

Vol. 25 NO. 2

June 30, 2003

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 (WEBSITE: www.southernlepsoc.org/)

J. BARRY LOMBARDINI: EDITOR

COLIAS EURYTHEME AND COLIAS PHILODICE: A PROGRESS REPORT BY LEROY C. KOEHN

This is a progress report on a rearing project that I began in 2001. I plan to report the results of this project once I have completed my rearing work. What follows is a brief overview of my work and some indication of results. I have personally come to believe that there may never be a conclusion to this project.

As a teenager with a passion for Lepidoptera, growing up in northeast Ohio was not a Lepidopterists' paradise. Regardless, I made it a year round effort. From the first warm days of spring to the waning days of Indian Summer late in the fall, I was out and about with a net in hand. I even pursued Lepidoptera in the winter, looking for Saturnid cocoons and on the occasional warm sunny day in December you could find me in a field in pursuit of *Colias philodice* and *Colias eurytheme*. Of all the specimens that I have collected, reared and prepared, my series of *Colias philodice* and *Colias eurytheme* is by far largest in my collection. However, it was the cold weather forms of these two species that interested me the most. They were very dark and many had extensive areas of green scales on the ventral surfaces of the wings, especially the hind wing. My field notes from 1962 and 1963 noted that all the Colias that I collected in November of 1962, and a single entry of 4 March 1963, as well as some additional entries in late April and early May of 1963, had "lots of green on the underside". Where did these green scaled creatures come from? I eventually decided to find an answer to that question in 2001, almost forty years later. What started out as a simple rearing effort turned into a major complex rearing project.

In mid March of 2001, I collected several specimens of *Colias eurytheme* in Whitley County, Kentucky. Some were very fresh, some were somewhat wing worn, and some appeared very worn, almost at the end of their life. The winter of 2000/2001 was extremely mild and I had been in the field in Whitley County a number of times when the temperature was 55+ degrees. In January of 2001, I took several specimens of *Colias eurytheme* that were worn,

some I kept and mounted, most I released, and those I released was a decision I would later regret. During the 2001 spring field meeting of the Society of Kentucky Lepidopterists in Menifee and Powell counties in eastern Kentucky, I observed a number of female *Colias eurytheme* with extensive green scales on the ventral surface, ovipositing on White Sweet Clover. I collected a dozen females for ova and dug up a number of white sweet clover plants. Thus began the rearing project to answer one question that as of this writing remains unanswered, and presented a dozen more questions. And, I have learned some amazing things about these two species.

This project is extremely complex. To even begin to explain and understand how complex, I must first explain some of the things learned and how rearing was accomplished. I reared all the larvae in cages (18" X 18" X 24") on potted plants with soil gathered in Kentucky. Each cage held four pots with host plant. The larvae were exposed to the elements, although somewhat shielded under the overhanging of a roof. To determine the preferred host plant, I placed four different host plants and several females into the cage. Females would lay the majority of the eggs in the first two days of confinement after which time I would released them back into the wild. Survival rate of larvae in the cages was 90%. Most losses resulted from ants or assassin bugs that were on the plants prior to being placed in the cages.

The potted plants were maintained in a garden. I partially buried each pot in soil and kept the soil moist. I fertilized the plants with Milorganite, an organic fertilizer. This process worked extremely well. A side benefit to potted plants maintained out doors, I also reared 11 species of moths without ever seeing the female. I would only find the larvae once the plant was placed in a cage.

I have had the adults, pupae and all instars of larvae *Colias eurytheme* hibernate and survive the winter. Only pupae and the latter instar larvae of *Colias philodice* survived the winter. Also, the winter of 2001/2002 was another very mild winter. To date the winter of 2002/2003 has been very cold. This may change the hibernation survival rate of both species.

I will discuss both species separately. (Please see Color Inserts A and B.)

COLLAS EURYTHEME

The variability in Colias eurytheme is striking (Color Insert A). Beginning with the wild collected females in early April, six generations are produced. The color plates illustrates the six generations. Each generation produces seasonal "forms". The males were identical, the females were quite different. Fig. 29 and Fig. 30 are typical summer Colias eurytheme and represent the "Bright Summer Form" of the female. Fig. 25 and Fig. 26 are also typical summer Colias eurytheme and represent the "Soft Summer Form" of the female. The rearing that I am conducting indicates that these two forms or variants were the result of the larval host plants. The majority of Colias eurytheme reared on Alfalfa, Medicago saliva, produce the "Bright Summer Form", those reared on Red Clover, Trifolium pratense, produce the "Soft Summer Form". Fig. 40 is a side by side of the two forms of the female. Fig. 37, 38 and 39 are also summer Colias eurytheme. These dark, washed out forms occur when larvae were reared on Crown Vetch, Coronilla varia. To really add to the complexity of all this, when larvae where reared on White Clover, Trifolium repens, a "Yellow/Orange Summer Form" resulted, Fig. 33, 34, 35, & 36. The amount of orange in the males varied from small to almost total orange. It appears to be a hybrid (Colias eurytheme X Colias philodice), the orange in the females varies, but not as significantly as the males. I tried on numerous occasions to cross breed Colias philodice with Colias eurytheme, without success. I hand paired males of Colias philodice with females of Colias eurytheme on several occasions and not a fertile ovum was ever produced. I attempted to hand pair males of Colias eurytheme with females of Colias philodice without success. As the results of my rearing efforts, I do not believe that Colias eurytheme and Colias philodice will cross breed in the wild.

During the third week of April, the hibernating fourth and fifth instar larvae begin to feed, eventually pupate and emerge as adults by mid-May. The majority of the these adults were of the "Bright Summer Form" regardless of what the larval host was, however, that was not the case with the next generation as the host plant indicated the variant of the female. This was the opposite of the early instar larvae that hibernated. They began to feed in late April/early

May and when they emerged as adults, the host plant determined the variant of the female.

By late August, larval development accelerated with some individuals producing adults in 4 weeks and while other individuals would take the full six weeks. As a result, there was no longer clear lines of generations. Maintaining family generations could only be accomplished by isolating each family. Alfalfa, *Medicago saliva*, became the host of choice of *Colias eurytheme* after the first of August. This huge developmental variability and overlap of generations produced some striking variants, Fig. 38 & 24. I considered this to be one continuous overlapping generation.

I had always assumed that the white form of the female were mixed with the typical orange form. As the result of this rearing project, I learned that a single orange female will produce a brood with the vast majority or all of the females of the white form. A brood with one or two white form females mixed with orange females was the exception. White females seldom produced white females. White females can produce some striking orange female variants.

Extreme color variants were common in fall emergences. However, Red Clover, *Trifolium pratense*, was the larval host plant of the most striking variants. It is evident to me that *Colias eurytheme* is a very complex and variable species. My two years of rearing indicate that the color forms and variations of the adults are related to host plant or possibly a combination of host plant and weather.

There were three color forms of the larva, the typical green occurred on all the larval host plants that I used. A deep purple form was common but only occurred on Red Clover, *Trifolium pratense*, and brown color larva occurred on Crown Vetch, *Coronilla varia* and only in the early summer (Mid-May). The pupae were always green. However, a day or two before emergence, the color of the wings became visible through the pupal case and these colors were brilliant, especially late in the fall, Fig. 28.

COLIAS PHILODICE

Colias philodice was entirely different (Color Insert B). I began with 4 females that I collected on 18 April in Scott County, Kentucky. I managed to keep 6 families breeding all summer. They appeared to be distinct generations. There was some variation between individuals but this was far less noticeable than Colias eurytheme. Especially during the late summer and fall. Colias philodice was much more stable and was more host specific, using White Clover, Trifolium repens. When presented a selection of plants, they would always oviposit on White Clover, Trifolium repens. The larvae were always green with the exception of an occasional brown individual. Colias philodice produced a cold weather form, Fig. 1,2,3,5,6 & 7, which produced a bright large yellow summer form, Fig. 9, 10 & 11. Although Colias philodice produces a cold weather form, the next generation was typically the same size, but without the green shading on the ventral surfaces, Fig. 5,6 & 7. Although similar, there was some shape variation between males. When looking at wild collected males, this variation is only noticeable when you have large series before you. Most males can be easily separated into the two variants: 1) Bright Yellow with dark black borders with a pronounced point to the forewings, and 2) Dull Yellow with smaller grayish black borders and roundish forewings. Some individuals appear to be a blend between the two variants. However, when I began to rear them, all the males from a single yellow female were of the same variation, bright yellow with more pointed forewings and larger black borders. The most astounding discovery was that only white females produced males of the duller variant with rounded forewings. But once again, this did not hold true. During late September and into October, regardless of the color of the female, all males were duller with more rounded wings.

Unlike *Colias eurytheme*, white females of *Colias philodice* occurred with each generation. The number of white females varied from one to all. There was little variation between white females, even cold weather forms. Although I have been successful in taking adults and pupae over the winter, I have yet to produce the cold weather form. I am currently of the opinion that the cold weather form is the result of host plant and weather, or possibly the effects of cold air temperatures on the pupae. And, I may have not used the correct host plant. My current plans include two more seasons of rearing, should it become necessary, possibly three. I have read a number of papers on the study of

VOLUME 25 NO.2, PG. 40

The Southern Lepidopterists' Society

OFFICERS

Robert Beiriger: Chairman 16356 Trafalgar Drive, East Loxahatchee, FL 33470 Bostrichid@mail.ifas.ufl.edu

Jeffrey R. Slotten: Treasurer 5421 NW 69th Lane Gainesville, FL 32653 E-Mail: jslotten@bellsouth.net

Bill Russell: Secretary 772 Yorkshire Rd. NE Atlanta, GA 30306 E-Mail: WHRINATL@aol.com

Paul Milner: Membership Coordinator 272 Skye Drive Pisgah Forest, NC 28768 E-Mail: pamilner@citcom.net

Marc Minno: Member at Large 600 NW 35th Terrace Gainesville, FL 32607 E-Mail: afn10853@afn.org

Dave Morgan: Website Manager 4935 Shadowood Parkway Atlanta, GA 330339 E-Mail: davemor@us.ibm.com

J. Barry Lombardini: Editor 3507 41st Street Lubbock, Texas 79413 E-Mail: jbarry.lombardini@ttmc.ttuhsc.edu

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 or the Society Website: www.southernlepsoc.org/ *Colias eurytheme* and *Colias philodice*. Most dealt with *Colias eurytheme* as a pest to Alfalfa, *Medicago saliva*, as a crop. These were studies in which all rearing was conducted in the laboratory. The results of these studies with controlled rearing were similar but different. I attempted to rear with near to natural conditions as possible. Several of these papers indicate successful cross breeding of *Colias eurytheme* and *Colias philodice* during controlled laboratory breeding. I have not been able to answer the question as to whether these two species cross breed in the wild.

These are two very common species of butterflies that we see all season long, and yet we think we know all about them, when in fact, we know very little.

INDEX

Page

1.	Colias eurythrme and Colias philodice: A Progress Report by
	Leroy C. Koehn
2.	Metaxaglaea of Louisiana by Vernon Antoine Brou Jr41
	Joe and Moe
	Abbot Award Nominees for 200343
	Automeris in lilith (Strecker) in Louisiana
	by Vernon Antoine Brou Jr
6.	For Sale by Member
	Cosmosoma myrodora Dyar in Louisiana
	by Vernon Anoine Brou Jr46
8.	Follow up on the Miami Blue Butterfly (Cyclargus thomasi
	bethunebakeri)
9.	Answer to Joe's and Moe's Dilemma
10.	Schinia trifascia Hubner in Louisiana
	by Vernon Antoine Brou Jr48
11.	Thoughts on Why Moths Are Attracted to Lights
	by Ken Philip49
12.	Fall Meeting of the Southern Lepidopterists' Society/Annual
	Meeting of the Association for Tropical Lepidoptera50
13.	To Publish or not to Publish Nomenclature Articles
	in the Newsletter by Robert Beiriger
14.	Observing Chlorostrymon maesites in Bahia Honda State
	Park, Florida, by David Fine54
15.	Photographs from a Collecting Trip in Ohoopee Dunes
	Natural Area, Florida, by James K. AdamsInsert C
16.	The Life History of Dahana Atripennis (Grt.)
	(Lepidoptera: Arctiidae) by Jeff R. SlottenInsert D57
17.	Reports of State Coordinators

METAXAGLAEA OF LOUISIANA BY VERNON ANTOINE BROU JR.

Abstract: The occurrence of the Noctuidae genus *Metaxaglaea* in Louisiana is briefly discussed and updated, delineating the flight periods in Louisiana of four species: *Metaxaglaea australis* Schweitzer, *Metaxaglaea violacea* Schweitzer, *Metaxaglaea violacea* (Grote), and *Metaxaglaea semitaria* Franclemont. Images of adults from Louisiana are provided.

Forbes (1954) listed the two described species of the genus, *Metaxaglaea inulta* (Grote) and *M. viatica* (Grote). The first mention of the genus *Metaxaglaea* in Louisiana is a single specimen listed as *Metaxaglaea viatica* (Grote) by Chapin and Callahan (1967). In 1968, *Metaxaglaea semitaria* Franclemont was described. Subsequently, Schweitzer (1979) revised the genus and described two newly recognized species: *Metaxaglaea violacea* Schweitzer and *Metaxaglaea australis* Schweitzer. This author has studied the Louisiana specimen reported as *M. viatica* by Chapin and Callahan (1967), and without a doubt, it is *M. violacea*. Schweitzer (1979) also reported *viatica* for Baton Rouge Louisiana. Forbes(1954) text description of *viatica* could refer to any of the subsequently described species: *semitaria*, *violacea*, or *australis*.

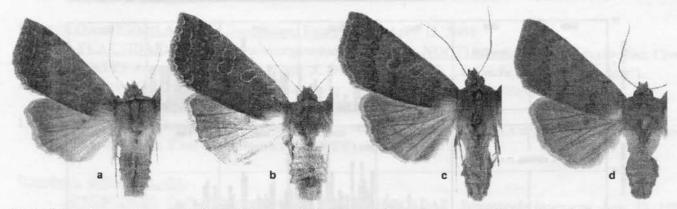


Fig. 1. Metaxaglaea species: a. australis, b. violacea, c. viatica, d. semitaria, captured at sec.24T6SR12E, 4.2 mi.NE Abita Springs, Louisiana.

Presently, four (Fig. 1a-d) of the five known species of *Metaxaglaea* occur in Louisiana. Distribution in the state is illustrated by parishes (Fig. 2a-d). *M. inulta* may not reach this far south, as Schweitzer (1979) listed the range to be the states of Virginia and Missouri at the southern end. Forbes (1954) stated "south to Virginia and Iowa". Despite the fact that at least two of the reported hostplant species of *Virbumum* occur commonly at the Abita Springs study site, and elsewhere in the state, no *inulta* have been collected to date.

In Louisiana, as apparently elsewhere, the four recorded species are univoltine, though the flight periods are drawn out over five to seven months (September - March), depending on species (Fig. 3a-d). The extended flight periods of *Metaxaglaea* are typical of many other winter moths in Louisiana, and all four species have flight periods peaking in months having the coldest temperatures: December, January, and February. Hostplants listed by Schweitzer (1979) for *Metaxaglaea* species are: *australis* on oaks, crabapple, cherry, and blueberry, *violacea* on American holly, *viatica* on apple, crabapple, oaks, red maple, blueberry, and sweetgum, and *semitaria* on crabapple and blueberry. Each of these plants are very abundant at the Abita Springs study site.

Among the Louisiana species, coloration is most diverse in *australis*. An array of brown colors and shades of tan and chestnut abound in a lengthy series of these specimens. *M. australis* can appear in color much like some *viatica* and *semitaria*, but the winglength of *australis* is significantly less, compared to these two species. The winglengths of *violacea* and *viatica* are the greatest among Louisiana specimens of *Metaxaglaea*. In fresh specimens of *violacea*, a violet sheen covers all wing surfaces to some degree, and this species is the darkest in appearance. Distinguishing some specimens of *violacea* and some darker *viatica* may require careful visual examination for accurate determination.

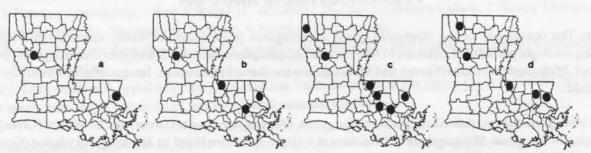


Fig. 2a-d. Parishes in which Metaxaglaea have been recorded. a. M. australis, b. M. violacea, c. M. viatica, d. M. semitaria.

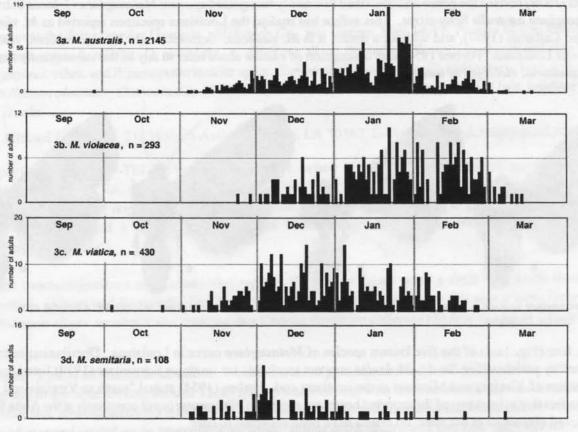


Fig. 3a-d. Metaxaglaea species: a. M. australis, b. M. violacea, c. M. viatica, d. M. semitaria captured at sec.24T6SR12E, 4.2 mi.NE Abita Springs, Louisiana.

Literature Cited

Chapin, J.B. and Philip S. Callahan 1967. A list of the Noctuidae (Lepidoptera, Insecta) collected in the vicinity of Baton Rouge, Louisiana, Proc. La. Acad. Sci. 30: 39-48.

Covell, Jr., C.V. 1984. A Field Guide to Moths of Eastern North America. The Peterson Field Guide Series No. 30. Houghton Mifflin Co., Boston. xv + 469pp., 64 plates.

Forbes, W.T.M. 1954. Lepidoptera of New York and Neighboring States, Part III, Cornell Univ. Agr. Exp. St. Mem. 329. Ithaca, New York, 433 pp.

Franclemont, J.G. 1968. A new species of Metaxaglaea (Lepidoptera, Noctuidae, Cuculliinae). Can. Entomol. 69: 127-130.

Schweitzer, D.F. 1979. A revision of the genus *Metaxaglaea* (Lepidoptera: Noctuidae, Cuculliinae) with descriptions of two new species. Postilla No. 178, Peabody Mus. Nat. Hist., New Haven.

(Vernon Antoine Brou Jr. 74320 Jack Loyd Road, Abita Springs, Louisiana 70420, email: vabrou@bellsouth.net)

JOE AND MOE

Joe and Moe, two fast flying moths of the clan *Hyles lineata* (the White-Lined Sphinx), were bemoaning the fact that they only lived two weeks (**T**) as adults. This was very distressing to them since they had lots to do and many places to see, and they were thus wondering how they could improve the situation, *i.e.* lengthen their life span. In the course of their readings in the *Journal of Science for Moths* and numerous conversations with the Moth Scientific Community, Joe and Moe became aware of the well known *time dilation phenomenon in special relativity* which states that *time slows for a speeding individual as determined by a stationary observer* according to the following formulas:

$$T^{1} = \delta T$$

$$\delta = 1/(1 - v^{2}/c^{2})^{\frac{1}{2}}$$

Joe and Moe jumped on this concept of special relativity thinking (erroneously) that it will be to their advantage if they fly fast enough their life span will increase. What speed will Joe and Moe have to fly in order to double (T^1) their life span as observed by Zoe, a stationary observer, who is a slow flying moth of the clan *Callosamia promethea* (the Spicebush Silkmoth) and who is obviously not impressed by Joe's and Moe's mistaken understanding of special relativity? [δ = constant, v = velocity, c = speed of light (186,000 miles/second)].

[Editor: Please note - the answer will appear on page 47 of the News.]

ABBOT AWARD NOMINEES FOR 2003

Irving Finkelstein is a retired art history Professor. He was born in the New York Area and moved to Atlanta in 1971, to teach at Georgia State University and to collect Diana fritillaries. He has been a worldwide collector of butterflies, but in recent years, Irving has been concentrating on the moth end of the Lepidoptera spectrum. He has unquestionably become one of the premiere "moth collectors" in the state of Georgia and the southeastern U.S. He and Dr. Charles Covell have described a new species of Geometridae from Georgia. Irving is a charter member of the society.

Dr. Jacqueline Y. Miller, Jackie to her friends, is a charter member of the Southern Lepidopterists Society. Jackie is Curator of Collections at the Allyn Museum of Entomology in Sarasota and Associate Editor of the *Bulletin of the Allyn Museum*. Jackie has authored or co-authored over 75 publications, including "The Butterflies of the West Indies and South Florida." Jackie, along with her husband, Dr. Lee D. Miller are charter members of the society and ardent supporters, event through some difficult times.

Harry Pavulaan is the Virginia Field Zone coordinator for the Southern Lepidopterist's Society. He is co-founder of the TLS. He and David Wright have done extensive studies on the Celestrina complex and described *Celestrina idella*. He is married and has several children.

The Ballot is an insert in this Newsletter. Please vote and return to:

J. Barry Lombardini, The Editor 3507 41st Street Lubbock, Texas, 79413

DEFINITIONS: *Gynandromorph* - an individual expressing characteristics of both male and female. *Aestivation* or *Estivation* - dormancy during a hot, dry season; to pass the summer in a dormant state; opposed to hibernation.

AUTOMERIS IO LILITH (STRECKER) IN LOUISIANA BY VERNON ANTOINE BROU JR.

Automeris io lilith (Strecker) (Fig. 1), was first reported in Louisiana by von Reizenstein (1863) as Saturnia io Fabricius. In 1972, Ferguson recognized the subspecies A. io io (F.), A. io lilith (Stkr.), and A. io neomexicana B.& Benj. A. io lilith has been commonly called the Florida Io moth, and Ferguson listed the range to be South Carolina westward to Louisiana. The Louisiana locality records are depicted in Fig. 2.

Fig. 1. Automeris io: males, a, b, c, female, d.

The upper forewings of male *lilith* in Louisiana usually appear in varying amounts of orange-brown over a yellow ground color and in an infinite array of these colorations. In some specimens (*e.g.*, the initial imagoes of the first brood in March) forewings can be entirely reddish-brown, without any yellow scales. The forewing maculation also varies greatly in amount, color, and intensity, with brownish-black markings replaced by entirely white markings on occasional specimens.

Several authors have surmised that there may be two or three annual broods of *lilith* in the southern United States. In Louisiana, 83% of the collected imagoes were captured in the four months of May – August. The number of broods of *lilith* occurring in Florida according to Ferguson (1972) is two, February – April and September – October. Ferguson ignored the six months in between, as he similarly stated when he presumed the number of broods of *Antheraea polyphemus* (Cramer)

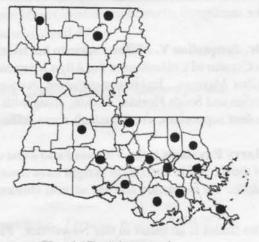


Fig. 2. Parish records.

in the southern United States (Brou, 2002). Based on the Louisiana specimens depicted in (Fig. 3), it appears there are 4 annual broods of *lilith*, broods peaking at approximately 46-day intervals, with the initial brood peaking the first week of April.

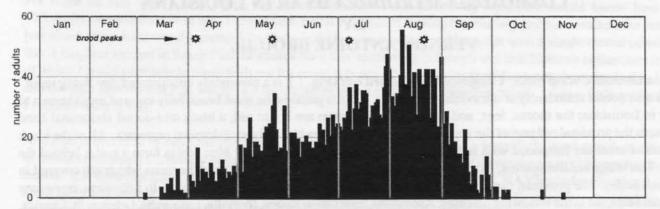


Fig. 3. Automeris io lilith captured in Louisiana, 4.2 mi. NE Abita Springs, sec.24T6SR12E. n = 3,604.

Literature Cited

Brou, Vernon A. Jr. 2002. Voltinism of Antheraea polyphemus (Cramer) (Saturnidae) in Louisiana. South. Lepid. News 24: 6. Ferguson, D.C. in Dominick, R. B. et al. 1972. The Moths of America North of Mexico, fasc. 20.2B, Bombycoidea (in part). von Reizenstein, Ludwig 1863, Catalogue of the Lepidoptera of New Orleans and Its Vicinity. New Orleans, Isaac T. Hinton.

FOR SALE - \$450.00 FOR ENTIRE LOT

Film Camera equipment (35 mm), original owner -- All items in 2 foam insulated hard cases -- 1 plastic - good condition, 1 metal - worn condition:

- 1. 1 Pentax K 1000 body very good
- 2. 1 SMC Pentax M 1:2, 50mm lens, w/cap excellent
- 3.1 SMC Pentax Macro 1:4, 100mm lens, w/cap mint
- 4. 1 SMC Pentax Macro 1:4, 50mm lens, w/cap mint, w/ hard case
- 5. 1 Albinar Macro 1:2.8, 28mm lens, w/cap very good, minor scratches on body, w/ hard case
- 6. 1 Vivitar Series 1, 70-210mm VMC 62mm front end, w/cap, Macro focusing zoom mint-new, w/ hard case excellent, w/ 62mm collapsible lens hood unused new w/ 62mm Hoya UV filter-mint, new
- 7. 1 Auto Bellows M (49mm) excellent
- 8. 1 double cable release excellent, minor handle scratches
- 9.1 single cable release excellent
- 10. 1 Vivitar Zoom thristor 265 hot shoe Flash very good condition
- 11. 1 Cambron set of extension tubes 31mm, 21mm, 13mm, mint new
- 12. 1 Promaster closeup set 49mm, +1, +2, +4, mint new
- 13. 1 Asahi Pentax 49mm 52mm step-up ring obvious use
- 14. 1 Tiffen 49mm, 80A, filter New-Unused
- 15. 1 Tiffen 49mm, FLD, filter New-Unused
- 16. 1 Tiffen 49mm, Sky 1A, filter New-Unused
- 17. 1 Tiffen 49mm, Polarizer, filter Excellent
- 18. 1 Hoya 49mm, 80B, filter New-Unused
- 19. 1 Sears 49mm, UV, filter Good
- 20. 1 Sears 49mm, K2, filter New-Unused
- 21. 1 Hoya 49mm, UV, filter Good
- 22. 1 Prinz 49mm FLD, filter Excellent
- 23. 1 Haze 52mm, UV, filter Excellent
- 24. 1 Stepring 52<-->52, New-Unused

Contact: Vernon Antoine Brou Jr. 74320 Jack Loyd Road Abita Springs, Louisiana 70420 Vabrou@bellsouth.net Phone: (985) 892-8732

COSMOSOMA MYRODORA DYAR IN LOUISIANA BY VERNON ANTOINE BROU JR.

The scarlet-bodied wasp moth, *Cosmosoma myrodord*Dyar (Fig. 1.), is a commonly encountered day flying moth which also occurs abundantly at ultraviolet light traps. This is perhaps the most beautifully-colored moth known to occur in Louisiana; the thorax, legs, and much of the abdomen are bright red, a black mid-dorsal abdominal band interrupts the proximal red part of the abdomen and attaches to the black distal abdominal segments. All of the black abdominal areas are festooned with iridescent blue patches of scales; similar blue scales form a collar behind the head. The wings are transparent, except for the borders (wing edges and apex) and the veins which are covered in jet black scales. The proximal two-thirds of the antennae is black, the distal third is white. In Louisiana, *myrodora* has been collected in the following parishes: Ascension, East Baton Rouge, Iberville, Lafourche, Orleans, St. Charles, St. John, St. Tammany, and West Feliciana.

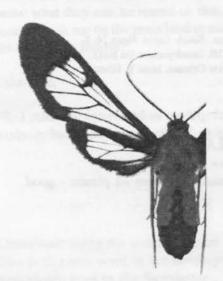


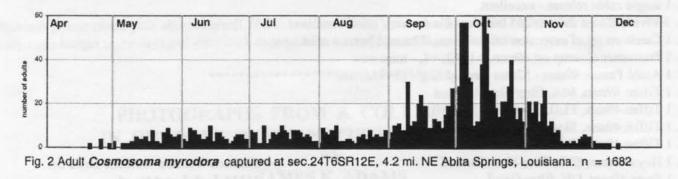
Fig. 1. Cosmosoma myrodora temale.

There has been most interesting research on this moth (Conner et al, 2000) and its relationship to alkaloid containing plants. *Cosmosoma myrodora* like some other Arctiidae possess male abdominal pouches which are capable of emitting flocculent. Conner (2000) reported *myrodora* to be attracted to pyrrolizidine alkaloid-containing dried roots of *Eupatorium capillifolium* (Asteraceae). Connor reported the alkaloid laden flocculent apparently acts as a defense mechanism against predatory spiders. Males acquire the alkaloid by feeding on plant fluids, they transfer this protection to females during courtship by discharging alkaloid laden filaments upon her and by seminal infusion. The female passes this alkaloid protection on to her ova.

The larval food plant in Louisiana, as elsewhere is *Mikania scandens* (L.) commonly called climbing hemp weed, a member of the sunflower family. *M. scandens* flowers abundantly during the latter half of the year, with adults visiting flowers as well as ovipositing on the vine-like plant.

Covell (1984) reported *myrodora* as occurring from Florida to Texas. Holland (1903) states the genus *Cosmosoma* contains at least 80 species,

though Hodges et al. (1983), listed only three species for America north of Mexico. There are several broods of *myrodora*, with the primary flight peaking in early October (Fig. 2).



Literature Cited

Conner, W.E. et al. 2000. PNAS (www.pnas.org), 97: 26.

Covell, Jr., C.V. 1984. A Field Guide to Moths of Eastern North America. The Peterson Field Guide Series No. 30. Houghton Mifflin Co., Boston. xv + 469pp., 64 plates.

Holland, W. J. 1903. The Moth Book. New York, Doubleday, Page & Co. reprinted 1968 New York: Dover, 479 pp., 48 plates.

Hodges, R.W. et al. 1983. Checklist of the Lepidoptera of America North of Mexico. E.W. Classey Ltd. and The Wedge Entomol. Res. Found., Cambridge: Univ. Press. xxiv + 284 pp.

FOLLOW UP ON THE MIAMI BLUE BUTTERFLY (CYCLARGUS THOMASI BETHUNEBAKERI)



Robert Petree and his wife

Robert Petree from Lake Mary, FL, sent in a news article that appeared in the Orlando Sentinel that states that biologists at the University of Florida's McGuire Center for Lepidoptera Research are in the process of breeding captive Miami Blue butterflies. The article was written by David Fleshler, a Florida Correspondent, who stated that the University scientists had obtained both a male and female butterfly from eggs that they had collected at Bahia Honda State Park which presently is the only know location of the Miami Blue. The goal is to breed these two butterflies and start a captive colony that will eventually be released in the wild into the former habitat of the Miami Blue. If successful these captivity-bred butterflies will reestablish the Miami Blue in the Keys and act as insurance against extinction of this species. (The

Miami Blue has been placed on the Florida endangered species list and it is a third-degree felony to harm this butterfly.)

[Editor's note: My thanks to Robert Petree for sending in this article. I encourage the membership to send me news worthy items.]

ANSWER TO JOE'S AND MOE'S DILEMMA POSED ON PAGE 43

You will recall earlier in the Newsletter on page 43 that Joe and Moe, two fast flying moths of the clan *Hyles lineata* (the White-Lined Sphinx), were despondent over their very short life span of 2 weeks and wished to double their life span to 4 weeks. They had read about *time dilation phenomenon in special relativity*, but mistakenly thought that by increasing the speed of their flight they could increase their own life span. Joe and Moe did not realize that only a stationary observer, such as Zoe of the clan *Callosamia promethea* (the Spicebush Silkmoth), would notice the slowing of time from 2 to 4 weeks. However, the actual life span of Joe and Moe (as experienced by Joe and Moe) will remain the same, *i.e.*, 2 weeks. The formulae and calculations are:

$T^1 = \delta T$	$1 = 4 - 4v^2/c^2$ (Rearrange equation)
$\delta = 1/(1-v^2/c^2)^{\frac{1}{2}}$	$-3 = -4v^2/c^2$ (Change signs to +; cross multiply)
Note in our example: δ must equal 2.	$4v^2 = 3c^2$
$T^1 = \delta T$	$v^2 = 3c^2/4$ (Take square root of each side of the equation)
$4 \text{ weeks} = 2 \times 2 \text{ weeks}$	$v = (3c^2/4)^{\frac{1}{2}}$
$\delta = 2 = 1/(1 - v^2/c^2)^{\frac{1}{2}}$	$v = (0.75c^2)^{\frac{1}{2}}$
Solve for v	v = 0.866c (c = speed of light = 186,000 miles/second)
Square both sides	
$4 = 1/(1 - v^2/c^2)$	v = 161,076 miles/second
Cross multiply	

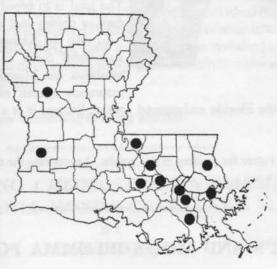
Joe and Moe will certainly be zipping along at approximately 86% of the speed of light, but they will not enjoy an extended life span; only the stationary observer, Zoe, will notice an increase in their life span from 2 to 4 weeks.

SCHINIA TRIFASCIA HUBNER IN LOUISIANA BY VERNON ANTOINE BROU JR.

The pretty olive-colored flower moth *Schinia trifascia* Hubner is reported by most of the authors: Covell (1984), Forbes (1954), Hardwick (1996), and Holland (1903), to occur from Ontario and Massachusetts south to Florida and west to Arizona, Colorado, and Wyoming. Some of these authors also report the larvae are feeders on various species of *Eupatorium* and dog fennel, false boneset, joe-pye-weed, *etc*.

The forewings are divided by narrow whitish transverse bands at anti-median and subterminal, and post-median line areas. The hindwings are light pale olive, with a dusting of darker olive scales along the outer margin, most concentrated at the apex. The species is fairly common wherever it is encountered and usually can be taken in considerable quantities using ultraviolet light. In Louisiana, *trifascia* has been found in 11 parishes (Fig. 2), though

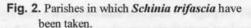




I suspect it may eventually be found in all 64 parishes. *Schinia trifascia* was previously reported for Louisiana by Chapin and Callahan (1967) from East Baton Rouge Parish.

Adults have been recorded from July to November in Louisiana, but the single brood culminates during the month of September (Fig. 3).

Fig. 1. Schinia trifascia Hbn.



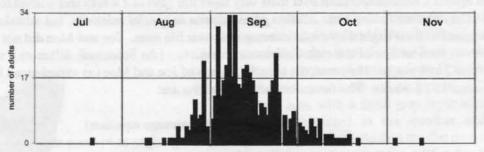


Fig. 3. Schinia trifascia collected at sec.24T6SR12E, 4.2 mi. NE Abita Springs, Louisiana. n = 544

Literature Cited

Chapin, J.B. and Philip S. Callahan 1967. A list of the Noctuidae (Lepidoptera, Insecta) collected in the vicinity of Baton Rouge, Louisiana, Proc. La. Acad. Sci. 30: 39-48.

Covell, Jr., C.V. 1984. A Field Guide to Moths of Eastern North America. The Peterson Field Guide Series No. 30. Houghton Mifflin Co., Boston. xv + 469pp., 64 plates.

Forbes, W.T.M. 1954. Lepidoptera of New York and Neighboring States, Part III, Cornell Univ. Agr. Exp. St. Mem.329. Ithaca, New York, 433 pp.

Hardwick, D.F. 1996. A Monograph of the North American Heliothentinae. Privately printed, 281 pp. 21 plates.

Holland, W.J. 1903. The Moth Book. New York, Doubleday, Page & Co. reprinted 1968 New York: Dover, 479 pp., 48 plates.

(Vernon Antoine Brou Jr., 74320 Jack Loyd Road, Abita Springs, Louisiana 70420 email: vabrou@bellsouth.net)

THOUGHTS ON WHY MOTHS ARE ATTRACTED TO LIGHTS BY KEN PHILIP

[As Editor of the SL News I came across these thoughts of Dr. Ken Philip (Institute of Arctic Biology, University of Alaska, P.O. Box 757000, Fairbanks, AK 99775-7000) on the internet. When contacted, Dr. Philip said that he had no problem with me publishing them in our Newsletter. I have edited them and hopefully have not changed his meaning and/or intent. Also, I am re-printing the copyright Fig. 7.7, p. 182 from INSECT BIOLOGY: <u>A Textbook of Entomology</u> by Howard E. Evans. This Figure is "Reprinted by permission of Pearson Education, Inc".]

"Moths attempt to keep a constant angle to the light rays of the moon which, given its distance, appear virtually parallel (Fig. 7-7:a). This brings up the concept of 'taxis' and while it has been proposed that 'taxes' (plural) may

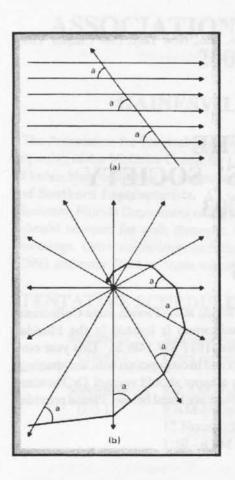


Figure 7-7: a) A moth maintains a straight line when navigation is via rays of light that are from a distant source and thus essentially parallel. b) But when the source is close by, maintenance of a constant angle with the light rays causes the moth to circle toward the source. elucidate a behavior as to why moths fly to a light source, the query has been asked by others: do taxes explain the reason for this type of movement? To quote from Chapman: 'A taxis is a movement of orientation to a source of stimulation, which may be light or any other stimulus...'

With regard to light, we have:

Positive phototaxis: the insect moves towards the light source. **Negative phototaxis:** think cockroach.

Skototaxis: orientation to dark objects against a light background.

Dorsal (or ventral) light reaction: maintains stability in the rolling plane during flight.

Menotaxis: moving at a constant angle to the light source. **Astrotaxis:** orientation to the light source (sun, moon, stars) is

constantly altered to compensate for the apparent movement of the light sources--thus producing flight in a constant compass direction.

The usual explanation for night-flying insects being 'attracted' to lamps is some combination of positive **phototaxis**, and **menotaxis** (which leads to flight around the lamp in a spiral of decreasing radius). Ultraviolet moth traps are designed on the basis of **menotaxis** -- the vanes on the trap intercept the spiral and drop the moth into the cone.

To answer the question poised at the beginning. Taxes describe a behavior but do they offer a explanation as to why it occurs? In a word: no. One must be very careful about constructing 'Just So Stories' to explain why evolution produced various adaptations. It's too easy to come up with a plausible explanation--which may be totally wrong.

Is the navigational angle fixed or can it change?

Refer to **astrotaxis**. Some insects can use a 'clock' to change the **menotaxis** angle during the day (or night) so they can make flights in a

constant compass direction regardless of the compass direction to the sun (or other light source) at any given time.

Someone wondered about whether flying toward lights could be evolved behavior after humans began producing light. I very much doubt that, for the following reasons:

It has only been very recently that human-caused light pollution has been widespread. During most of the
existence of humankind, artificial lights have been few and widely scattered--and the vast majority of insects never
saw them.

2) For such behavior to evolve so rapidly, it must convey an advantage. In the case of moths, at any rate, the opposite is true. Moths circling around lights are preyed upon by bats and other insectivores, not to mention being killed by the lights themselves in the case of open flames or high-temperature lamps. If evolution by natural selection is involved, one might expect moths to lose the 'attraction' to lights as light pollution increased. Anyone who has used a UV light trap can vouch for the fact that no such tendency appears to exist..."

Chapman, R.F. 1969. The Insects: Structure and Function. American Elsevier Publishing Company Inc., New York. (The subject of phototaxes is covered in Chapter XXVII: The Eyes and Vision. Taxes are discussed on pages 564-565, and the quote by Ken Philip came from p. 564.)

The same topic (phototaxes) is covered in more detail in:

Wigglesworth, V.B. 1965. The Principles of Insect Physiology. E.P. Dutton & Co., Inc., New York. (See Chapter VIII: Behaviour. Phototaxes are discussed on pages 279-289.)

FALL MEETING OF THE SOUTHERN LEPIDOPTERISTS' SOCIETY SEPTEMBER 25-28, 2003 AND CALL FOR PAPERS

Our annual meeting is scheduled for September 25-28, 2003, in Gainesville, Florida at the Florida State Collection of Arthropods (FSCA) Doyle Conner Auditorium. The Doyle Conner Auditorium is located in the Florida Department of Agriculture and Consumer Services, Division of Plant Industries, 1911 SW 34th St. This year our annual meeting will be held jointly with the Association for Tropical Lepidoptera and in conjunction with the opening of the McGuire Center for Lepidoptera. Any person interested in presenting a paper should contact Dr. Thomas Emmel, the 2003 program chair. His address, telephone number, and E-mail address are listed below. Please provide him a title, length, and an abstract of your talk.

Dr. Thomas C. Emmel Dept. of Zoology University of Florida P.O. Box 118525 Gainesville, Florida Off: (352) 392-5894 Fax: (352) 392-0479 E-mail: TCEMMEL@UFL.EDU

Important issues that will be discussed at the meeting include publication of nomenclature articles (see below), presentation of the 2003 Abbot award and election of officers and officer's reports. I encourage all to attend this meeting.

In the past, the Sunday following our annual meeting has been reserved for a collecting trip. With the combined

meetings this year, current plans call for talks most of the day Sunday. If there is interest, I will be more than willing to plan a field trip for all collectors/ watchers for Sunday. Anyone who plans on attending the meeting and wants to go collecting please see me at the meeting or e-mail me at Bostrichid@mail.ifas.ufl.edu.

The meeting is planned during a new moon and light trapping during the meeting should be very good. For those interested in light trapping, I plan to bring two portable light traps and will be placing these out in the Ocala area. Anyone interested in helping to put out or retrieve these traps Friday and/or Saturday night is more than welcome. I currently do not know of anyone planning on setting up a sheet, but if you have some interest in this please contact me at the meeting and I will see if some arrangements can be made.

Please see next announcement

ASSOCIATION FOR TROPICAL LEPIDOPTERA 2003 ANNUAL MEETING

GAINESVILLE, FLORIDA September 25-28, 2003

The Association for Tropical Lepidoptera will hold its 2003 meeting this year in September, in conjunction with the opening of the McGuire Center for Lepidoptera Research, on September 25-28, 2003, in Gainesville, Florida, at the Florida State collection of Arthropods (FSCA). **The meeting will also be held together with those of the Society of Southern Lepidopterists.** All sessions will be held in the Doyle Conner Auditorium, at the Division of Plant Industry, Florida Department of Agriculture and Consumer Services, 1911 SW 34th St., Gainesville. McGuire Center should be open for walk throughs, while the collections at FSCA will be available for inspection ahead of the meetings. Other collections, including the Allyn Museum of Entomology, will be moved to McGuire Center in late 2003 and early 2004, so these will not be in Gainesville in September.

TENTATIVE SCHEDULE:

September 25	Registration, Thursday, 8 AM-5 PM	
(Thurs.)	Open House, Florida State Collections of Arthropods	
September 26 (Fri.)	 8-9 AM: Registration and Reception, Doyle Conner Auditorium, DPI 9 AM-Noon: Morning Symposium and Submitted Paper Session 12 Noon-1:30 PM: Lunch 1:30 - 6 PM: Afternoon Session 	
September 27 (Sat.)	 8-9 AM: Registration and Reception, Doyle Conner Auditorium, DPI 9 AM-Noon: Morning Symposium and Submitted Paper Session Noon: Group Photo 12:15-2 PM: Afternoon Session 6-8 PM: Banquet (location to be announced) 8:30-11 PM: Slide Fest 	
September 28 (Sun.)	 8-9 AM: Registration and Reception, Doyle Conner Auditorium, DPI 9 AM-Noon: Morning Symposium and Submitted Paper Session Noon-1:30 PM: Lunch 1-30-5 PM: Afternoon Session 	

PROGRAM

A final program of abstracts of submitted papers will be available at the meeting.

REGISTRATION

\$20 per registrant (\$35 per couple: students \$10): only covers meeting participation and refreshments.

ACCOMMODATIONS

Gainesville offers a wide variety of hotel rooms within a few minutes of the Florida State Collection of Arthropods and the University of Florida (Rush Lake Motel, University/Doubletree Convention Center, and University Centre Hotel are closest to FSCA). Information brochures for recommended hotels and Gainesville attractions can be sent upon request.

Saturday evening banquet will by your choice of menu at a local restaurant.

AIRLINES: ASA connections from Atlanta and major airports in Florida (use taxi from airport: no free pick-up).

2003 Program Chairman:

Dr. Thomas C. Emmel, University of Florida Gainesville, FL 32611 Tel: (352) 392-5894 FAX: (352) 392 0479

TO PUBLISH OR NOT TO PUBLISH NOMENCLATURE ARTICLES IN THE NEWSLETTER BY ROBERT BEIRIGER

Recently there has been some controversy on whether our Society should be publishing nomenclature changes in our newsletter. Currently, the Executive Board of the Southern Lepidopterists' Society is against this. However, several people have made good points that maybe we should try and be a more scientific based society. I think that this is an issue that needs to be debated by the whole Society and should not be made by a few or a couple members of our Society. I suggest everyone having opinions on the subject attend our annual meeting, September 25-28, 2003, at the Doyle Conner Building in Gainesville. We will have a discussion on whether we stay a society with a newsletter, to become a society with a peer reviewed Journal that will have pages dedicated for article like what are now printed in our newsletter or *vice versa* or possibly even a peer reviewed journal and a newsletter.

Our constitution does allow us to publish the "Bulletin of the Southern Lepidopterist's Society" (see comment 1. Under peer reviewed journal). It is my understanding that it has been published very infrequently in the past and did have peer reviewed articles in it. Reviving this Journal might be one option worth considering.

If you can not attend and would like me to add your comments to this debate, please e-mail them to me at Bostrichid@mail.ifas.ufl.edu. I will gladly read them to the Society so that we have input from as many people as possible.

For every ones information, I have taken some comments that have already been sent to me and cut and pasted them together. Hopefully, I have not offend anyone by taking their comments out of context, but numerous good points where made and I wanted the Society to have a copy of them. I consider these comments a good starting place for our discussion at our Annual meeting.

BALLOT FOR JOHN ABBOT ELECTION

Please vote for either of the following three candidates for the John Abbot award. (Biographies of the candidates are on page 43 of the June issue of the Newsletter.)

IRVING FINKELSTEIN_____

JACQUELINE Y. MILLER_____

HARRY PAVULAAN_____

Please return the ballot in an envelope to J. Barry Lombardini by August 15, 2003.

J. Barry Lombardini, The Editor 3507 41st Street Lubbock, Texas 79413

NEWS OF THE SOUTHERN LEPIDOPTERISTS' SOCIETY VOL. 25 NO.2, INSERT A



Fig. 21 Colias eurytheme of D-R-April-KY



Fig. 22 Colias eurytheme 9 D-C-April-KY



Fig. 23 Colias eurytheme 9 D-R-April-KY



Fig. 24 Colias eurytheme 9 D-R-Sept-KY



Fig. 25 Colias eurytheme of D-R-June-KY



Fig. 29 Colias eurytheme



Fig. 26 Colias eurytheme 9 D-R-June-KY



Fig. 27 Colias eurytheme 9 D-R-June-KY



Fig. 28 Colias Eurytheme 9 Pupa X Medicago saliva Sept-KY



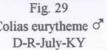




Fig. 30 Colias eurytheme \mathcal{P} D-R-July-KY



Fig. 31 Colias eurytheme \mathcal{Q} D-R-July-KY



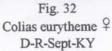




Fig. 33 Colias eurytheme 9 D-R-Aug-KY



Fig. 37 Colias eurytheme of D-R-Sept-KY



Fig. 34 Colias eurytheme 9 D-R-Aug-KY

Fig. 38

Colias eurytheme 9

D-R-Aug-KY



Fig. 35 Colias eurytheme 9 D-R-Sept-KY



Fig. 39 Colias eurytheme 9 D-R-Sept-KY



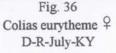




Fig. 40 Colias eurytheme 9 Bright Left - Soft Right



Fig. 1 Colias philodice ♂ D-R-April-KY



Fig. 2 Colias philodice ♀ D-C-April-KY



Fig. 3 Colias philodice D-C-April-KY

Fig. 7

Colias philodice 9

V-C-April-KY



Fig. 4 Colias philodice ♀ D-R-Sept-KY



Fig. 5 Colias philodice ♂ V-R-April-KY



Fig. 9 Colias philodice ♂ D-R-May-KY



Fig. 13 Colias philodice ♂[™] D-R-July-KY



Fig. 17 Colias philodice ♂ D-R-Sept-KY



Fig. 6 Colias philodice ♀ V-C-April-KY



Fig. 10 Colias philodice ♀ D-R-May-KY



Fig. 14 Colias philodice ♀ D-R-June-KY



Fig. 18 Colias philodice ♀ D-R-Aug-KY

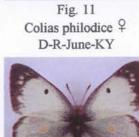


Fig. 15 Colias philodice D-R-July-KY



Fig. 19 Colias philodice D-R-Aug-KY



Fig. 8 Colias philodice ♀ Pupae X Trifolium repens Sept-KY



Fig. 12 Colias philodice D-C-Nov-KY



Fig. 16 Colias philodice D-C-Dec-KY



Fig.20 Colias philodice ♂ Left Dull - Right Bright

VOL. 25 NO.2, INSERT C



Cerma cora



Digrammia eremiata



Idia gopheri



Undescribed Schinia near saturata



Narraga georgiana



Acronicta brumosa



Dysgonia similis



Schinia fulleri



Irving and James at Ohoopee



Irving and Jeff at Ohoopee



Hyperstrotia nana



Emarginea percara



Schinia scissoides

James Adams writes the following: "All species pictured come from the Ohoopee Dunes Natural Area, west of Swainsboro, in Emanuel Co., GA. The *Narraga* is endemic to this area, and can be captured in April and September, as can the *Acronicta brumosa*. *Cerma cora* has been taken there in April, all the other specimens were recorded in September." Thanks to James Adams for the photographs - The Editor.

VOL. 25 NO. 2, INSERT D



Fig. 1. Eggs of Dahana atripennis (Grt.).



Fig. 2. Larva of *Dahana atripennis* (Grt.) on Spanish Moss (*Tillandsia usneoides* L.).



Fig. 3. Larva of *Dahana atripennis* (Grt.) on Spanish Moss (*Tillandsia usneoides* L.).



Fig. 4. Cocoon of Dahana atripennis (Grt.).

These pictures of the life cycle of **Dahana atripennis** (Grt.), the Black-Winged Dahana, were submitted by Jeff Slotten, Treasurer of the SL Society, and accompany his article in the Newsletter (page 57). This arctiid moth has been recorded from Florida all months of the year. Larvae eclosed in 6 days, the time period from eclosion to pupation lasted approximately 4 weeks, and the adult emerged about 2 weeks after the cocoon was formed. The moth produces several generations each season.

Note: Members please submit pictures of your activities to the Editor. The SL Newsletter is only as interesting as the members make it.



Fig. 5. Pupa and adult of Dahana atripennis (Grt.).

Comments on accepting nomenclature articles in the newsletter (in it's present form):

- Only those journals, or other publications, which are abstracted in Zoological Abstract, should be used to make nomenclature changes, describe new species or if a revision is presented. Taxonomy is too important, too difficult, and (sometimes) too fraught with controversy to leave unexamined in the hands of any one individual worker.
- 2. We should do everything to encourage membership and to make the newsletter more interesting. However, taxonomic articles are usually the domain of a small part of the membership, the same is true of the Lepidopterists' Society. Our membership much prefer articles that are not taxonomic in general since only a small portion of the membership would be interested. Therefore, more taxonomy to increase readership/membership is not a very good argument.
- 3. If an article dealt with available names, and presented new information that affected the status of such names, that should be acceptable for publication in the News. The authors and compilers of taxonomic lists constantly make revisions based on what appears to be personal opinion. There is certainly little or no peer review in such processes. What I have noticed in many cases is that an author of a list will actually cite a FIELD guide or some other catalogue as the source of an authoritative change in a taxon's taxonomic standing. On and on it goes. Thus, why not allow such treatments in the Southern Lepidopterists' News? If an author introduces a new status for a taxon name or revives a previous status in a Southern Lepidopterists' News article, and provides supportive evidence, then this would bear higher authority than a change introduced in a field guide or catalogue without explanation or justification.
- I recommend that our editor return all such manuscripts with a recommendation that the author submit his or her paper to one of the regular peer-reviewed journals.

I also received several good comments about peer review, peer reviewed articles and general comments on starting a new Journal. I have included them below.

Peer reviewed Journal:

- If peer review were to be introduced into the Southern Lepidopterists' Society, I might recommend reviving the Bulletin for that purpose. The Bulletin need not be a full-sized journal. It need only follow the format of other bulletins such as those produced by the Allyn and Carnegie Museums, and The Taxonomic Report. SuciBulletin issues could be mailed as supplements to the News. I would recommend using the full-color 8.5 x 11" format, stapled.
- 2. Peer review is completely out of the hands of the author of the article and those reviewing any article are often asked not only to determine the accuracy of the content, but also its appropriateness, layout, figures and tables, *etc.* In most cases their suggestions must be followed.
- 3. The solution of course, if there are enough people in the society who want to contribute articles, is to begin a research journal devoted to exactly this type of thing. Unfortunately, that is probably beyond the financial ability of the society and the scope might have to expand since a large proportion of the species in the southeast are well known. That would put us in direct competition with the Lepidopterists' Society. It seems far more logical to me, to continue to improve the content of the newsletter articles, maintain the seasonal section (far more people are probably interested in seeing their records included than reading about the description of a new species), include more technique articles (of general interest), and perhaps include articles that review certain hard to find species or that distinguish species that are often confused.
- 4. I would prefer to see it in a "Bulleting of the Southern Lepidopterists' Society". This could be mailed as insert in the News. Note that the Journal of the Lepidopterists' Society now uses the 8 1/2 X 11 format. But there is nothing wrong with putting this in the news either. Its just that the term "news" is usually for

informal publications.

- 5. Each author should submit the article to a reviewer, before submitting for publication. This should be stated in the article. It then becomes the decision of the editor, whether or not to have the submitted article reviewed again. This is usually done by establishing a review committee, who are willing to do this in a timely fashion.
- 6. If we do publish nomenclature articles in the newsletter, then every issue of the newsletter should have something like the following statement in it.

"The newsletter is open to the publishing of original research, and we welcome almost any contributions you would like to make. However, in matters dealing with new species names, revisions of species groups that involve name changes, *etc.*, we strongly discourage publication in any newsletter, as this may not meet with the requirements of the International Commission on Zoological Nomenclature (ICZN) and the Zoological Record. Any research articles dealing with the naming of new species, or revisions thereof, should be published through an established research journal that is appropriately refereed. If the author feels strongly about publication in this newsletter, then understand that any article dealing with nomenclature changes (new species, species revision) must go through an extremely stringent review process involving at least three appropriately qualified individuals in the field. Also understand that this means that your article may be rejected."

I hope the above comments make for any interesting meeting this fall.

OBSERVING *CHLOROSTRYMON MAESITES* IN BAHIA HONDA STATE PARK, FL BY DAVID FINE



Chlorostrymon maesites

Hello All:

On Saturday, June 21st, 2003, I spent the day down in the lower Keys with my friend and Butterfly World manager Alan Chin-Lee and coworker Brett Berger. Our main objective was to get some nice pictures of summer form C. thomasi females. It rained the entire way down and we arrived at Bahia Honda at about 10:00 a.m. with a thick gray layer of clouds. We were rather disappointed in the weather and were not expecting too much. We walked on the dirt path down by the ocean where the now famous Miami Blue "outhouse" is to hope to see some nectaring females on the Bidens that grow there. We were only in the park for 10 minutes when we came up on a lone sea grape tree that was in full bloom. I saw lots of Lycaenid action in the tree top but we could identify very little standing at the bottom of the tree. We watched for about 10 minutes and were going to move on when I saw a tiny hairstreak flit down and light on a leaf about 8 feet tall. I thought it was Ministrymon [Tmolus] azia, another bug I have not been able to get good field shots of, so I began

investigating closer. I then saw a bright green underside which could mean one of two things: *Chlorostrymon simaethis* or *Chlorostrymon maesites*! I quickly looked to see if there was a "silver band" and there was none!

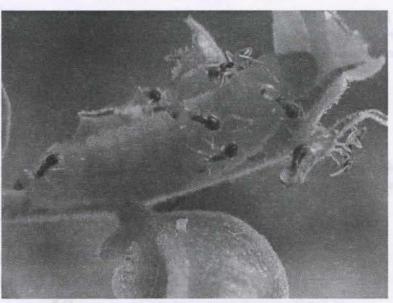
For those of you who I have spent any amount of time with discussing leps, you would know how much *Chlorostrymon maesites* is to me. I have spent ENDLESS hours looking for this bug and have walked the border of just about every hard wood hammock in Dade and Monroe counties and have not seen a single thread of evidence that it has ever existed in South Florida except for a few specimens in Leroy's and Jeff Slotten's collections (neither of which I could persuade to swap with me for one). It is one of few species that I have not photographed in Florida and the only species that I do not have a specimen of in my collection. Needless to say, I was a little excited when I realized what it was.

And then it occurred to me, God must have sent this present to me while in a State Park, dead smack in the center of the sole remaining *C. thomasi bethunebakeri* colony, and with no equipment on me except my camera for one good reason. If it were just about anywhere else, It would never wind up on film and ALWAYS wind up in my net. I don't know too many people that have been privileged enough to snap a picture of a wild *C. maesites*. So I indulged in a few shots. It was not in a very good position for photography. It was off the path, behind a fence, about 8' high up, and with the sun almost directly behind it. So Alan and I did what we could and snapped away. My best shot (enclosed) is a bit out of focus and the background stinks but at least it is good enough for a positive ID. After a few minutes it flew back up into the treetop and that was the end of the *maesites*. I waited for a good 1/2 an hour for it to come back down but with no luck.

C. maesites aside, we had a GREAT trip. At about 12 o'clock, the sun came out and it was out the rest of the day. I am also pleased to say that the *thomasi* colony is doing fine. They have more than recovered from the decline in population we observed in the winter months. This was the first time I had visited the site since December. There were LOTS of butterflies flying. We saw: CHLOROSTRYMON MAESITES (I can't get enough of that!), Strymon columella, Strymon melinus, Cyclargus thomasi bethunebakeri was EVERYWHERE!, Hemiargus ceraunus, Leptotes cassius, Agraulis vanillae, Dryas julia, Heliconius charitonius, Phoebis agarithe, Eurema lisa, Wallengrenia otho, Hylephia phyleus, Polygona leo, and Danaus plexippus. I have witnessed a great variety of butterflies at this park in the past including Epargyreus zestos, Siproeta stelenes, Phocides pigmalion, Urbanus proteus, Urbanus dorantes,

Asbolis capucinus, Cymaenes tripunctus, Marpesia petreus, Danaus gilippus, Strymon martialis, Electrostrymon angelia, Ministrymon [Tmolus] azia, Brephidium isophthalma pseudofea, Papilio cresphontes, Papilio polyxenes, Panoquina panoquin, Phoebis philea, Phoebis sennae, Ascia monuste, Appias drusilla, Junonia coenia, and Junonia evarete. For such a small island and limited habitat, it is amazing the amount of species diversity that occurs here.

We found *C. thomasi* eggs and larvae plentiful, as I remember it last summer. "Hilltopping" males were plentiful at the top of the incline leading out to the old railroad bridge. Females were more common at the bottom of the hill. I found ants in association with the larvae this time (I have enclosed a picture). It does not appear that the



ants are preying upon the larva rather taking the *C. thomasi bethunebakeri* larva "honeydew" much like the *camponotus* (genus of

the carpenter ants). I found them on quite a few larvae. I have also enclosed a picture of a mating pair of *C. thomasi* bethunebakeri that where quite cooperative for photography.

We also visited Cactus hammock on Big Pine Key (12:30). There wasn't much flying there other than Brephidium

VOLUME 25 NO.2, PG. 56

isophthalma pseudofea and mosquitoes. We did see what I am sure are Strymon columella, Wallengrenia otho, Junonia evarete, Appias drusilla, Phoebis agarithe, and Ascia monuste.

Next we visited the pines. We saw a few Strymon acis, Hemiargus ceraunus, Leptotes cassius, LOTS of Cyclargus ammon, Wallengrenia otho, Ephyriades brunnea, Hylephila phyleus, Phoebis agarithe, Agraulis vanillae, and Danaus plexippus.

All in all, it was an awesome trip. I still cannot believe that I saw a *maesites*! Does any one know what they can be reared on that may be accessible to me on the main land in case I ever get a shot at a female?

Take care,

PS: I AM still interested in trading for one if anybody has a spare specimen (*C. maesites*).



C.thomasi bethunebakeri

ONE FOR THE ENGLISH MAJORS

I have been using the spelling format "WEB SITE" in referring to the internet. According to my English scholar friends this new word in our language should be one word, and not two words. Therefore "WEBSITE" will be henceforth used in the Newsletter.

DUES - DUES - DUES

Members please check your address label! If it is less than "2003" you owe dues. The Newsletter is running on a fairly tight budget these days and your back dues will be most appreciated. Thank you.

PHOTOGRAPHS FROM A COLLECTING TRIP IN OHOOPEE DUNES NATURAL AREA, FLORIDA BY JAMES K. ADAMS

(SEE INSERT C)

James Adams sent in some interesting pictures of moths that were collected in the Ohoopee Dunes. Please see Color Insert C. Members, please send me stories, articles, pictures. I will try to print all submitted items that I think will be of interest to the membership - The Editor.

VOLUME 25 NO.2, PG. 57

THE LIFE HISTORY OF DAHANA ATRIPENNIS (GRT.) (LEPIDOPTERA: ARCTIIDAE) BY JEFF R. SLOTTEN

The arctiid moth *Dahana atripennis* (Grt.), the Black -Winged Dahana, has been recorded from Florida all months of the year. According to Kimball(1965), the hostplant of the larva is Spanish Moss (*Tillandsia usneoides* L.). I reared a single adult from an egg laid by a female collected at a light in March of 2003 in Gainesville, Florida.

Three eggs were obtained from the female confined in a clear plastic container with screening on the top for ventilation. Spanish Moss was spread inside the container so that the female would contact it. The eggs were round and pale green for the first few days and were laid on the moss (Fig.1, Please see Color Insert D). The eggs turned reddish as they neared eclosion (Fig.1).

Larvae eclosed in 6 days indoors and were reared in the clear container without ventilation. The Spanish Moss was placed in the container in small amounts so as not to mold. I have had problems in the past rearing the larvae if the Spanish Moss was too dry or too moist. The larvae are quite camouflaged on the host (Fig. 2). They are quite hairy with white and pale green dorsal stripes. The head is orange, white and black (Fig. 3). Larvae molted several times and remained very similar in color throughout. The time period from eclosion to pupation under laboratory conditions lasted about 4 weeks.

I sent Dave Wagner, an entomologist at the University of Connecticut in Storrs, CT., one larva for his studies. Only one of the other two larvae survived to pupation. The cocoon (Fig. 4) was made of loosely woven silk and the hairs of the larva. It was attacked to a stalk of the Spanish Moss host with the pupa visible inside (Fig. 5).

The adult emerged about 2 weeks after the cocoon was formed (Fig. 5). The moth produces several generations each season.

Literature Cited

Kimball, C. P. 1965. The Lepidoptera of Florida, an Annotated Checklist. Division of Plant Industry, Gainesville, Florida. 363 pp.

(Jeff R. Slotten: Research Associate FSCA, 5421 NW 69th Lane Gainesville, Florida 32653)

REPORTS OF STATE COORDINATORS

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: chgrisham@Comcast.net

Howard Grisham reports the following: A fresh female *Lycaena phlaeas americana*, presumably a state record, was taken at the Skyline Wildlife Management Area at Skyline, Jackson County, Alabama, on April 30, 2003, by Howard Grisham. *Poanes hobomok monofacies* was collected by Howard Grisham at Bingham Mountain, Hollytree, Jackson County, Alabama, on April 30, and May 3, 4, and 10, 2003. The always good-to-see *Lytrosis permagnaria* and *Metrea ostreonalis* have again made their usual spring appearances "at the sheets" on Bingham Mountain (May, 2003).

Last year I reported a probable state record of a nice colony of *Lycaena hyllus*, with multiple generations, occurring in a soggy field in Hollytree, and expressed concern for the existence of the colony after the field was disked and planted in soybeans. This spring a blanket herbicide was saturated over the area, which is presently planted in cotton. No more *Lycaena hyllus*!

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: bostrichid@mail.ifas.ufl.edu

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

James writes: "Here is the second summary for 2003. Please note that the September 7 report last year had a mistake for the Ohoopee Dunes area. It is west of Swainsboro in Emanuel Co., not west of Statesboro, which is farther east in Bulloch Co."

Records are from James Adams (no notation), Patrick Adams (PNA; my son), Irving Finkelstein (IF), Jim Vargo, Steve Johnson, Lance Durden, Ron Gatrelle, and Pam Romano. 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. Known County and State records are indicated. There were some impressive outbreaks of certain common species this spring, such as the geometrids *Pleuroprucha insulsaria* in the Dalton/Calhoun area and *Hethemia pistaciaria* in Dahlonega in Lumpkin Co. Also more abundant than usual in NW Georgia were the noctuid *Lesmone detrahens* and the geometrid *Plagodis alcoolaria*; both were recorded several times from multiple locations. All dates listed below are 2003 unless otherwise specified.

Calhoun, Gordon Co., GA (my house):

<u>SPHINGIDAE</u>: Amphion floridensis (at lights), May 3; Eumorpha fasciata, June 9 (COUNTY; PNA). <u>NOCTUIDAE</u>: Colobochyla interpuncta, April 29; Lesmone detrahens, several, April - June; Zale confusa, April 14 (COUNTY); Catocala similis, June 11; C. pretiosa, June 14; Eumicremma minima, May 6 (COUNTY); Lithophane viridipallens, March 25, 2003 (LATE!); Elaphria georgei, several, early April. <u>NOTODONTIDAE</u>: Hyparpax aurora, June 3. <u>GEOMETRIDAE</u>: Glena plumosaria, several, mid May; Ceratonyx satanaria, three from March 15 - 17, 2003; Lytrosis sinuosa, June 3 (COUNTY); Plagodis serinaria, April 17.

Cane Area, End of Tate Bend Rd. Calhoun, Gordon Co. GA, June 13:

NOCTUIDAE: Polypogon (Zanclognatha) atrilineela, Zale metata. **LACTURIDAE**: Lactura pupula.

Carbondale, Exit 326 off of 1-75, Whitfield Co., GA: <u>NOCTUIDAE</u>: Eupsilia tristigmata, March 23, 2003 (LATE).

Taylor's Ridge, 5 miles W. of Villanow, Walker Co.:

March 22, 2003 (Steve Johnson, Jim Vargo, James Adams)

<u>SATURNIIDAE</u>: Actias luna. <u>NOCTUIDAE</u>: Zale calycanthata, Feralia major (COUNTY). <u>GEOMETRIDAE</u>: Ceratonyx satanaria (several), Eupithecia swettii, E. jejunata, E. columbiata.

Gates Chapel Rd., 8 mi. NW of Ellijay, Gilmer Co., IF:

LYCAENIDAE: Incisalia augustinus, March 28. <u>NOCTUIDAE</u>: Idia scobialis, May 9 and June 14; Idia majoralis, June 14 (COUNTY); Orthosia revicta, March 28. <u>GEOMETRIDAE</u>: Ceratonyx satanaria, nearly 50 seen!, March 28; Heterophleps refusaria, May 24 (COUNTY, perhaps STATE). <u>TORTRICIDAE</u>: Croesia curvalana, June 14.

NEWS OF THE SOUTHERN LEPIDOPTERISTS' SOCIETY VOLUME 25 NO.2, PG. 59

Nebo Cemetery Rd., 7.5 miles NW of Ellijay, Gilmer Co., May 9, IF:

NYMPHALIDAE: Chlosyne gorgone. Phyciodes new species with orange-clubbed antennae. HESPERIIDAE: Poanes hobomok (pocahantas form female).

GA Hwy 400, 8 miles SE. of Dahlonega, Lumpkin Co., April 29, IF: SATURNIIDAE: Hyalophora cecropia (COUNTY).

Lake Allatoona Dam Area, Bartow Co., IF:

NOCTUIDAE: Lesmone detrahens, May 31. GEOMETRIDAE: Selenia kentaria, April 2; Venusia comptaria, March 24 (COUNTY).

Lake Allatoona, Cooper Furnace area, Bartow Co., IF:

NYMPHALIDAE: Chlosyne gorgone, 8 males, April 23; none seen four days later.

Atlanta, Fulton Co. (IF's house):

NOCTUIDAE: Acronicta betulae, May 17; Morrisonia new species (actually well known but undescribed), May 8. PYRALIDAE: Glyphodes pyloalis, May 13.

Ohoopee Dunes Natural Areas and Swainsboro, Emanuel Co., April 12, 2003:

LYCAENIDAE: Incisalia henrici margarettae (or yawehus). NOCTUIDAE: Argyrostrotis carolina, Cerma cora (COUNTY), Acronicta brumosa, A. longa, A. arioch (COUNTY), Ulolonche modesta (abundant!). Eumacaria laetiferrugata, Digrammia eremiata, Narraga georgiana, Iridopsis vellivolata.

Lance Durden lives in Stateboro, and has many notable records to contribute from a smattering of localities; most of the following, if not all, represent (COUNTY) records:

Statesboro, Bulloch Co., GA:

SPHINGIDAE: Dolba hyloeus, April 13, 1997. ARCTIIDAE: Syntomeida ipomoeae, Aug. 28, 1995. NOCTUIDAE: Ophiuche degasalis, Aug. 28, 2002 (STATE?); Melipotis fasciolaris, Sept. 25, 2000; Cutina distincta, May 23 and Aug. 29, 2002; Dysgonia consobrina, June 15, 1997; Metria amella, June 15, 1997; Pseudanthracia coracias, Aug. 23, 2001; Catocala marmorata (farthest south), Oct. 7, 1994; C. carrissima, Oct. 1, 2002; Ponometia exigua, several, April 19-May 21; Cerma cora, Mar. 24, 2001; Archanara oblonga, May 30, 1993; Callopistria granitosa, Sept. 8, 2001; Chaetaglaea tremula, Nov. 22, 1998; Elaphria excessa, June 5 and July 1, 1999; E. georgei, Mar. 20, 2002; Trichosilia manifesta, March 24, 2002; Eucoptocnemis fimbriaris, Nov. 2, 2001; Schinia bina, Aug. 18, 1998. GEOMETRIDAE: Lycia ypsilon, Feb. 27, 1997; Petrophora divisata, Feb. 12, 2002.

St. Catherine's Island, Liberty Co. (Lance Durden):

SATURNIIDAE: Eacles imperialis, May 24, 1994. SPHINGIDAE: Erinnyis obscura, Sept;. 22, 1993. ARCTIIDAE: Haploa colona, Aug. 19, 1994. NOCTUIDAE: Ophiuche degasalis, several, Aug. and Oct.; Doryodes spadaria, May 9, 1994; Panopoda repanda, April 5, 1994; Pseudanthracia coracias, Mar. 9, 1994; Acronicta connecta, April 8 and Aug. 5, 1994; Spodoptera latifascia, Oct. 13, 1993; Euagrotis lubricans, Mar. 5, 1994. GEOMETRIDAE: Caripeta aretaria, Aug. 13, 1992.

Broxton Rocks, Coffee Co., GA (Lance Durden):

NOCTUIDAE: Epidromia poaphilodes, Sept. 5, 1975; Catocala carrissima July 14, 1995; Exyra ridingsii, May 11, 1995.

Jekyll Island, Glynn Co., GA, Oct. 18, 1997 (Lance Durden): NOCTUIDAE: Eucoptonemis dapsilis.

Ron Gatrelle filed the following reports:

Early April: In Burke Co., Ga I stopped at 4 sites. All in all I found the following: a few widely scattered empty *Megathymus yuccae* tents, 2 *Battus philenor*, 2 *P. glaucus*, about 20 Snouts (*Libytheana bachmani*), 1 *Everes comyntas*, 5 *Vanessa virginiensis*, 1 Red Admiral (*V. atalanta*), 20 *Phoebis sennae eubule*, 1 Sleepy Orange, 25 *Anthocharis midea annickae* (the majority females), 6 Juvenal's Duskywings.

At Popcorn Overlook (about 10 miles west of Clayton on 76, <u>Rabun Co.</u>), I did find Brown Elfins (*Deciduphagus augustinus*) there on the 14th.

<u>May</u>: I can confirm *P. appalachiensis* (Appalachian Tiger Swallowtail) in <u>Union Co.</u>, GA. (**COUNTY**) at a couple of spots. near Jct. of 180 and 129, on 180 near Brasstown turn off.

Flowery Branch, Hall Co., GA, June 18, 2003:

SPHINGIDAE: Eumorpha pandorus Pam Romano

John Hyatt reports the following for Georgia: McIntosh Co., vic. Darien, May 14-17: *Poanes viator, Problema bulenta, Euphyes arpa, E. pilatka, O. maculata, A. delaware* all on Pontederia flowers in abandoned rice field swamps; *H. phyleus, vibex,* and *P. panoquina* in drier spots. *Eurystrymon favonius* (= *Fixenia ontario* form favonius) nectaring on *Nerium oleander. Catocala ilia, C. ultronia, C. similis,* and *C. micronympha* all at bait, together with worn *Lethe creola.*

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

Kreg D. Ellzey (warbleritis@CP-TEL.NET) of Hornbeck, LA, writes: "Hi again all, I returned to Kisatchie National Forest, Natchitoches Parish, LA, this afternoon (15-VI-2003) to work on my butterfly ID skills some more. On this trip I came across yet another skipper that is giving me trouble on the ID. Was hoping to get some input from the list on this one. I've noted a few of my comments on the page next to the pictures (http://www.cp-tel.net/kreg/helpwithid.htm)."

Andy Warren (warrena@science.oregonstate.edu) replies: "You have found quite a find! No doubt those are *Hesperia meskei*. Great job! Wonderful find." *Andy Warren initially thought that this was a state record for Louisiana but upon closer scrutiny it was realized that Charles Bordelon collected the first meskei in LA about 10 years ago.*

Kreg continues: "First of all, thanks to all who have written with help, comments and confirmation of ID. After class today I returned to the area arriving around 12:40 pm. It was overcast with the occasional shower/downpour. I located another area approximately 0.3 mile west of yesterday's location and counted 6 individuals here. I managed a few more photos and moved on to yesterday's location. It was quite dreary and overcast but I did ID 3 more individuals for a total of 9 Meske's Skippers for the day. A T-storm was quick to move in so I didn't get any further to check some other spots.

The mowers are coming! The roadsides/right of ways are being mowed by the USFS. They are currently about 2 miles or so away from the skipper area. I was hoping to talk with the local Biologist today but he was not in. Will try again in the morning before class. Maybe they can hold up with the roadside mowing in the area for a bit."

In further correspondence with Kreg Ellzey he states: "As you can see this turned out not to be a state record although I have not followed up on Andy's E-mail and looked at the literature to confirm. I would like to note numbers counted during my visits though. This should at least demonstrate that even though this may not be a state record it most definitely is proof enough that there is a breeding colony of Meske's Skipper in the Kisatchie Ranger District of Kisatchie National Forest, Natchitoches Parish, LA, which could possibly demonstrate a connection between the Texas/Arkansas and eastern populations.

6/15/03 Location 1 (6 individuals counted) - Kisatchie Road PR 830, 8.0 miles east of PR 830's intersection with LA Hwy 117. Nectaring on Pycnanthemum.

6/16/03 Location 2 (6 counted) - Kisatchie Road PR 830, 7.7 miles east of PR 830's intersection with LA Hwy 117. Nectaring on Pycnanthemum.

6/16/03 (returned to) Location 1 (3 counted) - Nectaring on Pycnanthemum .

6/23/03 1 week later - Locations 1 & 2 have been mowed down. Moved on to another area about 2 miles away from previous. (3 counted) Kisatche Road FS 360 approximately 0.2 mile south of FS 360's intersection with PR 830. Nectaring on Vernonia.

Total for three days: 18 individuals.

Also, I will be moving the photos to a new Meske's Skipper page on my site. The new URL will be.http://www.cp-tel.net/kreg/meskeskip.htm

I will add a few of the new photos as well, trying to keep the size of each down to no more than 20k per image."

Mississippi: Rick Patterson, 400 Winona Rd., Vicksburg, MS 39180, E-Mail: rpatte42@aol.com

Ricky Patterson submitted the following report: Incisalia henrici turneri: Collected by Ricky Patterson at the Calhoun County Wildlife Management area March 15,

2003 (county record). Anthocharis midea: Collected March 24, 2003 on Natchez Trace at mile marker 208. Webster county record, mile

Anthocharis midea: Collected March 24, 2003 on Natchez Trace at mile marker 208, Webster county record, mile marker 221, Clay county record, and at mile marker 225, Chickasaw county record (collected under a permit for the Natchez Trace).

Anthocharis midea: Collected April 7, 2003 at Barberry Landing, Prentiss county record.

On May 16, 2003, Drew Hildebrandt and Ricky Patterson collected at the Calhoun County WMA. The following county records were found:

Enodia creola, Polygonia comma, Feniseca tarquinius, Harkenclenus titus mopsus, and Anaea andria andria.

In addition to these specimens, the colony of *Euphydryas phaeton ozarkae* was still there and thriving, although the cool day slowed them down somewhat.

Last but certainly not least, Terry Schiefer of the Mississippi Entomological Museum added a state record for *Neonympha mitchelli*, found in Prentiss county on June 9, 2003. An additional colony was found in Tishomingo county on June 16, 2003. This is apparently an extension of the range of this butterfly.

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

The following selected moth records were submitted by Steve Hall. Specimens were collected at the Fort Bragg and Camp Mackall Army Bases, Hoke and Richmond Counties, on 28-29 May, 2003.

Geometridae:

Tornos abjectarius (1) Scopula purata (2; several others seen) Metarranthis n. sp. 1 nr. lateritiaria (1 seen)

VOLUME 25 NO.2, PG. 62

Notodontidae:

Heterocampa varia (1) Notodontidae, New Genus 1, Species 1 (1)

Noctuidae:

Macrochilo n. sp. 1 nr. *absorptalis* (5, from two different sites) *Nola* n. sp. nr. *pustulata* (1)

The following selected butterfly records were submitted by Harry LeGrand. Place names refer to counties unless otherwise stated, and records are not new county reports unless indicated. DC = Derb Carter, RE = Randy Emmitt, RG = Ron Gatrelle, HL = Harry LeGrand, JP = Jeff Pippen.

Records are from March - May 2003.

Papilionidae:

Papilio appalachiensis, the earliest report for the state was one seen by RG in Clay on April 26. Large numbers can be seen in some areas, such as the Harmon Den Road in Haywood, where John Dole observed at least 100 (along with several dozen *P. glaucus* for comparison) on May 30. This newly described taxon is quite common in parts of the state's mountain region and outnumbers *P. glaucus* at many middle elevations where they occur together, at least in May and probably in June. Comparisons of size (of males) can easily be made at mud puddles and damp soil on U.S. Forest Service roads.

Lycaenidae:

Satyrium liparops, RE photographed two individuals in Columbus (COUNTY) on May 24. Another was a good find at Falls Lake in Wake on May 29 by Brian Bockhahn.

Satyrium favonius ontario, always a good find in the state; one was observed nectaring at Vaccinium arboreum in Columbus (COUNTY) on May 24 by RE.

Celastrina neglectamajor, along the Harmon Den Road in Haywood, Craig Marks noted three on May 2, and John Dole also found two there on May 30. This appears to be a good site for the species, as HL and JP found several males along the road in mid-May 2002.

Celastrina nigra, along the Harmon Den Road in Haywood, Craig Marks observed four individuals on May 1 and two on the following day. This is a relatively scarce species – much rarer than *C. neglectamajor* – and is usually reported just once or twice a year.

Nymphalidae:

Chlosyne gorgone, the state's first known population, discovered by RG in Clay in 2001, is still persistent, as RE found one on May 4 and RG observed another on May 11.

Chlosyne nycteis, HL found the first colony reported in the state's Coastal Plain on May 12. At least 10 individuals were seen along a jeep trail in the floodplain of the Roanoke River in eastern Halifax; the species is known to occur in the county along the Roanoke River at the Fall Line, about 15 miles to the northwest.

Vanessa cardui, apparently the only report for the season was a worn female seen ovipositing on Cirsium vulgare at Rendezvous Mountain State Forest, Wilkes, on May 1 (HL).

Neonympha areolata, an excellent count was 65 observed by RE in the Craven portion of Croatan National Forest on May 25.

Hesperiidae:

Hesperia sassacus, a record single-day total for the state was the 30 estimated by RG in Clay on May 27. Interestingly, this county lies adjacent to Georgia, where the species has never conclusively been found (according to RG). Biologists are finding the species more frequently in recent years in many mountain counties, probably just a matter of more field work than a population explosion.

Euphyes dukesi, a male seen on May 28 in Brunswick (JP) was approximately two weeks earlier than the previous early date for the state.

Amblyscirtes reversa, a first record for the eastern Piedmont, and just the second ever for the province, was one studied carefully by DC, RE, and JP in a powerline clearing in Franklin (COUNTY) on April 27. Interestingly, last year at this site HL found populations of *A. carolina* and *A. hegon*, perhaps the only spot where these two species overlap in range. At this site, DC and RE observed *A. vialis* this year, also on April 27. Coupled with HL's finding of *A. aesculapius* here a few years earlier, five of the state's six species of *Amblyscirtes* have been found at a single Piedmont site. [*A. alternata* has never been found in the state's Piedmont, but it has been found with all the others except *A. hegon* at large "sites" in the Coastal Plain such as Fort Bragg and the Sandhills Game Land.]

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

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

John reports the following: Spring continues to be cold and wet. The Kingsport area of NE TN is running about 6" of rain ahead of long-term averages, and temperateurs are consistently at least 5-10 degrees below norm. The night of June 1 hit a low of 45 degres! Spring collecting was good for the one or two warm weeks we had in mid-late April, with *Amblyscirtes vialis* and *hegon* flying in some numbers, and *Pieris virginiensis* making a huge flight in Hawkins Co. Since then, very few leps have been seen on the wing, the exception being an enormous population explosion of the 2nd brood of *C. argiolus* - even on cool cloudy days they're everywhere! Bait traps have produced little or nothing all spring, and light trap results very sparse.

Rick Gillmore found the moth *Thyris maculata* (Plate 57, Fig. 2 in Covell's "A Field Guide To The Moths Of Eastern North America") at Rock City/Lookout Mtn., Tennessee, on June 8, 2003. It was sitting on a blossom of oak leaf hydrangea (*hydrangia quercifolia*).

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

Harris Co., Spring Valley, Bordelon & Knudson:

Eurema mexicanum, 15-II-03, *Kricogonia lyside*, 29-IV and 21-VI-03 (new Co. record), *Ministrymon clytie*, 19-IV-03 (new Co. Record), *Celastrina neglecta*, 22 and 28-VI-03, *Parrhasius m-album*, 15-VI-03, *Aellopos titan*, 21-IV-03, *Achatodes zeae*, 25-IV-03, *Mouralia tinctoides*, 12-VI-03, *Catocala innubens*, 13-VI-03.

Hidalgo Co., Bensten State Park, 13,14-IV-03 (Dave Hanson and others, photos):

Phocides belus (new US record, photos only, det. Andy Warren),

Ft. Bend Co., Sugarland, May-early June: Synanthedon sapygaeformis (abundant at pheromone)

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

John Hyatt reports the following: Scott Co., May 3-4: Glaucopsyche lygdamus, Amblyscirtes hegon, and A. vialis.

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.

SOUTHERN LEPIDOPTERISTS' SOCIETY

c/o J. BARRY LOMBARDINI, THE EDITOR 3507 41st Street Lubbock, Texas 79413