dryas iulia* (seen in small numbers in Spring Valley up to late January; *Nymphalis antiopa*, Spring Valley, 20 Feb.; and *Urbanus proteus*, Spring Valley, 24 Feb.

In the Beaumont area, on Feb 25, a good selection of winter moths were found at a convenience store in NW Beaumont, near Bevil Oaks (Jefferson Co.). This included a nice specimen of what appears to be *Lithophane signosa*, the southernmost TX record for this species.

**Virginia:** Harry Pavulaan, 494 Fillmore Street, Herndon, VA 22070, E-Mail: hpavulaan@aol.com

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The Southern Lepidopterists' News is published four times annually. Membership dues are \$15.00 annually. The organization is open to anyone with an interest in the Lepidoptera of the southern United States. Information about the Society may be obtained from, and dues may be sent to: Jeffrey R. Slotten, Treasurer, 5421 NW 69th Lane, Gainesville, FL 32653.

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