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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 (WEBSITE: www.southernlepsoc.org/)

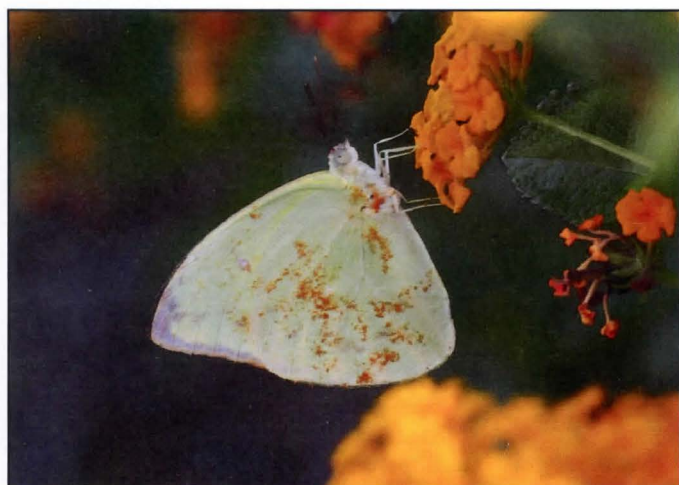
J. BARRY LOMBARDINI: EDITOR

RECENT YARD BUGS

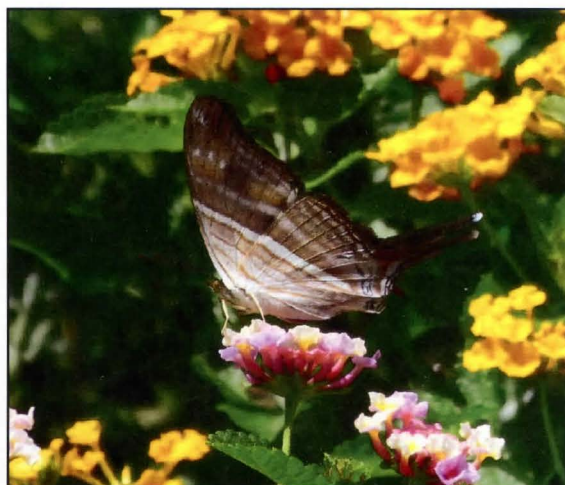
BY

MIKE A. RICKARD

The summer of 2013 has seen very good numbers of influx species from Mexico throughout Texas' Lower Rio Grande Valley. A few species making it into our small yard were of particular interest and excitement to us. All photos were taken in Mission, TX., by Mike A. Rickard.



Statira Sulphur (*Aphrissa statira*). This species periodically shows up in numbers in south Texas. This female displayed unusual coloration on the ventral surfaces. (Photo taken July 24, 2013.)



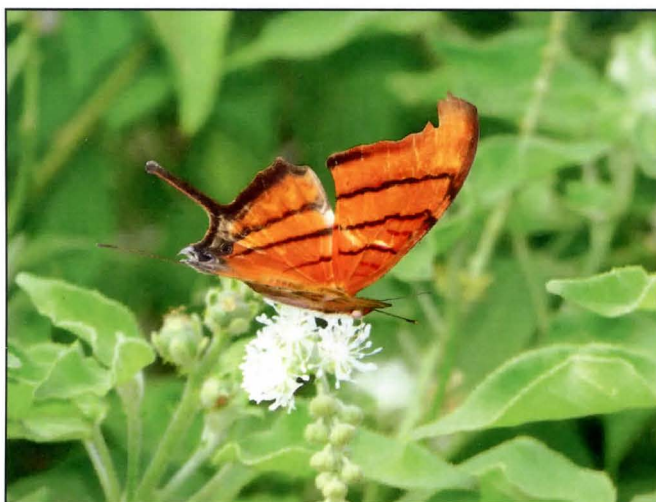
Many-banded Daggerwing (*Marpesia chiron*). This species appears randomly, in wooded areas, so it was a great surprise to find one in our yard, for a new Yard Record. (Photo taken August 18, 2013.)



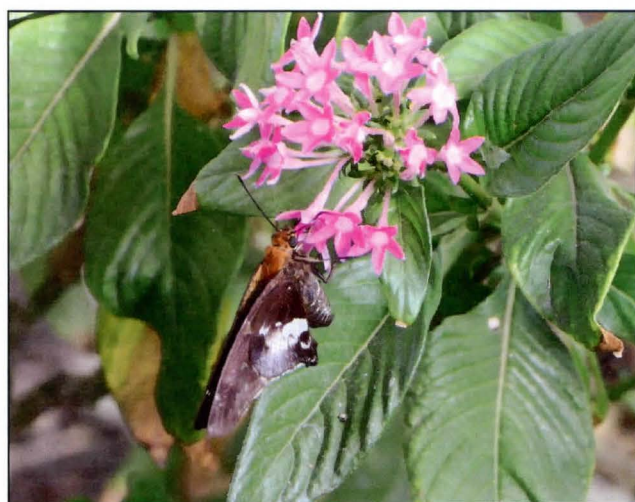
(*Trichistognatha pyrenealis*). This is another Crambid, with a too-long name, new for the yard. I was struck by the white costa, outer margin, basal stripes, and the striking apical markings. (Photo taken July 13, 2013.)



(*Dichogama colotha*). This is the second yard record for this Crambid, which looks as though it was painted by Picasso. It is an uncommon, and rarely photographed in south Texas. (Photo taken July 29, 2013.)



Ruddy Daggerwing (*Marpesia petreus*). The most commonly encountered Daggerwing in south Texas, this species likewise prefers wooded areas, and likewise was a new Yard Record. (Photo taken August 10, 2013.)



Broken Silver-drop (*Epargyreus exadeus*). This skipper, rarely recorded in the US, is easily the most exciting bug on our yard list. It was spotted by my wife Ginny, and is a first for me in 50 years collecting and photographing Texas butterflies. (Photo taken August 6, 2013.)

(Mike Rickard. E-Mail: folksinger4@yahoo.com)

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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. Annual membership dues:

Regular	\$20.00
Student	\$15.00
Sustaining	\$30.00
Contributor	\$50.00
Benefactor	\$70.00

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/

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TREASURER'S REPORT FOR 2013

AS OF AUGUST 31, 2013:

There are 154 paid members and two complimentary issues sent out quarterly (Library of Congress and Library at Division of Plant Industry in Gainesville, Florida).

Beginning Bank Balance with SunTrust of Gainesville as of 1/1/2013: \$3191.74

Ending Balance as of 08/31/2013: \$3003.13

Deposits and Credits: Includes member dues and donations, collections from meetings and sales of old newsletters: \$5140.00

Withdrawals and Fees:

Bank Fees: \$6.00 Deposit Correction Fee

Printing Newsletters: \$4160.77

Vol. 34 #4 \$1468.34

Vol. 35 #1 \$1331.30

Vol. 35 #2 \$1361.13

Postage for Newsletters: \$828.94

Vol. 34 #4 \$448.20

Vol. 35 #1 \$380.74

Vol. 35 #2 \$315.96

Supplies: \$16.94

Respectfully submitted,

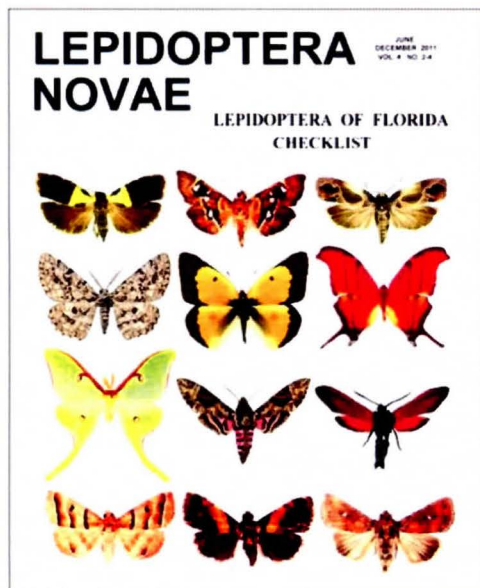
Jeffrey R. Slotten

Research Associate McGuire Center

FSCA, SLS Treasurer 2013

MANY THANKS TO THE FOLLOWING MEMBER WHO CONTRIBUTED TO THE SL SOCIETY

Robert Patterson (Benefactor)



LEPIDOPTERA OF FLORIDA CHECKLIST

New updated and revised checklist of all Florida moths and butterflies, all 3002 species by J. B. Heppner. Includes new references and species described since the 2003 Florida Lepidoptera catalog. Double issue from Vol 4, *Lepidoptera Novae*. 142pp, 1 color plate (plus color cover). 8-1/2x11 inches. \$47.50 postpaid (in USA). Orders to:

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THE BUTTERFLIES OF GLOBAL WILDLIFE CENTER IN FOLSOM, LOUISIANA

BY
GARY NOEL ROSS

Global Wildlife Center (GWC) is the largest free-roaming facility of its kind in the United States. The center is located a few miles west of the Village of Folsom in St. Tammany Parish, Louisiana, north of Lake Pontchartrain. Although the mailing address for GWC is Folsom, the facility is located slightly west of the parish border in Tangipahoa Parish. The entrance to the center is on LA Highway 40, approximately one hour east of Baton Rouge and one hour north of New Orleans. The countryside is a rural checkerboard of pastures, timberlands, and small private residences.

GWC consists of over 900 privately owned gently rolling acres covered in pesticide-free grazing lands and piney woods; twelve ponds and a lake dot the landscape. At present, the facility features approximately 4000 animals representing 30 species of herbivorous mammals (the largest is the giraffe) and birds from around the world—some of which are threatened or endangered in the wild. (The addax, a critically endangered antelope from the Sahara regions of North Africa is the logo.) There are no carnivores or predators. The center is the brainchild of Ken Matherne, a Lafayette (La.) oil entrepreneur. In June 1991 the center opened its doors with a resident community of 3000 exotic animals. The center operates as the Global Wildlife Foundation, a 501(c)3 non-profit organization. According to Mr. Matherne: "We seek to be a center of excellence in education, to create a perfect place in which threatened and endangered wildlife from around the world can flourish in a free-roaming natural environment. A place where children, adults, students, and teachers embrace the values of active conservation and wildlife preservation through hands-on education and first person sensory exposure."

At GWC, each year a quarter of a million visitors experience a "ride on the wild side"—an hour-and-a-half safari in the comforts of a small train of wagons hitched behind a tractor or an hour personal tour in a *pinzgauer* (Swiss military vehicle) called a "Pinz Tour." (For safety reasons, visitors are not permitted to roam the grounds on their own). GWC is open year round, seven days a week; spring is a favorite time to visit due to new births. The center has received a number of accolades, including "one of the best places to work in Louisiana" by *Louisiana Life Magazine*. And in 2009, the Encore Louisiana Commission voted GWC as "one of the Best Places to Visit with the Kids/Grandkids in the State of Louisiana."

While exotic herbivores occupy center stage at GWC, native animals have not been ignored. In 1992, for example, just one year after the center opened for operation, I with several other associates of the Baton Rouge Audubon Society initiated periodic surveys to document native birds and butterflies within the borders of GWC. The bird counts were short lived: 7 surveys in 1992 in which 101 species were identified. By contrast, I continued to conduct butterfly surveys through 2005. In fact, during this 14 year period, 23 separate surveys were conducted, with one per year as a component of the "Fourth of July Butterfly Count" program sponsored by the North American Butterfly Association (NABA). Most surveys involved a small group of butterfly enthusiasts and were advertised in local newspapers as well as newspapers in New Orleans and Baton Rouge. However, a few surveys were conducted solely by me because of convenience. The surveys routinely began at 9:00 AM and lasted until 2:00-3:00 PM. However, on certain days these times were altered because of cloud cover and excessive heat.

Because herbivores are especially attracted to flowering plants, butterflies usually make their homes not on the easily tour-accessible grazed lands but rather in a 260-acre back section that is fenced off from wildlife and the general public and accessed through a small iron gate located beside Old Uneedus Road, the eastern border of GWC. During our survey period, this back area was mowed only periodically. On occasion, the land was used for special events such as over-night camp outs, fund-raising barbecues, and autumn hayrides. Because of a labyrinth of tractor trails, there was good foot access for us. As such, the back acreage constituted relatively attractive habitat for flowering forbs—especially naturalized Brazilian vervain (*Verbena brasiliensis*). One section in particular—a several-acre parcel near the access gate on Old Uneedus Road—was always ablaze in flowers and therefore particularly attractive to butterflies. If I would telephone a few weeks in advance of a survey, a GWC employee would mow a meandering path through the venue so that we butterflyers would have easy access. Indeed, this wildflower area contained several known host plants for butterflies, including antelope-horn milkweed (*Asclepias viridis*) and red milkweed (*A. rubra*)—two native hosts for the Monarch. Today, however, the back 260 acreage is almost totally devoted to the production of grass to provide winter hay for feeding the extended number of herbivores now in residence. (All special events offered



Entrance to Global Wildlife Center on LA Highway 40, just west of Folsom but in Tangipahoa Parish on the north shore of Lake Pontchartrain. The logo for GWC is the addax (mother and baby), a critically endangered antelope from the Sahara regions of north Africa.



A section of the administrative complex and the Gift Shop (background). A pond stocked sport fish is in center. Visitors waiting for their safari can purchase small food pellets for feeding and observing the fish.



Gift Shop at GWC.



Section of the administrative complex of GWC, a 900-acre free-roaming exotic wildlife reserve open year round.



Section of pasture near entrance gate with a small sample of the center's wildlife. Although several sections of this acreage were sampled consistently during the 14 years of this research, most survey time was devoted to 260 back acres that were off limits to wildlife and the general public.



Tractor and train of covered wagons boarding for a group "safari." Safaris are scheduled several times each day, more often on weekends.

by GWC are now conducted near the administration complex.) Nonetheless, the heavily mowed landscape still contains small islands around various pine trees, in damp drainage channels, and along fence rows where trees shrubs and forbs are plentiful; these areas remain attractive to a variety of butterflies and other small wildlife.

Because the back acreage was off-limits to the exotic animals, most survey time was devoted to it. However, the visitor-accessible area was not avoided, particularly in those rear sections where most animals did not frequent. (In spite of our caution, we nonetheless did occasionally encounter an unexpected resting animal or two. Needless to say, these moments were quite tense but provided comic relief that we have been able to share with friends even now two decades later.) In addition, the surveys were expanded beyond the fenced boundaries of GWC to include bordering roadsides and drainage ditches. Many of these proved to be substantial butterfly habitat except during those years when the areas were recently mowed or sprayed with herbicide.

Then, during the late 1990s, several attempts were made to enhance the visitor area with container-grown butterfly/hummingbird friendly plants. These efforts, however, were only short lived. Not surprisingly, the colorful flowers proved irresistible to a few "smart" individual animals. These quickly discovered a method of circumventing the recently installed cattle guard and fences. As a result, the plantings had a very limited lifespan.

Lastly, in 1997, shortly after the untimely vehicular death of my father and his new wife on the highway between Folsom and Franklinton (see References), GWC was inspired to initiate a "Memorial Butterfly and Native Species Garden." A brochure was created with the description: "The garden is being created as a "place to memorialize and honor those who have contributed to our lives in a memorable way. It will also serve as an outdoor classroom for those interested in creating their own butterfly and native species gardens. The garden will provide a place for our visitors to find shade in the

summer months while waiting to take a tour of the facility." A special fund, the Memorial Brick Fund, was set up and a preliminary drawing was proposed. To begin generating funds, bricks of various sizes inscribed with personal information were offered for sale. These were to be installed in a designated venue near the gift shop. Although the project initially was greeted with enthusiasm and a number of bricks were purchased and installed in four attractive units in a patio-like venue behind the gift shop, the project encountered a major setback: Personnel of GWC undertook several attempts to establish an encompassing garden. However, these failed because of the continued inability to secure the area from resident animals during unattended night hours. Consequently, both personnel of GWC and I lost interest in the project; as a result, the formal garden was never established. Today the original patio area is accented with a butterfly-oriented plaque and four sections of ground brick installations to memorialize lost loved ones.

Here is a summary of the 23 individual butterfly surveys. Sixty four species were identified. The year with the greatest number of species was 1994 with 38 species represented by 279 individuals. (In 2000, 30 species were recorded but represented by 475 individuals, the highest number during the surveys.) The year with the lowest number of species was 2005 with 18 species represented by 144 individuals. (In 1993, 20 species were recorded but represented by only 65 individuals, the lowest number during the surveys.). Results of the 14 NABA counts were published in the annual NABA "Butterfly Count Reports."

Because the individual NABA annual butterfly count reports may not be readily accessible for most members of the Southern Lepidopterists' Society and because the reports are rather cumbersome, I am providing below a single comprehensive/cumulative list of the butterfly species. Nomenclature follows the NABA "Checklist & English Names of North American Butterflies." For those species that were encountered only once, the date is included along with the number and sex of individuals.

FAMILY PAPILIONIDAE:

1. Pipevine Swallowtail (*Battus philenor*)
2. Black Swallowtail (*Papilio polyxenes*)
3. Giant Swallowtail (*Papilio cresphontes*)
4. Eastern Tiger Swallowtail (*Papilio glaucus*)
5. Spicebush Swallowtail (*Papilio troilus*)
6. Palamedes Swallowtail (*Papilio palamedes*)

FAMILY PIERIDAE:

7. Cabbage White (*Pieris rapae*)
8. Orange Sulphur (*Colias eurytheme*)
9. Cloudless Sulphur (*Phoebis sennae*)

10. Little Yellow (*Eurema lisa*)
11. Sleepy Orange (*Eurema nicippe*)
12. Dainty Sulphur (*Nathalis iole*)

FAMILY LYCAENIDAE:

13. Great Purple Hairstreak (*Atlides halesus*): 09/02/2001, 1 male
14. Gray Hairstreak (*Strymon melinus*)
15. Red-banded Hairstreak (*Calycopis cecrops*)
16. Eastern Tailed Blue (*Everes comyntas*): 10/01/1992, 1 female
17. 'Summer' Spring Azure (*Celastrina ladon neglecta*)

FAMILY NYMPHALIDAE:

18. American Snout (*Libytheana carinenta*)
19. Gulf Fritillary (*Agraulis vanillae*)
20. Variegated Fritillary (*Eupatoletia claudia*)
21. Phaon Crescent (*Phyciodes phaon*)
22. Pearl Crescent (*Phyciodes tharos*)
23. Question Mark (*Polytonia interrogationis*)
24. Mourning Cloak (*Nymphalis antiopa*): 08/28/2003, 1 male
25. American Painted Lady (*Vanessa virginiensis*)
26. Painted Lady (*Vanessa cardui*)
27. Red Admiral (*Vanessa atalanta*)
28. Common Buckeye (*Junonia coenia*)
29. Red-spotted Purple (*Limenitis arthemis astyanax*)
30. Viceroy (*Limenitis archippus*)
31. Goatweed Leafwing (*Anaea andria*)
32. Gemmed Satyr (*Cyllopsis gemma*)
33. Carolina Satyr (*Hermeuptychia sosybius*)
34. Georgia Satyr (*Neonympha areolata*)
35. Common Wood-Nymph (*Cercyonis pegala*)
36. Monarch (*Danaus plexippus*)

FAMILY HESPERIIDAE:

37. Silver-spotted Skipper (*Epargyreus clarus*)
38. Long-tailed Skipper (*Urbanus proteus*)
39. Southern Cloudywing (*Thorybes bathyllus*)
40. Northern Cloudywing (*Thorybes pylades*)
41. Confused Cloudywing (*Thorybes confusus*): 07/24/1994, 1 male, 1 female

In addition to the adult butterflies, immature representative of several species were observed. These include: Spicebush swallowtail on Sassafras (*Sassafras albidum*), Cabbage White on ornamental cabbage (*Brassica oleraceae*), Cloudless Sulphur on partridge pea (*Cassia fasciculata*), Gulf Fritillary on passionflower (*Passiflora incarnata*), Variegated Fritillary on passionflower (*Passiflora incarnata*), Common Buckeye on pink foxglove (*Agalinis fasciculata*), Red-spotted Purple on black willow (*Salix nigra*), Goatweed Leafwing on wooly goatweed/hogwort (*Croton capitatus*), Monarch on antelope-horn milkweed (*Asclepias viridis*), Common Checkered Skipper on teaweed (*Sida rhombifolia*), and Fiery Skipper on an unidentified grass.

Acknowledgements

Throughout the 14 years of this study, numerous individuals assisted me with the field work. All have been acknowledged in the individual annual "Fourth of July Butterfly Counts" sponsored by the North American Butterfly Association. But I would like to single out the following: Robert Sherman and Gayle Strickland (deceased), Baton Rouge; Linda Barber Auld and Dorothy Munchow, New Orleans. In addition, I would like to especially thank these personnel of Global Wildlife Center: Ken Matherne, Paula Finley, Christina Cooper, and Sara Coulon.

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42. Juvenal's Duskywing (*Erynnis juvenalis*): 04/05/1992, 1 male
43. Horace's Duskywing (*Erynnis horatius*)
44. Mottled Duskywing (*Erynnis martialis*): 07/11/1992, 1 male
45. Zarucco Duskywing (*Erynnis zarucco*)
46. Common Checkered Skipper (*Pyrgus communis*)
47. Tropical Checkered Skipper (*Pyrgus oileus*)
48. Common Sootywing (*Pholisora catullus*): 07/28/1996, 2 males
49. Swarthy Skipper (*Nastra lherminier*)
50. Neamathla Skipper (*Nastra neamathla*)
51. Clouded Skipper (*Lerema accius*)
52. Least Skipper (*Ancyloxypha numitor*): 08/01/1992, 1 male
53. Southern Skipperling (*Copaeodes minimus*)
54. Fiery Skipper (*Hylephila phyleus*)
55. Tawny-edged Skipper (*Polites themistocles*)
56. Whirlabout (*Polites vibex*)
57. Southern Broken-Dash (*Wallengrenia otho*): 10/01/1992, 1 male
58. Northern Broken-Dash (*Wallengrenia egeremet*): 07/18/1999, 1 male
59. Sachem (*Atalopides campestris*)
60. Delaware Skipper (*Anatrytone logan*)
61. Dun Skipper (*Euphyes vestris*)
62. Eufala Skipper (*Lerodea eufala*)
63. Twin-spot Skipper (*Oligoria maculata*): 05/23/1992, 1 male
64. Ocola Skipper (*Panoquina ocola*).

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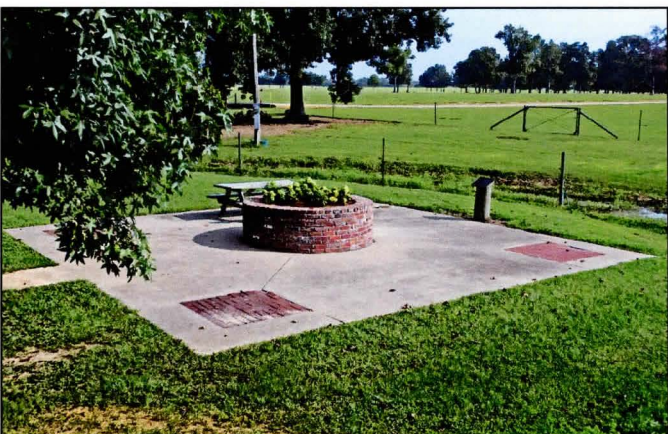
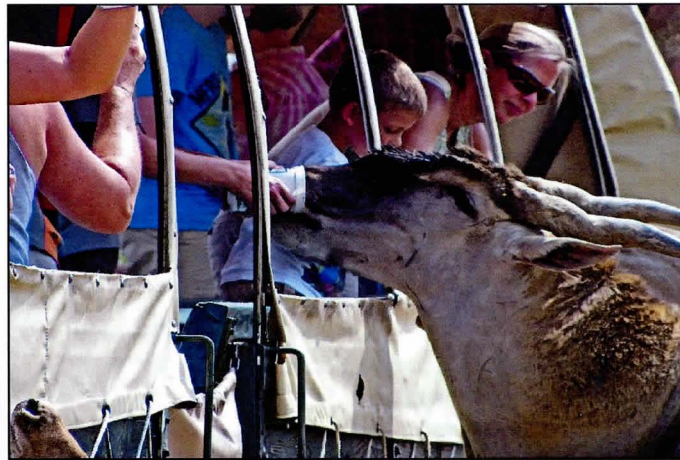
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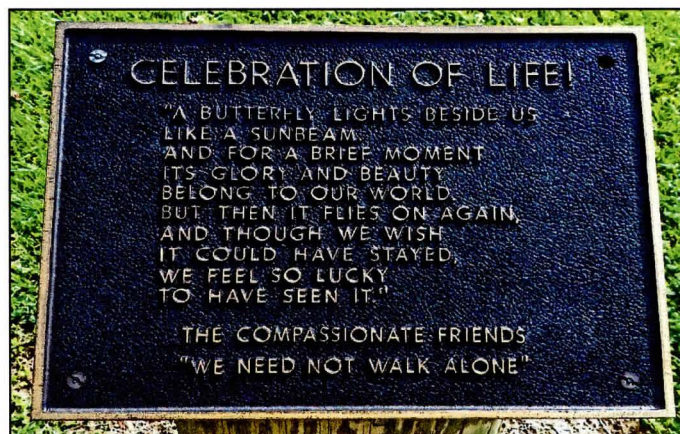
This photograph and the middle 2: Visitors can purchase cups of corn to feed wildlife during the 1.5 hr. safari. Animals learn to anticipate this and so are attracted to the vehicles and tourists.



A *pinzgauer*—a Swiss military vehicle—used for conducting a private “Pinz Tour” of the grounds. These individualized tours must be arranged in advance.



Patio in designated area for proposed Memorial Butterfly Garden proposed in 1998 and inspired by the vehicular death of author's father and stepmother at an intersection on LA Highway 24 between Franklinton and Folsom, LA., on Sunday November 2, 1967. Garden was never implemented because of the inability to create an off-limits area to preclude hungry wildlife from decimating the colorful plants during the quiet hours of darkness.



Plaque in proposed Memorial Butterfly Garden venue. “Compassionate Friends” is a national organization of parents and friends who grieve the loss of children.



One of four sections of memorial bricks in patio. Individual bricks were sold to raise funds for the anticipated garden.



Memorial brick for author's father and stepmother, who were just recently married after meeting at a local dance club in Covington, LA. (hence "Dancing in Heaven.")



Memorial brick for author's mother who died during heart surgery on January 2, 1991, while the author was on an expedition in the Amazon Basin of Brazil (see References).



This photograph and the next 3: The back 260 acres (out of 900) are fenced off from visitors and wildlife. Area was originally used for special functions of GWC and periodic mowing for winter hay. Initially the area contained several wildflower-rich sections that were good habitat for butterflies and other small wildlife, and hence the chief focus for the 27 surveys during the 14 years of this study. Today, however, the acreage is reserved almost exclusively for hay production to furnish supplemental winter feed for the center's resident 4000 animals.



Flower of native passionflower (*Passiflora incarnata*). This was a common vine in shrubby areas of the back acreage. Plant is the host for Gulf Fritillary (*Agraulis vanillae*) and Variegated Fritillary (*Euptoieta claudia*).



Mature larva of Gulf Fritillary feeding on *P. incarnata* in back acreage.



Mature larva of Variegated Fritillary feeding on *P. incarnata* in back acreage.



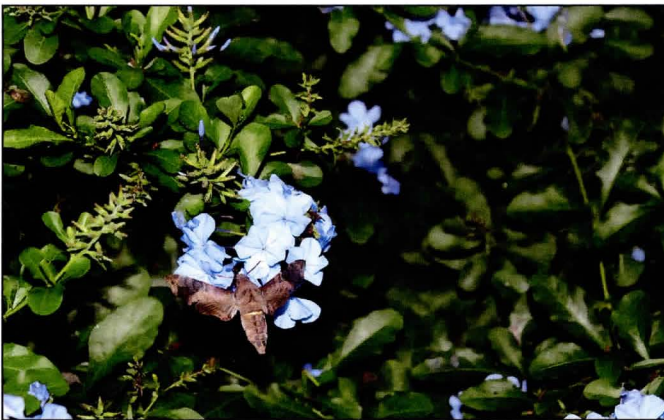
Native antelope-horn milkweed (*Asclepias viridis*) in back acreage. Species is a popular host for the Monarch and plant was relatively common in pastures.



Mature Monarch larva feeding on *A. viridis* in back acreage.

(Gary N. Ross, E-Mail: gnross40@yahoo.com)

Two photographs of *Enyo lugubris* sent in by David Hill (Date: 28-VII-2013, Time: 8:30 PM, Location: 512 Hager Dr., Ocoee, Florida 34761).



JAMES' CHALLENGE

Two articles in the June (2013) issue of the SLS NEWS "Searching for Hessels' Hairstreak in Alabama, Text by Paulette Haywood Ogard and Photography by Sara Bright" and "A First Record of *Anomis editrix* in North Carolina by Parker Backstrom" cost James \$20.00. Many thanks to the above authors for submitting articles and to James for continuing his challenge to the SLS Membership to write articles on the "Dangers of Lepping" and "First Encounters". [The Editor]

EARLIEST RECORDS FOR *LEPTOTES CASSIUS* (CRAMER, 1775) (LEPIDOPTERA: LYCAENIDAE) IN LOUISIANA

BY
VERNON ANTOINE BROU JR.

The small in size blue butterfly *Leptotes cassius* (Cramer) was described in 1775 from Surinam. Miller and Brown (1981) state that most of Cramer's types are lost or are no longer recognizable, and this is the case with *cassius*.



Fig. 1. *L. cassius* - male: dorsal (a), ventral (c); female: dorsal (b), ventral (d).

In the U.S., *L. cassius* is found from Florida to Texas with occasional captures further north of the Gulf Coast states and west of Texas.

Unknown to the author was the fact that *cassius* was unreported for Louisiana when I first captured it during the summer months 1963-64 on property that beginning in 1942 was a Naval Air Station, and later in 1946 was designated a Naval Air Training Station. In 1957, the U.S. Navy abandoned this property. In 1958 the site quickly became the campus of the Louisiana State University New Orleans (LSUNO) by renovation of barracks and other existing facilities. Years later (1974) LSUNO's name changed to its present name, the University of New Orleans (UNO).

As a youngster, *cassius* was the only blue butterfly I knew about in Louisiana, and numerous specimens were captured in those early years. By the late 60s, the surrounding area inhabited by *cassius* was also bulldozed and cleared of all vegetation for the expansion of the UNO campus and later again to make room for extension of a city street Leon C. Simon Boulevard, and for the establishment of Benjamin Franklin High School.



Fig. 2. Parish records for
L. cassius.

Another capture of *L. cassius* was a single specimen on June 29, 1968, in St. Helena Parish by the late Gayle Strickland, and reported in an invited paper in the early 1970's at a meeting of the Lepidopterists Society.

More recently October 2000, a small series of more than a dozen specimens were captured nectaring on *plumbago* by Linda Auld, again in New Orleans. Two of these most recent specimens are illustrated in Fig. 1. The parish records are illustrated in Fig. 2. I wish to thank Linda Auld for calling my attention to these recent captures.

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NORTH AND SOUTH: A TALE OF TWO BUTTERFLIES

BY

CRAIG W. MARKS

On Saturday, June 2, 2012, I met Jeff Trahan at Sisily Island Hills WMA in Catahoula Parish, Louisiana. My purpose for this trip was to look for Byssus Skippers. Only reported twice in Louisiana, both times within the last ten years, Kil Roever had previously identified Sisily Island as one of those locations. We had a day filled with a total of 29 species and hundreds of butterflies, but no Byssus Skippers. Yehl Skippers, Spicebush Swallowtails, Red-banded Hairstreaks, Southern Broken-dashes and Lacewing Roadside Skippers were abundant, found primarily taking nectar at purple bee balm growing wild along the roadsides. Silver-spotted Skippers were common, also on the bee balm.

I also saw several satyrs that I identified as Southern Pearly-eyes, *Enodia portlandia*. I had caught a female Southern Pearly-eye at Sisily on March 10, 2012. There was a great amount of cane present, and I had made a mental note expecting it to be present in greater numbers later in the year. As such, I was not surprised to see more pearly-eyes the following June.

Because Catahoula Parish is under-reported, Jeff was taking pictures of virtually everything we saw, including one of the pearly-eyes, all of which were later submitted to the "Butterflies and Moths of North America" website. As part of the verification process, Ricky Patterson (from Mississippi) reviewed the pearly-eye photograph and then contacted Jeff to advise he felt the butterfly depicted was *E. anthedon*, not *portlandia*. This perplexed me because the pearly-eye in question appeared to have yellow tipped antennae, typically diagnostic of Southern Pearly-eyes. As such, I wanted to investigate this colony further and decided to return to Sisily to take a series of specimens for further study. The picture in question is below.



Sisily Island Hills WMA, Catahoula Parish
(June 2, 2012)

Historically, the Northern and Southern Pearly-eyes were considered to be well-differentiated, but clinal races of a single species, the Pearly-eye (*Lethe portlandia*). In 1971, Gatrell suggested two distinct species existed. Later, Heitzman and dos Passos (1974) verified that two discreet populations, "co-exist in certain regions without interbreeding," (quoting Cech and Tudor, 2005). Of particular note, the former was determined to use a variety of woodland grasses as its hostplant, but not cane which is the hostplant of the latter.

Warren Co, Mississippi. Also, in that same e-mail, he indicated that *anthedon* was reported from, "Jefferson County in Mississippi which is not that far from where you took your picture."

Northern Pearly-Eyes have been reported from Mississippi. In fact, Patterson, in his e-mail to Trahan wherein he identified the butterfly picture above as *anthedon*, stated that he had captured *portlandia*, *anthedon* and *creola* in

Northern Pearly-eyes have also been found to our north in Arkansas. Specifically, I have found it during our annual NABA count at Grandview/Rick Evans WMA in Hempstead, AR, in May and early June. I also found it on Mt. Magazine in mid August, in Logan County. It has also been reported at Red Slough WMA in extreme southeastern Oklahoma.

In 1954, Lambremont reported "*Lethe portlandia portlandia*" from St. Landry Parish with a sighting/capture date of July 3, 1897. As previously noted, during this time frame *anthedon* had not yet been recognized as a separate species but was typically the northern subspecies of *portlandia*, *L. p. anthedon* (see Klots, 1951). Lambremont had specifically referenced the more southern subspecies, *L. p. portlandia*, as present in Louisiana. By 1963, Ross and Lambremont reported this same subspecies as located in three additional parishes, including a population at Avery Island, Iberia Parish, where they noted it to be abundant.

In an unpublished paper circa 1971, Gayle Strickland referred to *portlandia* as, "abundant in suitable habitat," noting that it was present in lowlands in East Baton Rouge Parish and "mixed deciduous uplands of W. Feliciana Parish." More recently (and after *portlandia* and *anthedon* had been recognized as separate species), Dr. Michael Israel

and Kevin Cunningham reported to The Lepidoptera Society seeing *portlandia* in East Feliciana Parish and Terrebonne Parish, respectively. In the late 1980's and into the early 1990's, Vidrene, *et al.*, reported it from the Cajun Prairie Region, flying in March, May (only 1 seen), July (again, only 1), then August into November. It was also reported during the Barateria (June 1998) and Lower Pearl River NABA Counts (June 2005).

Over the years, I found *portlandia* to be quite common at Avery Island and regular at Thistlethwaite WMA in St. Landry Parish. Although I haven't checked on it in years, there was a large colony at Chicot State Park in Evangeline Parish. During the 2007 Kisatchie NABA Count, it was reported for the first time from that location in Natchitoches Parish. In 2011 and 2012, I found it, along with *creola*, at Tickfaw State Park in Livingston Parish.

Jeff Trahan also has numerous records for *portlandia* to include Eddie Jones Park in Caddo Parish (October), Bodcau WMA in Bossier Parish (April through June and August), Kisatchie NF in Rapides Parish (March and August) and Madden Mill Road in Bienville Parish (June). My point is that while *portlandia*, the Southern Pearly-eye, had been reported from around the State for some time, *antheson*, the Northern Pearly-eye was significantly less reported.

Specifically, Northern Pearly-Eyes were listed as part of the fauna of Louisiana on BAMONA, reported as found in West Feliciana Parish, but that site offers no particulars, references, dates, locations, *etc.* Vernon Brou had reported (2013) that he had found this butterfly, a male, in Evangeline Parish on July 15, 1979.



Northern Pearly-eye habitat, Sisily Island Hills WMA, Catahoula Parish, LA. (June 1, 2013).

On July 28, I finally had a free day to drive back and investigate further whether there were both Northern and Southern Pearly-eyes flying at Sisily. It was extremely hot and humid. While the WMA was still very green, unlike the first two times I was there earlier in the year, there was an almost complete absence of blooming wildflowers. As a result, the combination of the heat and no nectar sources yielded minimal butterflies and only nine species. The two most common species seen were

Southern Pearly-eyes and the colony of potential Northern Pearly-eyes, with over 20 of the former and over 10 of the latter seen. All were active in the shade, and, to my consternation, flying on several fairly steep slopes where both cane and the possible grass host-plant for the Northerns were growing. Much effort was exerted and sweat lost as I worked up and down those slopes.

There was clearly a difference between the typical Southern Pearly-eyes and the particular butterflies that had been identified as Northern Pearly-eyes. These differences included size, coloring, markings and, to an extent, habitat. Not all of the suspected Northern Pearly-eyes were found exactly at the same spot that Jeff and I had walked in June. That June site was off to the left from a hunter's trail, down a slope toward a dry creek bed. From that hunter's trail, looking down the slope into where the pearly-eyes were flying, there was a ridge on the right that paralleled the creek bed. Most of the *antheson*-like pearly-eyes I saw were found flying in a separate, dry creek bed on the other side

of that ridge. There was a small amount of cane, but much more of the grass I believe to be the host-plant based on observations of several females flying around and perching on the grass.

Dr. Charles M. Allen has written several books on Louisiana's flora including one on the "*Grasses of Louisiana*" (Allen *et al.*, 2004), and was kind enough to identify the grass at Sisily Hills as either *Chasmanthium laxum* (slender woodoats) or *C. sessiliflorum* (longleaf woodoats), two grasses that he described as very closely related. Within his referenced book, Allen listed both species as present in, "the edges of and in forest throughout the state except the coastal marsh." He further indicated that both of these grasses have been recorded as present in Catahoula Parish. While I've seen no identification of either of these specific grasses as a host plant for *anthedon*, several authors have listed generically referenced "forest grasses," particularly those that grow in shaded, wooded habitat, as host plants. Belth (2013) has suggested *anthedon* uses a sister species, *C. latifolium* (indian woodoats), in Indiana. Cech and Tudor (2005) listed *Chasmanthium* [*Unifolia*] *latifolia* (river oats) as a host. Allen (1997) stated that other forest grasses which have not yet been confirmed may serve as host plants.



Species of woodoats found at Sisily Hills WMA, Catahoula Parish, LA.

the wing maculation was cleaner than in *E. p. missarkae* (the subspecies he reported as found in this region). He further noted the row of eyespots on the underside of the forewing were in a straight line like *anthedon* whereas



Antennae of the prospective *anthedon*.

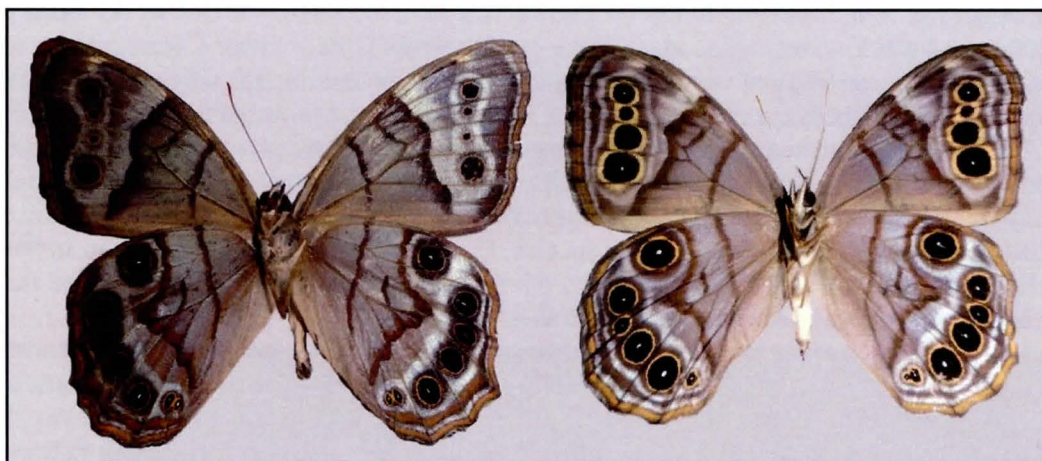
Returning to the picture of the pearly-eye that Ricky Patterson identified as *anthedon*, when asked about the apparent yellow antennae, Ricky noted the view was of the underside and that he had seen other *anthedon* that had orangish antenna on the underside. He then explained that antenna coloration is not 100% accurate, and *anthedon* can have an orangish antenna with little indication of the darker club, especially on the underside. He felt the butterfly was *anthedon* because

in *portlandia* that row of eyespots is curved. Finally, he noted that the ventral eyespots on the lower wing of female *portlandia* show an orange coloration, missing in Jeff's picture.

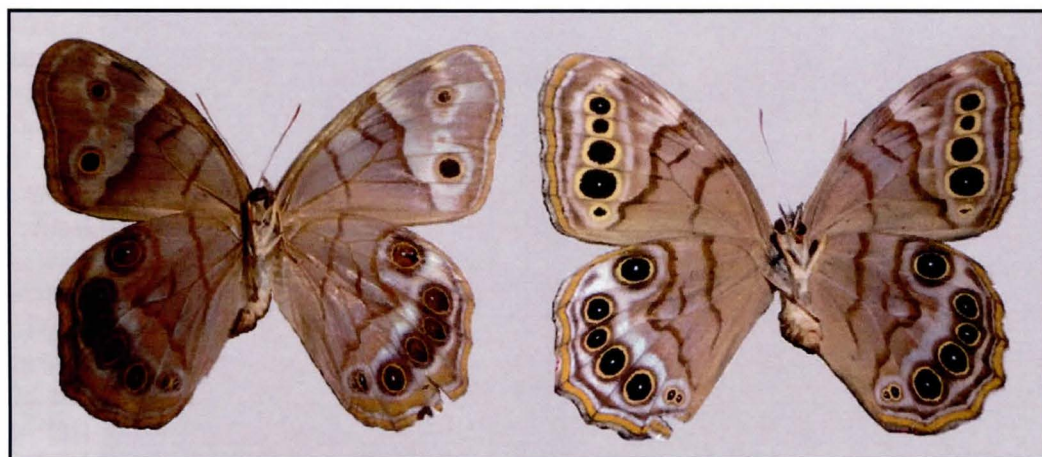
After a more detailed inspection of the specimens collected on July 28, I agree completely with Ricky. A close-up dorsal view of the antennae of the prospective *anthedon* specimens showed the dark clubs (see photograph to left).

Further, a comparison of several

specimens caught in a separate region of the WMA, and which are clearly *portlandia*, shows the distinctions Ricky referenced in excellent detail (see photographs below).



Portlandia (left) and *anthedon* (right) males.



Portlandia (left) and *anthedon* (right) females.

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LINTNERIA EREMITOIDES (STRECKER, 1874) - LIFE HISTORY

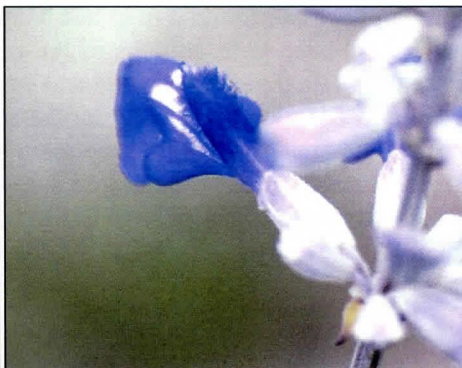
BY

JEFF SLOTTEN

Lintneria eremitoides (Strecker, 1874) is a North American sphinx species that has not been well studied. It has a limited range in the United States and its larval host is very specific. In this presentation which was originally a power point presentation, I describe the life history with habitat and hostplant information.

Fig. 1. Habitat of *Lintneria eremitoides*.

Fig. 2. Egg.

Fig. 3. Mealy Blue Sage (*Salvia farinaceae*).Fig. 4. Mealy Blue Sage (*Salvia farinaceae*).

encapsulates a black pattern. The protuberance-hump appears to represent a derived character that is a unique character among known Sphingid larvae. During the first four instars much of the larva, including the head, is densely covered with tiny, often whitish secondary setae, which gives the larva a very granulated appearance. In the last instar, the secondary setae are greatly reduced and mottled, giving the larva a smooth appearance similar to a snake skin. There are seven sets of diagonal dorsolateral stripes that may continue slightly into the next segment. The caudal horn tends to be short and sharply hooked to the rear. The pupae are similar in general form, color, and texture to those of the genus *Sphinx* with a movable abdomen and prominent cremaster. The tongue case is always free but may range from extremely long with a greatly exaggerated loop similar to *Manduca* to rather short and only slightly elevated away from the body.



Fig. 5. Egg.



Fig. 6. Early Instar larva.



Fig. 7. Moulting larva.

In 1996 along with several other collaborators, I helped Jim find eggs and larvae of certain sphingids that he was unable to find on his own for his book. These included *Manduca jasmineearum*, *Eupyrrhoglossum sagra* and *Sphinx eremitoides*. In this same year I took a trip out to the hill country of Texas to a familiar area that Ed

James P. Tuttle published the book "The Hawk Moths of North America" in 2007. In it he discusses 5 species of sphingids that breed in North America that can be separated from other sphingids because the adults have intricately maculated dorsal

forewings and the larvae have a significant and consistent morphological anomaly. These 5 species have been placed in the genus *Lintneria* Butler, 1876. These 5 species are *Lintneria istar*, *separatus*, *smithi*, *eremitus* and *eremitoides*. The first 4 instars of each species have a large, fleshy, mid-dorsal protuberance on the second thoracic segment that angles anteriorly. In the fifth instar, the protuberance is replaced by a thoracic hump. The dorsum of this hump is marked with a light-colored patch that



Fig. 8. Mature instar larva.



Fig. 9. Last instar larva.



Fig 10. Head of larva.

I targeted the most common *Salvia* in the area growing around the Frio River. This species is *Salvia farinaceae*, the Mealy Blue Sage. It has a long blooming period and is tolerant of drought conditions. This area is subject to periods of long droughts followed by heavy rains that can cause local flooding. In early June I spent a considerable amount of time searching this host for larvae and was successful in finding a small number of mostly final instar larvae well camouflaged on the host during the daytime. I sent most of them to Jim for his study and reared a few to adult stage. They emerged in late July of this same year. I returned to Concan the following year and found ova in late May as well as a few tiny larvae. I attempted to bring these back with cuttings of the host and was unable to get them past the third instar. The next year I returned and could not find any eggs or larvae.

In 2002 I returned and found 3 final instar larvae and a few young larvae. I was able to rear the late instar larvae on cuttings of the host. The young larvae were slow growing on the cuttings I brought back and would not accept any of the local sage I offered including some of the blue varieties found in nurseries. They seem to be very specific to *Salvia farinaceae* and the host has to be fresh. The distribution of the moth is presently from northern Mexico through Kansas. Here are some photos of the habitat, larval hostplant and stages of the moth.



Fig. 11. Last instar larva.



Fig. 12. Pupa.



Fig. 13. Adult.

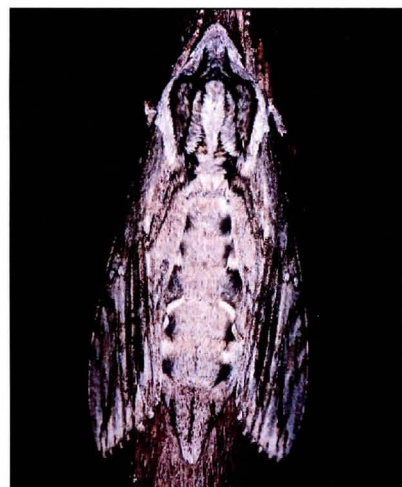
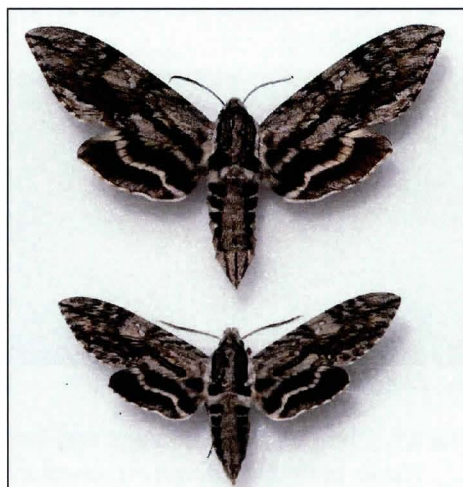


Fig. 14. Adult.

Fig. 15. *L. eremitoides* (top ♀, bottom ♂)

Knudson had surveyed many times called Concan, in Uvalde County. I knew that Ed had collected a few adults of *Sphinx eremitoides* there during the months of April and May and I knew that the larva of this moth fed on some kind of *Salvia* from notes in the MONA Fascicle 21 by Ron Hodges.

I would like to thank Marc Minno for helping with the original power point presentation.

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METALLATA ABSUMENS (WALKER, 1862) (LEPIDOPTERA: EREBIDAE) IN LOUISIANA

BY
VERNON ANTOINE BROU JR



Fig. 1. *Metallata absumens* phenotype variations: males and females captured at *Abita Springs Entomological Study Site.

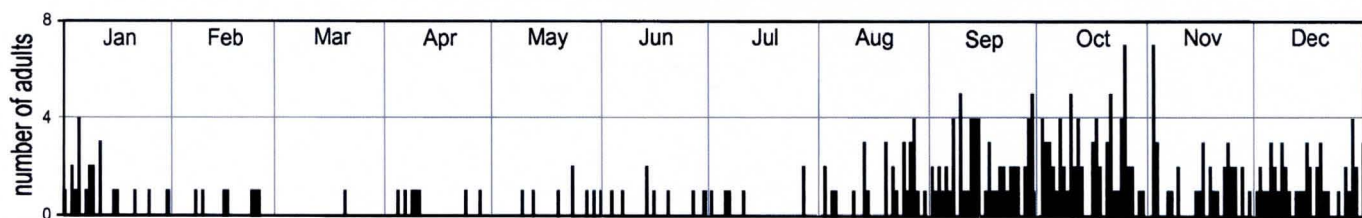


Fig. 2. Adult *M. absumens* captured in Louisiana. n = 298

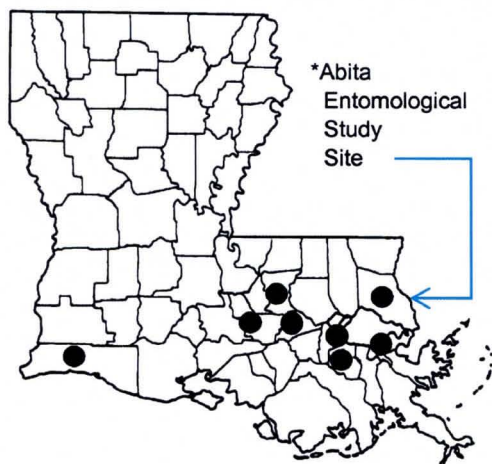


Fig. 3. Parish records for *M. absumens*.

Adults of the small in size migratory moth *Metallata absumens* (Walker, 1862) (Figs. 1 and 4) have been captured in all months of the year in southern Louisiana (Fig. 2). This tan to brown colored species exhibits highly variable maculation which is best illustrated in the 32 examples (Figs. 1 and 4) taken at one single location in Louisiana, the *Abita Entomological Study Site.

Heppner (2003) listed the range of *absumens* to include: New York to Florida and Missouri to Texas, the West Indies, and Mexico to Argentina.

The parish records are illustrated in Fig. 3.

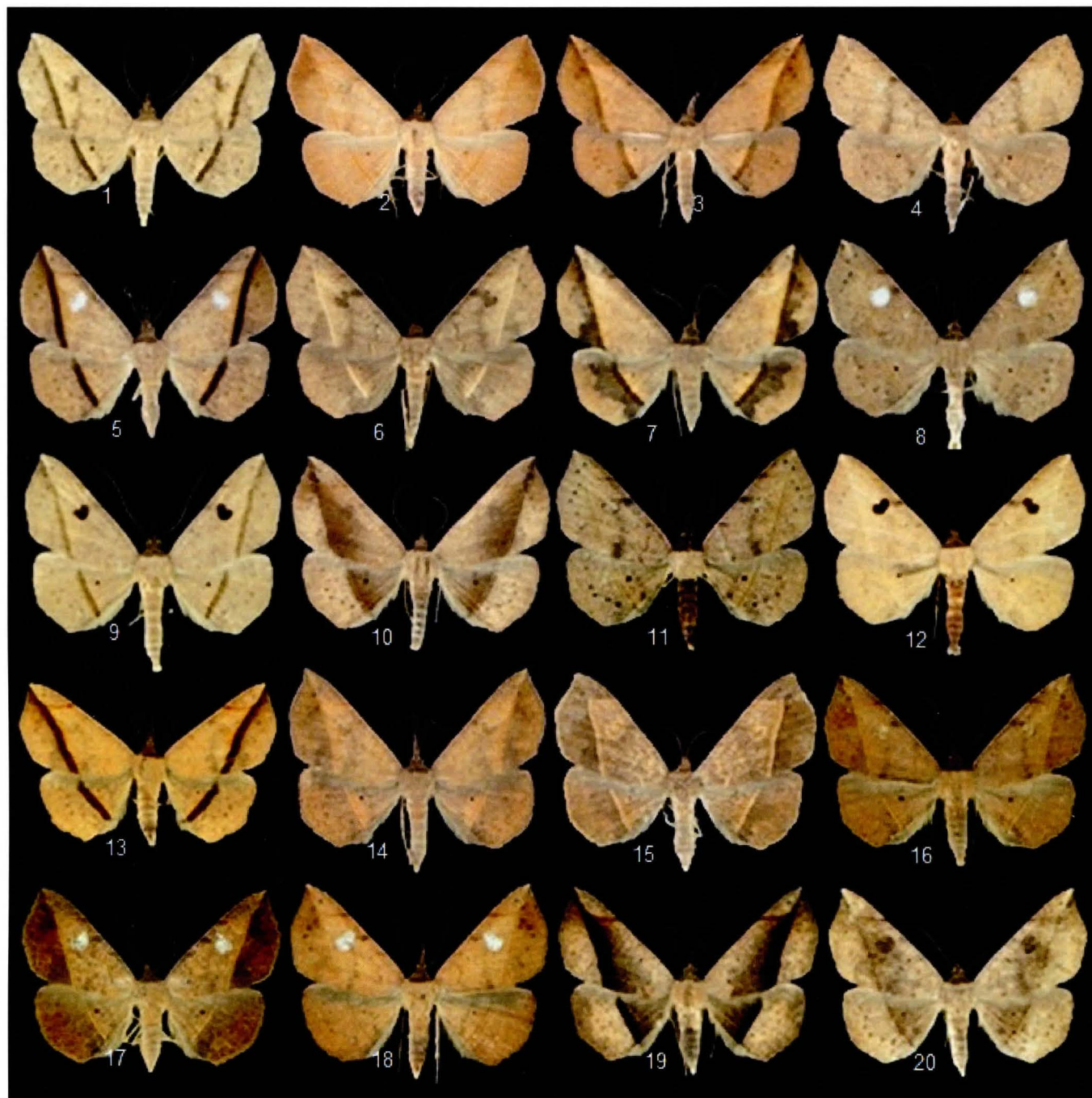


Fig. 4. *Metallata absumens* phenotype variations: males and females captured at *Abita Springs Entomological Study Site.

*Abita Entomological Study Site: sec. 24,T6S, R12E, 4.2 miles northeast of Abita Springs, Louisiana.

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**MELANOLOPHIA CANADARIA CHOCTAWAE RINDGE, 1964
(LEPIDOPTERA: GEOMETRIDAE) IN LOUISIANA**

BY
VERNON ANTOINE BROU JR.



Fig. 1. *Melanolophia canadaria choctawae* phenotypes: a-k. males, m-n. females.

In 1964, Rindge undertook a remarkable investigation involving 2988 specimens from the collections of the American Museum of Natural History (AMNH), the British Museum of Natural History (BMNH), and the Nat. Mus. Nat. History (NMNH), Los Angeles County Museum (LACM) and several private collections. Rindge began with dissections of the genitalia of the five North American species of the genus *Melanolophia* Hulst. As a result of Rindge's investigation, he listed 75 species of *Melanolophia* placed into seven groups which included 34 new species and 15 new subspecies. In this same publication Rindge listed 19 species of the geometrid genus *Pherotesia* Schaus divided into two groups including eight new species and one new subspecies. Additionally, Rindge created a new genus *Melanotesia* for two described South American species.



Fig. 4. *Melanophia canadaria choctawae* phenotype variations: a-f females.

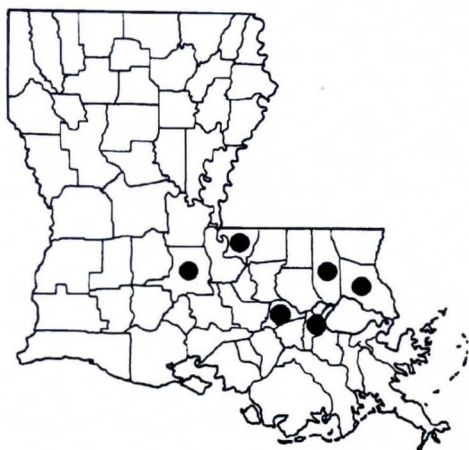


Fig. 3. Parish records for *M.c. choctawae*.

Two new subspecies designated by Rindge (1964) represented populations of *Melanophia canadaria* (Guenée, [1858]) namely: *Melanophia canadaria crama* Rindge from the Eastern United States and *Melanophia canadaria choctawae* Rindge (Fig. 1 and 4), new subspecies from the Southeastern United States.

The southeastern population occurring in the coastal plains of the Southeastern United States and in the Gulf States, *choctawae* are larger and darker in color than other members of *Melanophia canadaria*. I have captured adults of *choctawae* in each of the past 44 years in Louisiana using ultraviolet light traps and occasionally at fermenting fruit bait traps. The flight period in Louisiana is illustrated by placing capture dates on a single multi-year composite 366-day graph (Fig. 2). Though I have captured adults in all months of the year, *choctawae* appears to have five significantly populated annual broods in southeast Louisiana. The

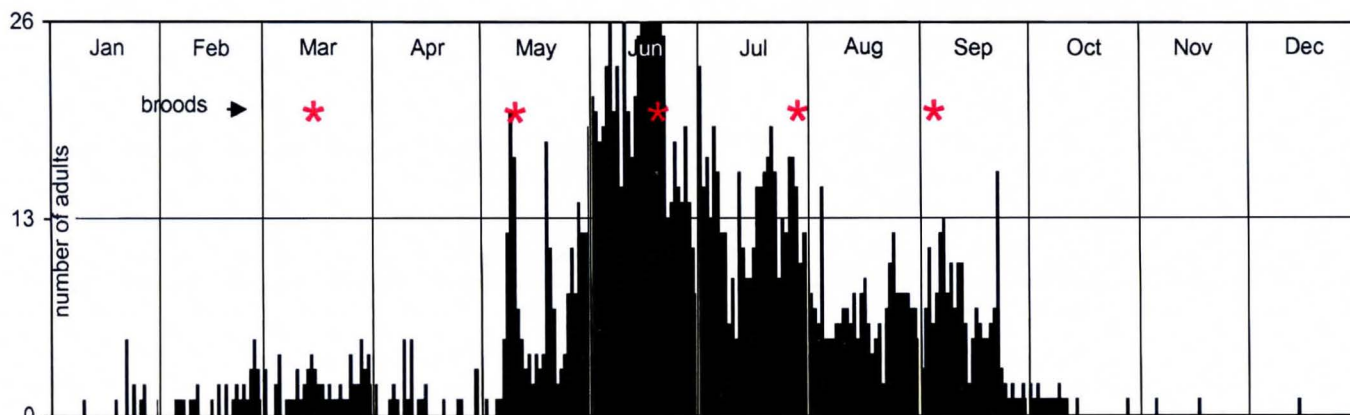


Fig. 2. Adult *M. c. choctawae* captured in Louisiana. n= 1854

initial brood peaks in March with second through fifth broods peaking at approximate intervals of 40-days beginning early May. The third brood peaking near mid June is the most abundantly populated of the five broods. The parish records in Louisiana are illustrated in Fig. 3.

The Holotype of *choctawae* is a male from Clinton, Hinds County, Mississippi taken February 13, 1959; Allotype, female, same data, March 31, 1960, both specimens were from the collection of Bryant Mather. All paratypes also were from Mississippi. Packard (1876) reported *choctawae* as *M. canadaria* from New Orleans, Louisiana. Rindge reported the subspecies *choctawae* occurs primarily in the coastal plains area, and it is on the wing from February through October. The range includes Southeastern United States, from the District of Columbia south along the coastal regions to northern Florida and west to Mississippi and eastern Texas, with single specimens known from Arkansas and Louisiana.

Rindge and Warren (1967) published an additional investigation providing lectotype designations and notes on the genera *Melanolophia*, *Pherotesia*, and *Melanotesia*. More recently, Rindge (1990) published a revision of the *Melanolophiini* (Lepidoptera, Geometridae).

Covell (1984) pictured only *M. c. crama*, stating it occurs from New Jersey to northern Illinois and Tennessee. About *choctawae*, Covell stated it occurs along the coast from Maryland to Texas. He also stated that these various subspecies were common to abundant throughout eastern North America occurring in two broods from March to September.

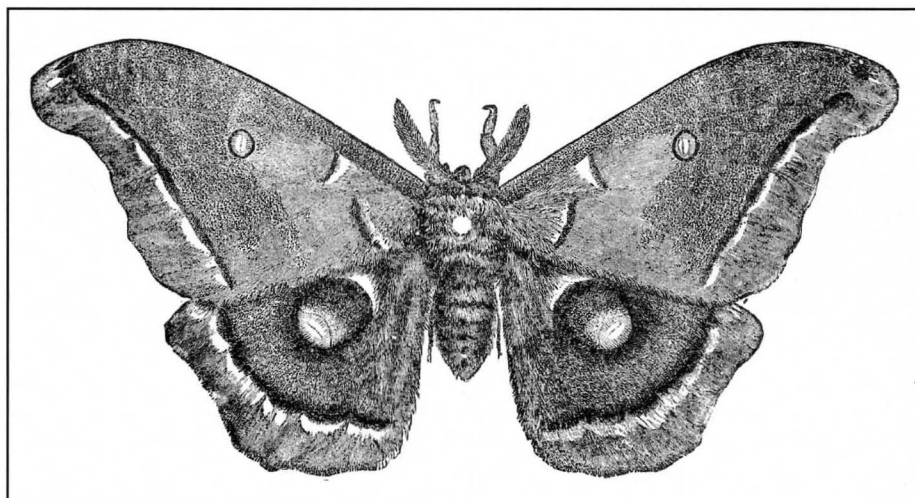
Heppner (2003) listed fifteen foodplants for *choctawae* and the dates (Florida) from January to July.

I am indebted to the late Frederick H. Rindge for determining the identity of my specimens of *Melanolophia* over several decades.

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Polyphemus moth.

"If ever a name was a misnomer, it is surely so in his case. Polyphemus, a one-eyed furious giant, a murderer and greedy cannibal, for him to give a name to this two-eyed, gentle-natured, and apparently tongueless moth (whom no sweets could tempt), simply because it is large! As well might he be called the Tower of Babel, Behemoth, Leviathan, or any other great thing of earth or sea. He is, however, not likely himself to apply to the legislature for redress for his grievance." (Page 34)

EUSARCA PACKARDARIA (MCDONNOUGH, 1940) (LEPIDOPTERA: GEOMETRIDAE) IN LOUISIANA

BY
VERNON ANTOINE BROU JR.

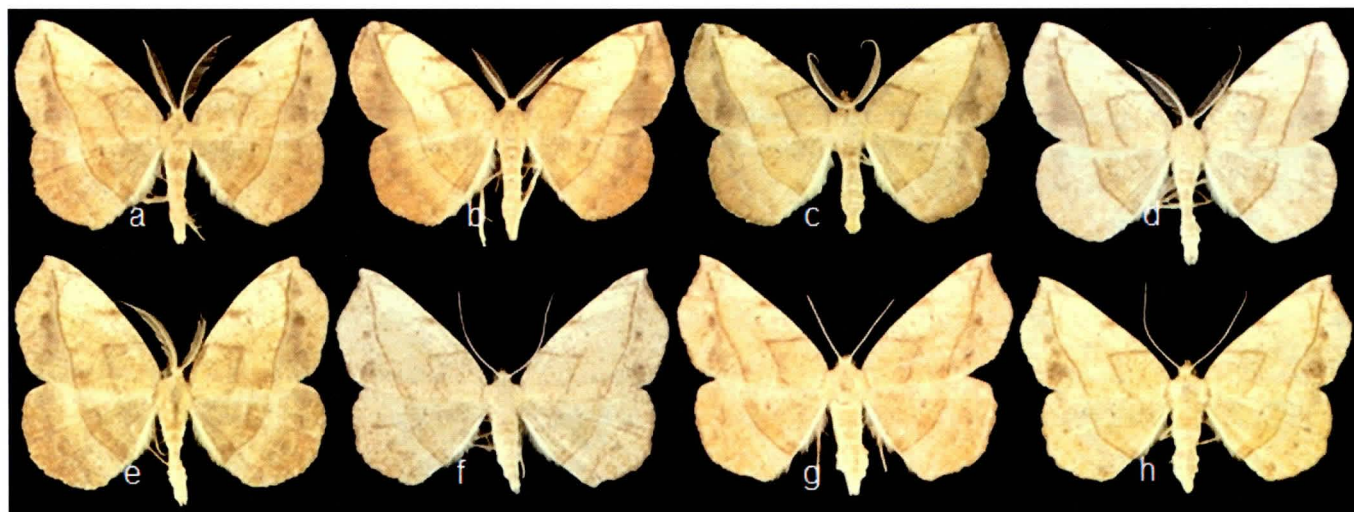


Fig. 1. *Eusarca packardaria* (a-h) captured at Edgard, St. John the Baptist Parish, Louisiana. Males (a-e), females (f-h). Dates of capture: a. May 8, 1978, b. Sept 10, 1981, c. Sept 10, 1981, d. June 18, 1982, e. May 16, 1978, f. April 27, 1977, g. May 14, 1979, h. Aug 11, 1977.

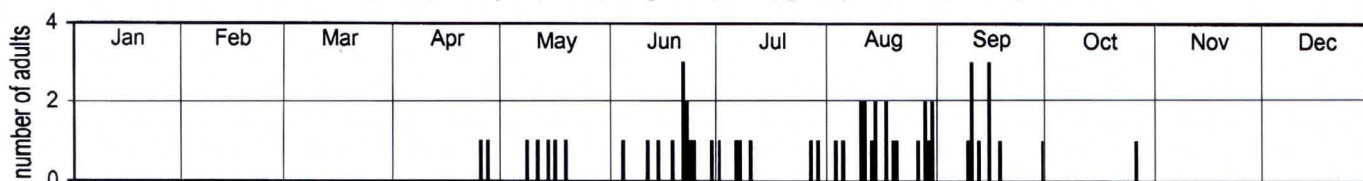


Fig. 2. Adult *Eusarca packardaria* captured in Louisiana. n = 55



Schweitzer, *et al.* (2011) listed *Eusarca packardaria* (McDonnough) as a poorly known species of Lepidoptera found in the eastern United States of possible conservation concern. These authors listed the range of *packardaria* to include "Illinois southward into east Texas" and also noting a population from Gordon County, Georgia.

This species was not addressed by Covell (1984) nor by Heppner (2003).

E. packardaria appears to have three annual broods based on the limited sample in Fig. 2. The parish locations are illustrated in Fig. 3.

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POLLEN PRESENCE ON NOCTURNAL MOTHS IN THE KETONA DOLOMITE GLADES OF BIBB COUNTY, ALABAMA

BY

KATHRYN A. LECROY^{1,2}, H. WAYNE SHEW¹, AND PETER A. VAN ZANDT¹

What types of insects perform pollination? If you asked this question of non-scientists, “bees” will be the main response. Indeed, hymenopterans are the most well studied pollinators, particularly honey bees and bumble bees, which effectively pollinate a multitude of angiosperms across the plant kingdom. In fact, hymenopterans largely steal the show of the world of pollination ecology, and in effect there is often a neglect of other insect taxa, such as Diptera, Coleoptera, and Lepidoptera (Weiss, 2001).

Despite this, everyone knows that moths are important pollinators, and a quick internet search for “moth pollinator” will turn up thousands of pages describing moths as effective pollinators. However, a more extensive search will indicate that this reputation is largely based off the study of just a few groups of moths. The pollination behavior of many of the Sphingidae is the best studied. For example, there are at least 106 plants in temperate North America that are pollinated by hawkmoths (NRC, 2007). Members of the yucca moth family (Prodoxidae) have also been extensively studied for their pollinator behavior and coevolutionary relationships (e.g., Pellmyr and Thompson, 1992). There are also a few members of other moth families that have been identified as potential pollinators (e.g., Oliveira *et al.*, 2004; Graham, 2010; Devoto *et al.*, 2011), but given the vast number of moth species, many aspects about their pollination ecology is at best uncertain, and at worst left unexplored.

Studies have shown that Lepidopteran pollinators are usually generalists and do not carry large amounts of pollen, but these pollinators do fly to the same plant species from longer distances, implying greater pollinator efficiency and effectiveness (Herrera, 1989; Willmer, 2011). These findings suggest that there may be some value of nocturnal pollinators that is not fully evaluated because we do not know the extent of nocturnal moth pollination. By uncovering some preliminary clues about nocturnal moth flower visitation, we can expand our limited scope of knowledge of nocturnal moth pollination behavior.

In our study, we sought to discover potential lepidopteran pollinators by analyzing collected moth specimens for conspicuous pollen presence. We focused our efforts on four moth families (Erebidae, Geometridae, Noctuidae,

and Pyralidae) whose members are largely nocturnal and where some have been found to exhibit pollinator behavior such as proboscis extension towards flowers, drinking nectar, or transporting pollen from flower to flower. These four families are well represented in the ketona dolomite glades of Bibb County, Alabama, according to a nocturnal moth diversity survey of these glades and surrounding areas.



Fig. 1. Glycerin jelly (left) used to cut cubes for swabbing proboscides of moth specimens. Middle panel shows an example of a re-hydrated moth (*Synanthedon exitiosa*), and pollen grains (right) of “speckly” pollen, visualized with glycerin jelly stain under light microscope at 400x. The pollen ranges from 18 – 22 μm , and is shown next to scales from *Digrammia continuata*.

these glades (Garland, 2008). Within these glades is the 1.94 km² Kathy Stiles Freeland Memorial Preserve (owned by The Nature Conservancy). At the time of this pollination study, 286 species of moths had been collected and identified from the Preserve (P. A. Van Zandt, unpublished data). Moths were captured at the glades using a black light bucket trap deployed on 10 nights from May to August of 2011 and preserved in the Birmingham - Southern College Moth Collection. We took a natural history approach to search for pollen

presence on the bodies of these moth specimens and match these pollen grains with a pollen reference collection of the Bibb County glades.

In order to examine the proboscides of dried, preserved moths, it is necessary to rehydrate the specimens to make the proboscis and other body parts flexible, similar to the state immediately after collection of the specimen. Dried moths in the Birmingham-Southern College collection were placed in a hydration chamber for 2 – 4 hours, depending on specimen body size. Larger moths needed a longer period in order to rehydrate adequately.

After re-hydration, the moths were mounted for viewing under a dissection microscope. A modified protocol of Beattie (1972) and Atwater and Lott (2011) was used to remove the pollen grains from the moth proboscis (see Fig. 1). Briefly, one #0 insect pin was used to unroll the proboscis of the moth, while a second pin with a glycerin jelly cube (1 – 2 mm³) with fuschin stain was rubbed against the unrolled proboscis and labial and maxillary palps. This cube was placed on a glass microscope slide along with another cube that had been rubbed over the rest of the body, including legs, eyes, antennae, and wing edges. The two cubes were kept separate on the same slide. The slide was heated to 50°C to melt the glycerin jelly, coverslips were placed on top, and the jelly was allowed to harden at room temperature. A light microscope was used to examine the entire slides for pollen at 100x and 400x magnification. The fuschin stain colors the exine layer of the pollen grains pink and aids in revealing distinguishing characteristics (Fig. 1).

If pollen was collected from any of the sampled moths, the number of grains were counted and identified to the lowest taxon possible. Devoto *et al.* (2011) propose that an insect may be a biologically significant plant visitor and potential pollinator if it has a substantial amount of pollen present on the body or head (*i.e.*, ≥ 5 grains). When observed, pollen grains of known wind-pollinated species (*e.g.*, Pinaceae) were not counted towards pollen presence. Pollen grains were identified using a variety of manuals and published photographs and descriptions, as well as a pollen reference collection that was prepared from preserved plants reported to be present in the Bibb County Glades (Allison and Stevens, 2001). The pollen for the reference collection was obtained from vouchers at the University of Alabama Herbarium (UAH) in Tuscaloosa, Alabama, and preserved by immersing the grains in glycerin jelly containing fuschin stain on microscope slides.

We were able to identify pollen from several families of plants on moth specimens. Families that contained more than five grains of pollen included Ericaceae, Liliaceae, and Betulaceae. Unfortunately, we were unable to identify the most dominant pollen type (“speckly”), meaning that it was not part of the species list of this glade habitat (Allison and Stevens, 2001). Pollen from this plant was found on all geometrid and noctuid specimens that had more than five grains on them. Erebrids also had more of this pollen than any other type, with the second most common grain type coming from the Ericaceae (the heather family), which includes many difficult to distinguish members of the genus *Vaccinium*. Proper identification of these pollen grains is crucial for facilitating the important next step of determining plant visitation and assessing the pollination abilities of these species.

A total of 261 moth specimens representing 90 species within four families were examined for the presence of pollen. For some of these species, we were only able to examine a single specimen. We found pollen on at least one specimen for 46 of the 90 species. Pollen was found most frequently on members of the Erebidae, followed closely by members of the Geometridae and Noctuidae (Tables 1 and 2). Only one of the five pyralids examined had pollen on it (Tables 1 and 2). For the most part, pollen was only on the non-head portions of the body. Specimens that carried five or more pollen grains (Fig. 2) were far less frequent (Tables 2 and 3), and those that had high levels of pollen were most frequent in the Erebidae. The pyralids we examined apparently never visited flowers, as they were typically devoid of pollen.

Our findings are in agreement with those summarized by Norris (1936), in that the most common nocturnal flower visitors are in the Noctuoidea and Geometridae. Indeed, collecting at flowers can be very productive for some noctuids that may be uncommon at lights (*e.g.*, Neilsen, 1981). A full literature review is beyond the scope of this note, but other studies that have observed moth activity have also found that in addition to the Sphingidae, members of the Noctuidae, Erebidae, and Geometridae are most commonly found visiting flowers at night (*e.g.*, Oliveira *et al.*, 2004; Makholela and Manning, 2006). Some families, especially the Noctuidae, can have members that are even more effective pollinators than diurnal species like bees (Groman and Pellmyr, 1999; Young, 2002). In contrast to our findings, others (Okamoto *et al.*, 2008) have found that members of the Pyralidae can be very common visitors at night.

This study was designed to be a broad survey of four abundant moth families rather than a thorough inspection at the species level. Given the large number of moth species, the latter approach is an enormous undertaking. This is especially true since many specimens per species will need to be examined to assess whether a moth species is a consistent visitor to flowers. We are conducting these species-level searches for potential pollinators as part of an ongoing study.

If the five pollen grain minimum of Devoto *et al.* (2011) truly represents a biologically relevant cutoff separating potential pollinators from flower vagrants, then a relatively small percentage of moths examined in this study are likely to be reliable flower visitors. Perhaps, then, the frequently heard claim that moths are pollinators should be rephrased to recognize that only some families and subfamilies are likely to contain effective nocturnal pollinators.

Table 1. Summary of all 90 species analyzed for pollen presence, sorted by family, subfamily, and species name. Species with any pollen present marked with X. Pollen location is noted by "M" for pollen located on or near mouthparts, "B" when located on thorax, and "Both" when found in both body designations. When more than one specimen is found to have pollen numbers in () designate the quantity of specimens with pollen per specific location.

FAMILY	SUBFAMILY	SPECIES	POLLEN PRESENCE	POLLEN LOCATION
EREBIDAE	Arctiinae	<i>Clemensia albata</i>	X	Both (3)
		<i>Hypoprepia fucosa</i>	X	B, Both (2)
		<i>Leucanopsis longa</i>	X	Both
		<i>Spilosoma congrua</i>	X	B
		<i>Spilosoma virginica</i>	—	—
		<i>Virbia aurantiaca</i>	X	B (2)
		<i>Virbia opella</i>	X	Both
	Calpinae	<i>Plusiodonta compressipalpis</i>	X	M
	Erebinae	<i>Argyrostromis anilis</i>	X	B (2), M
		<i>Caenurgis chloropha</i>	X	M
		<i>Catocala amica</i>	—	—
		<i>Catocala andromedae</i>	—	—
		<i>Catocala connubialis</i>	X	Both
		<i>Catocala epione</i>	X	B, Both
		<i>Catocala grynea</i>	—	—
		<i>Catocala micronympha</i>	X	M
		<i>Catocala muliercula</i>	X	Both
		<i>Catocala ultronia</i>	—	—
		<i>Ptichodis herbarum</i>	X	B, M
		<i>Zale confusa</i>	X	B
		<i>Zale obliqua</i>	X	B
	Eulepidotinae	<i>Panopoda carneicosta</i>	X	B
		<i>Phyprosopus callitrichoides</i>	—	—
	Herminiinae	<i>Idia aemula</i>	X	B
		<i>Idia americalis</i>	—	—
		<i>Idia majoralis</i>	—	—
	Hypeninae	<i>Hypena palparia</i>	X	B
		<i>Hypena scabra</i>	—	—
	Lymantriinae	<i>Dasychira basiflava</i>	X	B
	Phytometrinae	<i>Hyperstrotia villificans</i>	—	—
	Scolecocampinae	<i>Arugisa latiorella</i>	—	—
		<i>Scolecocampa liburna</i>	X	B

FAMILY	SUBFAMILY	SPECIES	POLLEN PRESENCE	POLLEN LOCATION
GEOMETRIDAE				
	Ennominae	<i>Anavitrinella pampinaria</i>	X	B
		<i>Antepione thisoaria</i>	—	—
		<i>Digrammia continuata</i>	X	M, Both
		<i>Epimecis hortaria</i>	X	B
		<i>Erastria cruentaria</i>	—	—
		<i>Euchlaena deductaria</i>	X	B
		<i>Eusarca confusaria</i>	X	B
		<i>Eutrapela clemataria</i>	X	B (3), Both
		<i>Glena plumosaria</i>	X	M
		<i>Hypagyrtis esther</i>	X	B, Both
		<i>Iridopsis vellivolata</i>	—	—
		<i>Lomographa vestaliata</i>	—	—
		<i>Lytrosis unitaria</i>	X	B
		<i>Macaria multilineata</i>	X	B (2), M, Both
		<i>Melanolophia canadaria</i>	X	B
		<i>Nematocampa resistaria</i>	—	—
		<i>Nepytia semiclusaria</i>	X	B, M
		<i>Patalene olyzonaria</i>	X	B (2), M, Both
		<i>Plagodis fervidaria</i>	X	B, Both
		<i>Prochoerodes lineola</i>	X	B (4), M (2)
		<i>Speranza pustularia</i>	—	—
	Geometrinae	<i>Dichorda iridaria</i>	—	—
		<i>Nemoria saturiba</i>	—	—
		<i>Nemoria sp.</i>	—	—
		<i>Synchlora sp.</i>	—	—
	Larentiinae	<i>Dyspteris abortivaria</i>	—	—
		<i>Eulithis diversilineata</i>	X	M
		<i>Eulithis gracilineata</i>	—	—
		<i>Eupithecia sp.</i>	—	—
	Sterrhinae	<i>Idaea demissaria</i>	X	B
		<i>Idaea eremiata</i>	—	—
		<i>Idaea furciferata</i>	—	—
		<i>Idaea obfusaria</i>	—	—
		<i>Idaea taturata</i>	—	—
		<i>Idaea violacearia</i>	X	M
		<i>Lobocleta ossularia</i>	—	—
		<i>Pleuroprucha insulsaria</i>	—	—
		<i>Scopula limboundata</i>	X	M (3)
NOCTUIDAE				
	Acronictinae	<i>polygrammate hebraeicum</i>	—	—
	Amphipyridae	<i>Azenia obtusa</i>	—	—
	Condicinae	<i>Homophoberia apicosa</i>	—	—
		<i>Ogdoconta cinereola</i>	—	—
	Cydosiinae	<i>Cydosia aurivitta</i>	X	M
	Eustrotiinae	<i>Marimatha nigrofimbria</i>	X	Both
	Herminiinae	<i>Tetanolita floridana</i>	—	—
	Noctuinae	<i>Anicla infecta</i>	—	—
		<i>Cosmia calami</i>	X	B (2)

FAMILY	SUBFAMILY	SPECIES	POLLEN PRESENCE	POLLEN LOCATION
NOCTUIDAE (<i>continued</i>)				
	Noctuinae (<i>continued</i>)	<i>Elaphria grata</i>	X	Both
		<i>Feltia subterranea</i>	—	—
		<i>Galgula partita</i>	X	B (2)
		<i>Phosphila miselioides</i>	—	—
		<i>Spodoptera ornithogalli</i>	—	—
	Risobinae	<i>Baileya ophthalmica</i>	—	—
PYRALIDAE				
	Chrysauginae	<i>Galasa nigrinodis</i>	—	—
		<i>Parachma ochracealis</i>	X	B
	Epipaschiinae	<i>Macalla superatalis</i>	—	—
		<i>Macalla zelleri</i>	—	—
	Pyralinae	<i>Dolichomia olinalis</i>	—	—

Table 2. a) Summary of pollen location on head or body of specimen (only on or near mouthparts, only on thorax, or on both portions of body), sorted by family. The first number in each cell is the number of species, and numbers in parentheses represent the total number of specimens with pollen on them. b) Frequency of pollen presence on specimens, calculated by dividing the total specimen count by the total number of specimens examined in each family.

a)

Location of Pollen	Erebidae	Geometridae	Noctuidae	Pyralidae	Total
Only head or on mouthparts	5 (5)	9 (12)	1	0	15 (18)
Only Thorax, legs, wings	13 (15)	14 (21)	2 (4)	1	30 (41)
Found on both portions of body	7 (10)	6 (6)	2 (2)	0	15 (18)
Total of Species (Total Specimen Count)	21 (30)	19 (39)	5 (7)	1	46/90 (77/261)

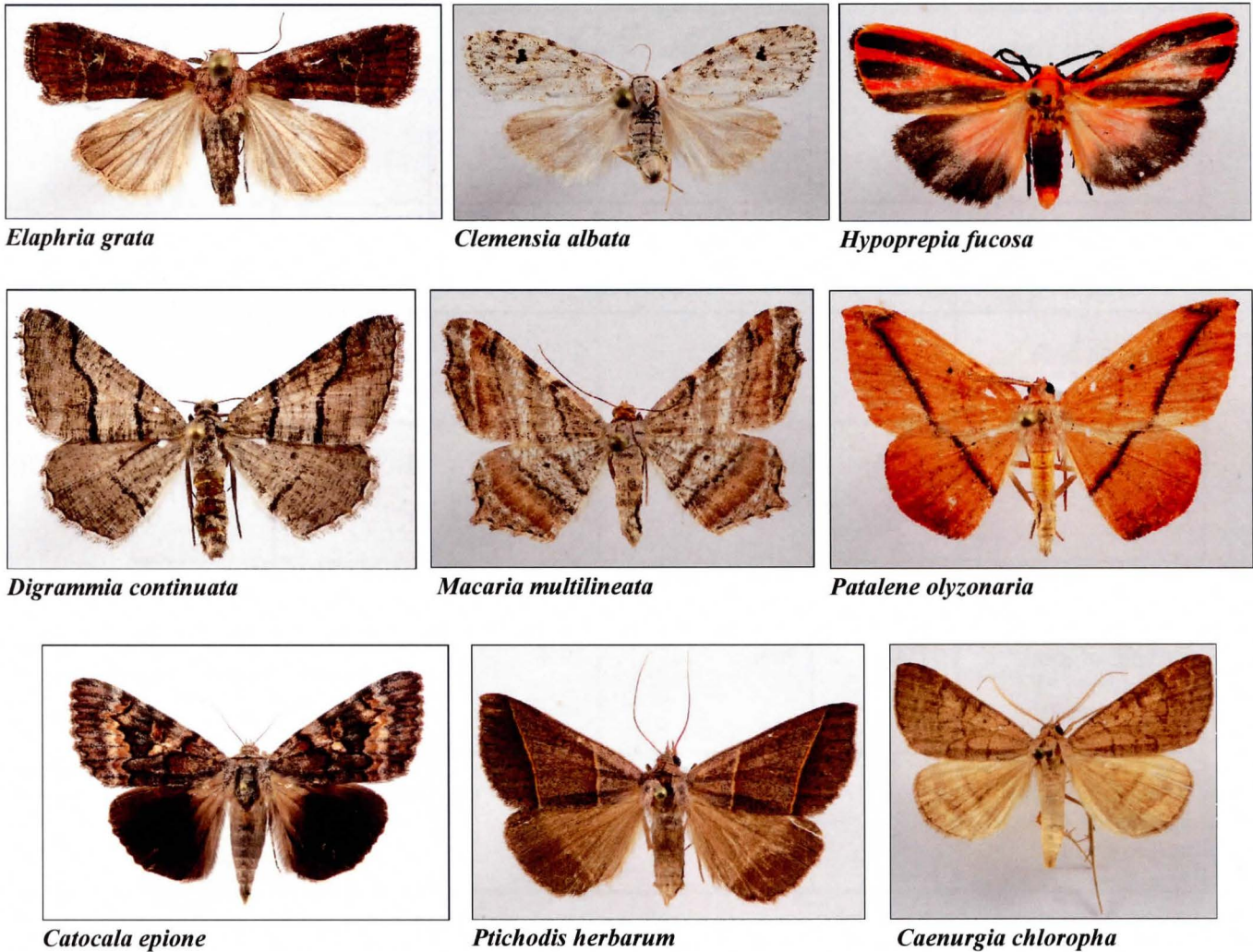
b)

Percent of total specimens (>1 pollen grain)	37%	30%	29%	4%
Percent of total specimens (≥ 5 pollen grains)	9%	7%	4%	0%

Table 3. List of species recorded to have at least five pollen grains on a specific portion of the body, sorted by family. Pollen location is noted by “M” for pollen located on or near mouthparts, “B” when located on thorax, and “Both” when found in both body designations. When more than one specimen is found to have pollen present, numbers in () designate the quantity of specimens with pollen per specific location.

Family	Subfamily	Species	Pollen Location
Erebidae	Arctiinae	<i>Clemensia albata</i>	Both (2)
Erebidae	Arctiinae	<i>Hypoprepia fucosa</i>	Both (2)
Erebidae	Erebinae	<i>Caenurgia chloropha</i>	M
Erebidae	Erebinae	<i>Catocala epione</i>	Both
Erebidae	Erebinae	<i>Catocala muliercula</i>	Both
Erebidae	Erebinae	<i>Ptichodis herbarum</i>	M
Erebidae	Lymantriinae	<i>Dasychira basiflava</i>	B
Geometridae	Ennominae	<i>Digrammia continuata</i>	Both
Geometridae	Ennominae	<i>Eutrapela clemataria</i>	Both
Geometridae	Ennominae	<i>Hypagyrtis esther</i>	Both
Geometridae	Ennominae	<i>Macaria multilineata</i>	M, Both
Geometridae	Ennominae	<i>Patalene olyzonaria</i>	Both
Geometridae	Ennominae	<i>Prochoerodes lineola</i>	M
Noctuidae	Noctuinae	<i>Elaphria grata</i>	Both

Fig. 2. Species found to have more than five grains of pollen on at least one specimen in this study.



*Hypagyrtis esther**Prochoerodes lineola**Dasychira basiflava**Eutrapela clemataria*

Acknowledgements

We'd like to thank former students John Paul Tortorich, Anna Bianchi, Grace Balinda, and Aisha Bonds for collecting and curating moth specimens. Richard Brown of the Mississippi Entomological Museum helped us with moth identification, and Steve Ginzburg of the University of Alabama herbarium made all of the plant specimens available for pollen sampling. The Alabama Nature Conservancy allowed us to collect moths from the Preserve and the Alabama Wildflower Society provided funding support for PVZ and KL.

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THE GENUS *ERASTRIA* HÜBNER, 1813 (LEPIDOPTERA: GEOMETRIDAE) IN LOUISIANA

BY
VERNON ANTOINE BROU JR.

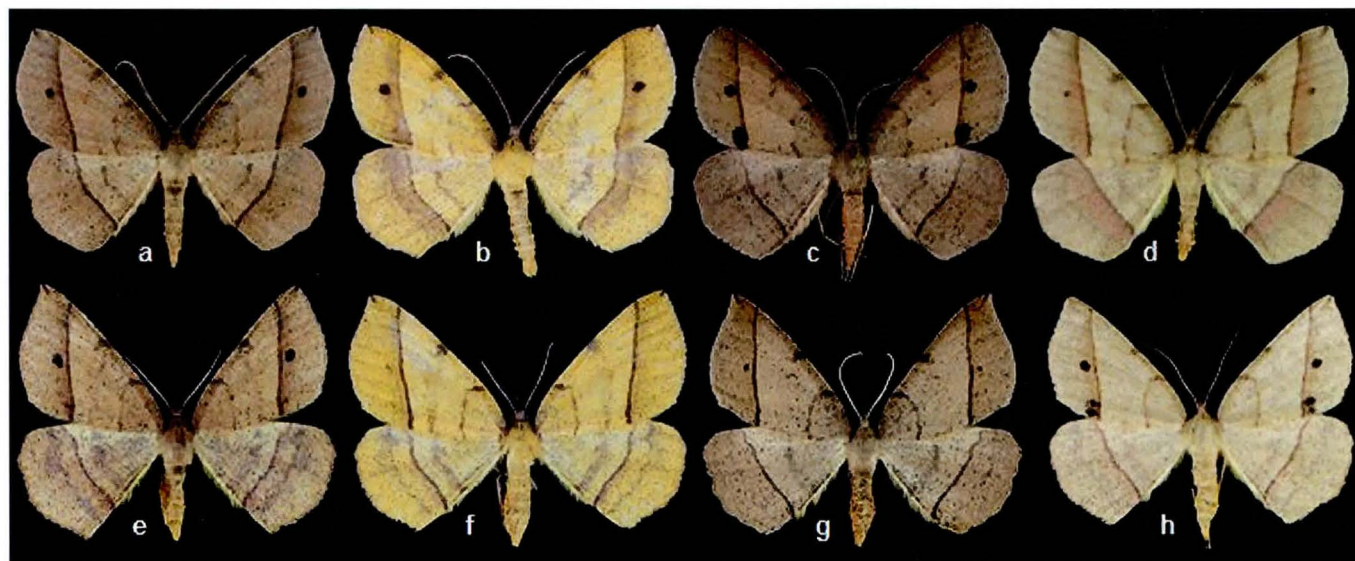


Fig. 1. *Erastria cruentaria* phenotype variations: males (a-d), females (e-h).



Fig. 2. ♂ *Erastria coloraria*.

In the checklist of moths in North America (Hodges, 1983), the genus *Erastria* Hübner was referred by Douglas Ferguson. This author listed four species of the genus *Erastria*.

In Louisiana, I have taken two species: *Erastria cruentaria* (Hübner, 1796-1799), new combination (Fig. 1), and *Erastria coloraria* (Fabricius, 1798), new combination (Fig. 2).

Adults of *cruentaria* have been captured in all 12 months within Louisiana in possibly

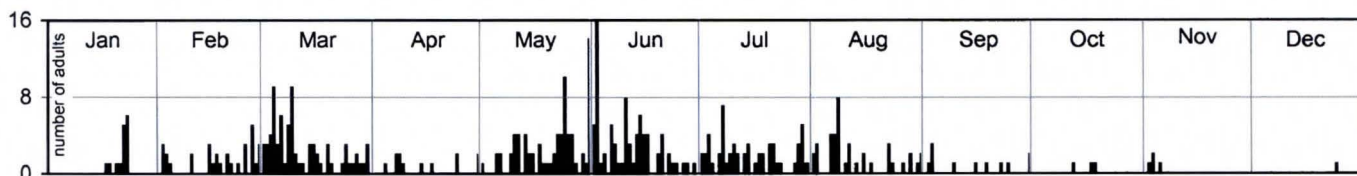


Fig. 3. Adult *Erastria cruentaria* captured at sec.24T6SR12E, 4.2 mi NE of Abita Springs, Louisiana. n = 396

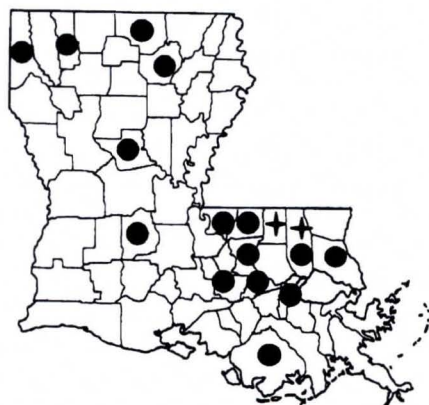


Fig. 4. Parish records for *cruentaria* ● and *coloraria* +.

as many as seven broods. The initial adult brood peaks in early March, second brood peaking end of May/beginning of June with subsequent broods occurring at approximately 35-day intervals (Fig. 3).

Most adults were taken using ultraviolet light traps. Over several decades I have captured numerous adults of *cruentaria* in sesioid pheromone traps, though no correlation to any specific sesioid lure was discernible. Perhaps adults simply enter the traps seeking a place of concealment, as several decades of continuous operation of such traps without any lures of any type have also captured *cruentaria* and specimens of other lepidoptera families.

The parish records for both species are illustrated in Fig. 4.

Rindge (1950) studied over 350 specimens including all of the types involved in the United States. There have been numerous past revisions concerning

the status of many of the species involved. Readers are referred to Rindge's publication, though this publication too, was subsequently revised with respect to certain species by Ferguson in Hodges (1983).

Acknowledgements

I am indebted to the late Frederick H. Rindge and the late Douglas C. Ferguson, both of whom identified my Louisiana *Erastris* specimens over many years, and Kevin Cunningham for providing the Terrebonne Parish record.

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(Vernon Antoine Brou Jr., 74320 Jack Loyd road, Abita Springs, Louisiana 70420; E-Mail: vabrou@bellsouth.net)

Vernon Brou sends the following: "Attached are 2 photos, *no not a motorcycle gang, no not ZZ-top, no we are not going to Cuba, we are prepared for the coming of the Taliban. No, it's just the Texas Lepidoptera Survey team, Ed and Charles visiting the Louisiana Lepidoptera Survey team, Vernon & Charlotte in Abita Springs.*"



Charles Bordelon (left), Ed Knudson (right) visiting Vernon (center) and Charlotte Brou (behind camera) in Abita Springs, Louisiana, June 23, 2013.



Ed Knudson (left) Charles Bordelon (right) visiting Vernon and Charlotte Brou in Abita Springs, Louisiana, June 23, 2013.



Luna moth.

"The Luna moth is of exquisite form, and delicate colors. It is a light pea-green, with edges bordered with yellow, and a brown edge to each fore wing. It is tailed, and has two handsome transparent centered eye-spots, of white, black, yellow, and a faint tint of red. Those of the hinder wings are round, and those on the fore wings are like an inverted comma. The body is white and covered with a soft, fine wool, the antennae yellow and plumed, and the legs a purple brown. The colors in the eye-spots are so blended as scarcely to be separately distinguished without a glass, the whole appearing like shades of brownish pink." Page 134.

Julia P. Ballard, 1890. *Among the Moths and Butterflies*. G.P. Putman's Sons, New York,

The Knickerbocker Press.

ELADA CHECKERSPOT (*TEXOLA ELADA*) LIFE HISTORY

BY
BERRY NALL

I collected a mating pair of Elada Checkerspots in February, 2010. I provided Tube Tongue (*Siphonoglossa pilosella*) and Flame Acanthus (*Anisacanthus wrightii*) as possible host plants. I had previously found caterpillars on Flame Acanthus, and Tube Tongue is often listed as a host plant (for example, Mike Quinn's excellent *Caterpillar Food Plants for the Lower Rio Grande Valley of Texas*).

The female oviposited two groups of eggs on Tube Tongue after four days. One group was on a cut branch; the other on a potted plant. When the caterpillars emerged, I decided to try an experiment. I placed the cut branch of Tube Tongue and a few leaves of Flame Acanthus in the same container, in order to see which plant was preferred. Several, but not all, of the caterpillars chose the Flame Acanthus.

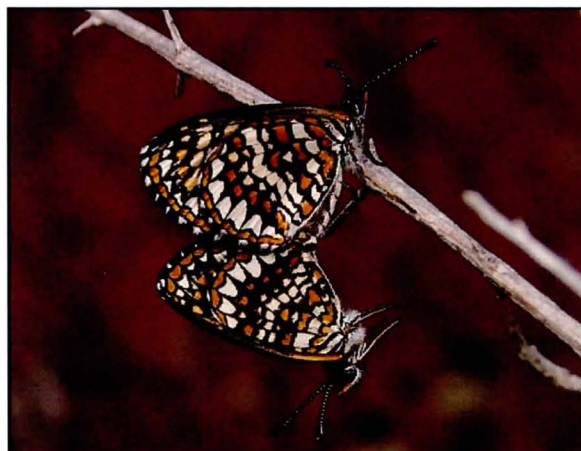
I now had three groups of caterpillars: two in containers, and one on a potted plant. I noticed after a couple of days that the caterpillars in the container with Tube Tongue were not growing. Most died after another day or two; one lasted 2 weeks but eventually died also. I inspected the potted Tube Tongue, and was unable to locate any caterpillars on it. Those, too, had died. Clearly, Tube Tongue was an incompatible host plant when I performed this study. Perhaps the results would be different at a different time of the year, or with a larger group of caterpillars, but on this occasion the plant was not what the larvae needed. Later in the season I discovered that Eladas seem to favor a plant called Texas Wrightwort (*Carlowrightia texana*). It is also used by Texan Crescents.

Fortunately, the caterpillars that chose the Flame Acanthus were thriving. They pupated after about 3 weeks, and the adults emerged after approximately 7 days. The caterpillars of this group were not as yellow as those I raised in a previous study.

Vesta and Texan Crescents, and Tiny Checkerspots, all may use the same hosts. The coloration of each of these varies to some extent during different instars and between different caterpillars. I have found the face, if a good picture or look can be obtained, is the best indicator of species. The Elada Checkerspot has a black head (contrast the red of Tiny Checkerspot) with numerous white markings that give it the appearance of having eyes and a nose.



Face of Elada
Checkerspot



20-II-2010, mating pair



Eggs on 1-III-2010 (laid on 24-II-2010)



7-III-2010, caterpillars emerging



11-III-2010



20-III-2010



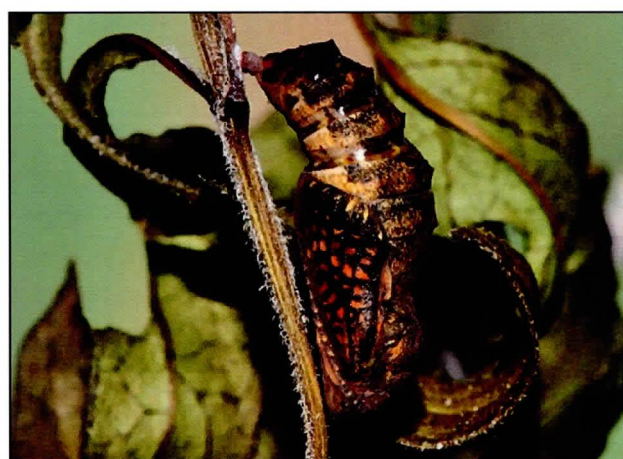
26-III-2010, mature caterpillar



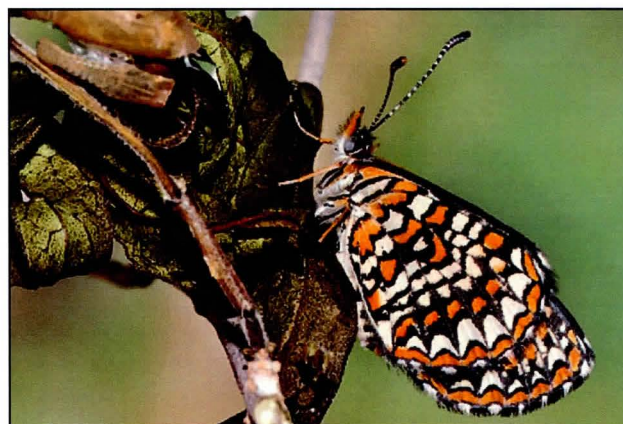
29-III-2010, newly formed chrysalis



30-III-2010, typical appearance of chrysalis



4-IV-2010, butterfly almost ready to emerge from chrysalis



4-IV-2010, fresh Elada Checkerspot

The SL Society and the Editor thank Mr. Berry Nall for allowing us to reprint his life history of the Elada Checkerspot. The original publication can be seen at http://leps.thenalls.net/content 2.php?ref=Species/Nymphalinae/elada_life.htm

Mr. Nalls website "*Berry's Butterfly Photos*" can be viewed at <http://leps.thenalls.net/> His contact E-mail is: lb@thenalls.net

DEFINITION:

Anthropogenic - The term designates an effect or object resulting from human activity.¹ Caused, produced, or influenced by humans.²

1) http://en.wikipedia.org/wiki/Human_impact_on_the_environment

2) <http://www.thefreedictionary.com/anthropogenic>

GONDYSIA CONSOBRINA (GUENÉE, 1852) (LEPIDOPTERA, EREBIDAE, EREBINAE) IN LOUISIANA

BY
VERNON ANTOINE BROU JR.

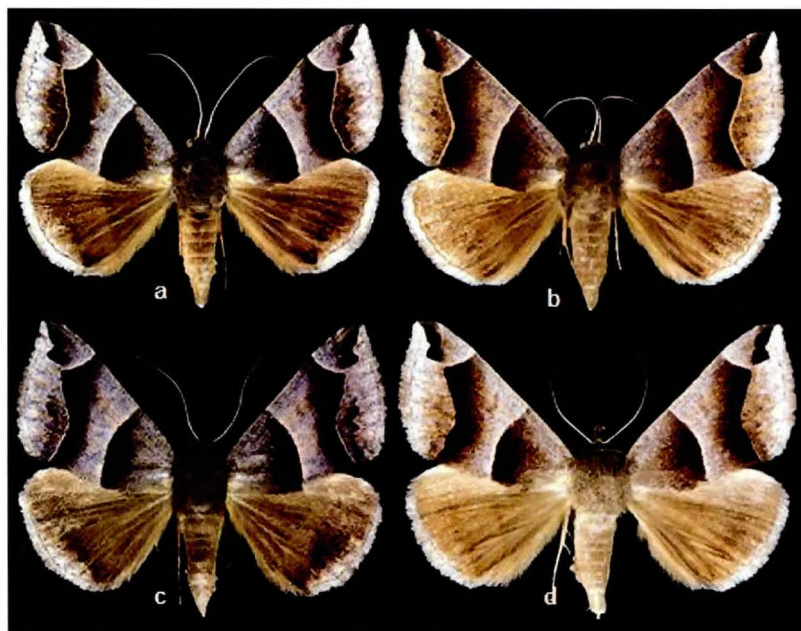


Fig. 1. *G. consobrina* phenotypes: males (a-b), females (c-d).

The attractively marked moth *Gondysia consobrina* (Guenée) (Fig. 1) is one of four species of the genus *Gondysia* Berio currently listed for North America (Sullivan and Legrain, 2013). This species was not addressed by Covell (1984). *G. consobrina* was first listed as occurring in Louisiana by Sullivan (2010) based on specimens captured at the *Abita Springs entomological study site.

Sullivan (2010) noted the three species of *Neadysgonia* were originally described in the genus *Ophiusa* Ochsenheimer. Hamson placed them in *Parallelia* Hübner, and Poole (1989) moved them to *Dysgonia*. *Dysgonia* was placed in the tribe Ophiusini by Fibiger and Lafontaine (2005) before being moved to the Poaphilini by Lafontaine and Schmidt (2010).

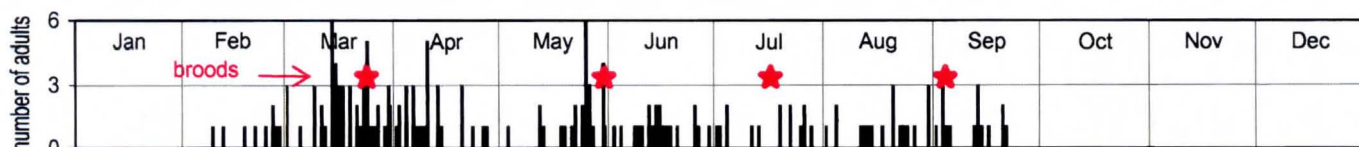


Fig. 2. Adult *G. consobrina* captured in Louisiana. n = 183

In Louisiana, *consobrina* has four annual broods, the first peaking late March, the second brood peaking end of May, with remaining broods at approximately 47-day intervals (Fig. 2). The four currently known parish records are illustrated in Fig. 3

*Abita entomological study site: sec. 24,T6,SR12E. 4.2 miles northeast of Abita Springs, St. Tammany Parish, Louisiana, USA.

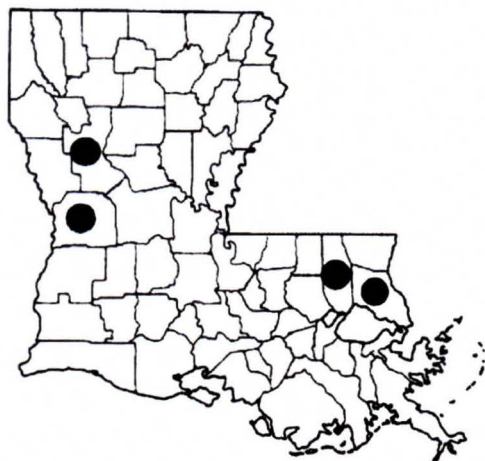


Fig. 3. Parish records for *G. consobrina*.

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- Sullivan, J.B., 2010. A new genus and species for *Dysgonia* (Lepidoptera, Erebidae, Erebiniae) from Southeastern United States. In: Schmidt BC, Lafontaine JD (Eds), *Contributions to the systematics of New World macro-moths II*. *ZooKeys* 39: 85–97. doi: 10.3897/zookeys.39.434

Sullivan, J.B., Legrain, A., 2013. Gondysia preceded Neadysgonia (Lepidoptera, Erebidae, Erebiniae), a new generic synonymy from Southeastern United States – Corrigendum. In: Schmidt BC, Lafontaine JD (Eds), Contributions to the systematics of New World macro-moths IV. *ZooKeys* 264: 237–238. doi: 10.3897/zookeys.264.4378.

(Vernon Antoine Brou Jr., 74320 Jack Loyd Road, Abita Springs, Louisiana 70420 USA; E-Mail: vabrou@bellsouth.net)

THOMAS SAY - A BIOGRAPHY ⁽¹⁾



Portrait of Thomas Say (1818)
by Charles Willson Peale.

Thomas Say, a self-taught naturalist, was born on June 27, 1787, in Philadelphia. It is said that he was tutored on an informal basis by his great uncle William Bartram who was an American naturalist noted for his botanical talents. Thomas Say achieved extraordinary scientific achievements in entomology, malacology, and herpetology with the most notable being in entomology by describing over 1000 new species of beetles and more than 400 species of insects of various orders.

Thomas Say was a founding father of the Entomological Society of America and a charter member and a co-founder of the Academy of Natural Sciences of Philadelphia. He is considered to be the "Father of American Entomology"

He went on numerous scientific insect collecting expeditions with other naturalists in various fields. His travels took him to the western frontier areas of the United States which were quite dangerous due to the hostilities of the American Indians.

In 1818 Say traveled with the noted geologist, William Maclure, to the off-shore Spanish-controlled islands of Georgia and Florida on a geological expedition where he undoubtedly collected insects.

In 1820 Say joined with Major Stephen H. Long on an expedition to the Rocky Mountains and the tributaries of the Missouri River. This expedition led to "the first descriptions of the Coyote, Swift Fox, Western Kingbird, Band-tailed Pigeon, Rock Wren, Say's Phoebe, Lesser Goldfinch, Lark Sparrow, Lazuli Bunting and Orange-crowned Warbler."

Say married Lucy Way Sistare who was an artist and illustrator and the first woman member of the Academy of Natural Sciences.

The two published works of Thomas Say that he is most well-known for are:

- 1) *American Entomology or Descriptions of the Insects of North America* (3 volumes, Philadelphia, 1824 - 1828), and
- 2) *American Conchology, or Description of the Shells of North America Illustrated From Coloured Figures From Original Drawings Executed From Nature*, Parts 1-6, New Harmony, 1830-1834; Part 7, Philadelphia, 1836.

Thomas Say was extremely frugal, neglecting his personal health by mainly subsisting on a meager diet. He endured a number of years of poor health and died on October 10, 1834, possibly from typhoid fever.



Papilio turnus (= *Papilio glaucus*), from *American Entomology*.

1) Wikipedia: http://en.wikipedia.org/wiki/Thomas_Say

REPORT ON SLS MEMBER ACTIVITIES AND THE 2013 ANNUAL MEETING

BY

DEBORAH MATTHEWS AND JACQUELINE Y. MILLER

The 62nd Annual Meeting of the Lepidopterists' Society, together with the annual business meetings of the Association for Tropical Lepidoptera and the Southern Lepidopterists' Society, was held in Gainesville, 27-30 June (Thursday – Sunday), with formal sessions convening at the Hilton Hotel and Conference Center across the street from the McGuire Center for Lepidoptera and Biodiversity. More than 170 registrants, including 48 SLS members, attended the various sessions and activities and the McGuire Center hosted numerous visitors working in the collections several days before and following the meetings.

The meetings were preceded on the 26th by a special educational seminar for young entomologists at the UF Department of Entomology and Nematology by Dave Wagner entitled "A Backyard: Florida's Amazing Caterpillars and Their Survival Strategies." Field trips were held on the following day, starting with a day collecting trip to the Ocala National Forest and vicinity led by Lary Reeves and a butterfly watching trip to Goethe State Forest led by Jane and Orland Blanchard. An evening welcome reception was enjoyed by all in the Butterfly Rainforest Gallery of the Florida Museum. Following the reception, Charlie Covell led an enthusiastic crowd of more than 26 individuals to Paynes Prairie to brave the mosquitoes, heat, and humidity in pursuit of new moth records for the preserve. One especially fine catch was *Anisota pellucida* collected by Madison Young (see meeting photos).

The formal meeting sessions began on Friday morning and featured a microlepidoptera symposium, a silk textile exhibit, and various contributed papers including an historical account of the entomological activities of the Dodge family by John Calhoun. The SLS board meeting was held during lunch and attended by Debbie Matthews, Jeff Slotten, Rick Gillmore, Lary Reeves, Dave Morgan, and Bob Belmont. Afternoon talks highlighted recent work on the Notodontidae and a conservation symposium covered a variety of studies. The latter included work by Peter Van Zandt and colleagues on the influence of an urban heat island on moth phenology in Birmingham, Alabama, and a presentation by Marc Minno on climate change and the butterflies of Cumberland Island. Our annual business meeting was held immediately after the symposium with 22 SLS members present. The minutes of the business meeting are posted in this issue of the news. The traditional Friday night LepSoc barbeque was held at

Kanapaha Botanical Gardens. The food, camaraderie, and local beverages were enjoyed by all, as well as the opportunity to walk around the gardens. Light rigs were also set out by a few die-hard collectors until it was time to pack up around 11:30 pm.

Saturday sessions incorporated a full slate of 24 talks beginning with a symposium on neotropical Lepidoptera, followed by student presentations, and a wide range of contributed papers from Chihuahuan critters by Eric Metzler to Leroy Koehn's tips on bait and traps. The Saturday banquet was held at the Hilton and featured an address on the worldwide impact of Lepidoptera and museums by William McGuire and a special presentation on species discovery by Jordan Medal awardee James S. Miller. Andrew Warren, president of the Lepidopterists' Society, was the master of ceremonies and presented several awards, including the William D. Winter Service Award to our incoming chairman, Charlie Covell.

Sunday morning commenced with another round of presentations and concluded with the business meeting of the Lepidopterists' Society. Several SLS members made extended visits at the McGuire Center after the meeting to work on various projects. Larry Gall of the Peabody Museum, Yale University, worked on sorting *Catocala* and John Douglass of Toledo, Ohio, sorted African Lepidoptera. Megan McCarty of Patriot, Indiana, interned with Charlie Covell for five days, learning methods and principles of systematic lepidopterology, including dissecting techniques.

Along with the exchange of information, one of the most gratifying aspects of hosting and attending a large combined conference like this was the opportunity for our members to meet other Lepidopterists from around the world, who traveled from as far away as Canada, Mexico, the United Kingdom, Germany, Vietnam, Japan, and Kenya. In addition, SLS members from several states in our region attended the meetings, representing Alabama, Mississippi, and Texas as well as Florida and Georgia. We enjoyed spending time with old friends and many new friends and contacts were made during the course of the meetings. We thank all who participated and helped make the meetings a memorable and successful event.

The program booklet with abstracts is posted on the SLS website (<http://www.southernlepsoc.org>).

SLS 2013 BUSINESS MEETING MINUTES

Chairman Deborah Matthews called the Southern Lepidopterists' Society (SLS) Business Meeting to order at 5:20 PM on Friday June 28, 2013, at the Hilton University of Florida Conference Center in Gainesville, Florida. Members who signed in at the Business Meeting were:

James K. Adams
Robert T. Allen
Bob Belmont
John Calhoun
Bill Conner
Charlie Covell
John Douglass
Irving L. Finkelstein

Rick Gillmore
Leroy C. Koehn
Deborah Matthews
Eric H. Metzler
Marc Minno
Dave Morgan
Tom Neal

Lary Reeves
Bill Russell
Suzette Slocumb
Jeff Slotten
John Snyder
Don Stillwaugh
J.D. Turner

The meeting began with a quick review of the SLS 2012 Business Meeting Minutes by Don Stillwaugh. Debbie followed with a summary of the year's accomplishments – 4 Issues of NEWS, two amendments to the SLS Constitution, nomination slate of 2014 Officers, SLS participation at the 2012 ButterflyFest at the Powell Hall as well as the current LepSoc 2013 Field Trips and the completion of scanning of all newsletters through Vol 35(1).

Member-at-large Rick Gillmore gave a summary of the 2013 Board Meeting held earlier in the day: 1) Lary Reeves' addition to the Board as a second Member-at-large 2) Issue of posting of NEWS online 3) Indexing of NEWS online 4) Potential creation of a Facebook page 5) 2014 Officer nominations 6) Abbot Award (not given this year).

Next, Lary gave a brief summary of the previous day's field trip to Ocala National Forest and Charlie Covell, similarly, summarized the Paynes Prairie blacklighting expedition.

Jeff Slotten gave the Treasurer's Report (see p. 115 this issue for details). Production and mailing of NEWS, as usual, constituted the majority of the expenses. As annual expenses far exceed the income from regular membership dues, SLS only stays in the black with generous contributions from sustaining members.

The last item on the agenda was the election of 2014 Officers. The slate was as follows –

Chairman – Charlie Covell
Treasurer – Jeff Slotten
Secretary – Don Stillwaugh
Membership Coordinator – Marc Minno
Member-at-Large – Rick Gillmore
Website Manager – Dave Morgan
NEWS Editor – J. Barry Lombardini

It was noted that the other Member-at-Large, Lary Reeves, just took office this past January. Therefore, the Member-at-Large positions will be up for re-election in alternating years. With no further nominations from the floor, a vote was taken. The slate of 2014 Officers was unanimously elected and will take office on January 1, 2014.

Under New Business, Debbie proposed the posting of the scanned NEWS issues on the SLS website with a two year lag for the most recent issues. James Adams stated that TLS newsletter postings are up-to-date. A suggestion was made that dues-paying members should get some advantage (access to the most current issues) over non-paying website visitors. Lastly, reference was made to legal issues of posting of our copy-righted publication – the implication being that some type of Usage Guidelines should be posted with the archived issues. The membership present voted all Yeahs with two abstaining for posting NEWS issues with a two year lag.

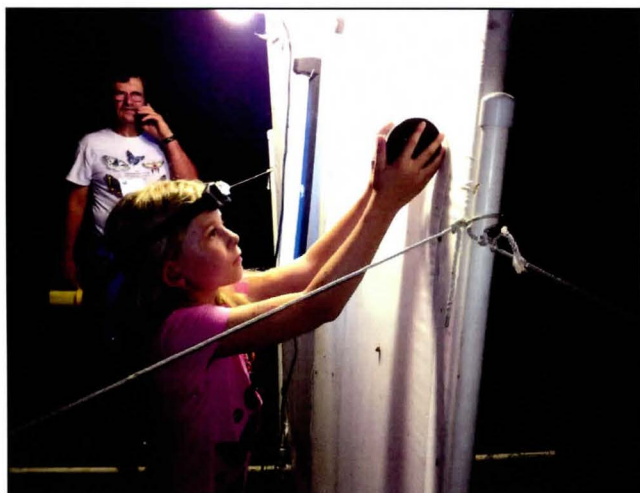
The final topic of the Meeting was the location of next year's Meeting. The assumption of another fall meeting in Gainesville inspired an open, thoughtful discussion. Charlie felt that SLS has "piggy-backed on other organizations long enough" and might be heading toward a loss of identity. He encouraged the membership to explore other possibilities such as a Field Trip Meeting. He felt SLS might be rejuvenated with such camaraderie. Leroy Koehn reminded all that SLS, indeed, held Field Meetings in the early years. J.D. Turner lobbied for keeping Joint Meetings with ATL as the overlapping interests seem like a good fit. James Adams stated that there are pluses and minuses to each and felt that occasional Meetings held outside of Gainesville are appropriate. The discussion concluded with

Rick Gillmore's suggestion of holding two meetings: one for presentations; one for fieldwork and the Annual Business Meeting.

The meeting was adjourned at 5:57 PM.

Respectfully submitted Don Stillwaugh, Secretary

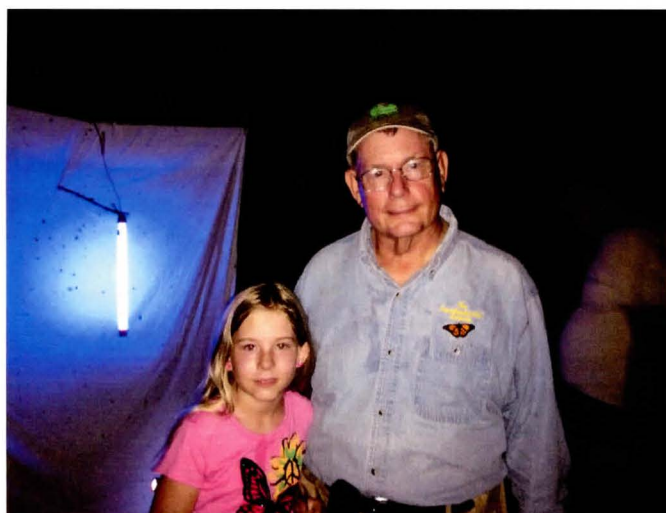
"Charlie Covell led an enthusiastic crowd of more than 26 individuals to Paynes Prairie to brave the mosquitoes, heat, and humidity in pursuit of new moth records for the preserve" (62nd Annual Meeting of the Lepidopterists' Society, June 28, 2013, Gainesville, FL)



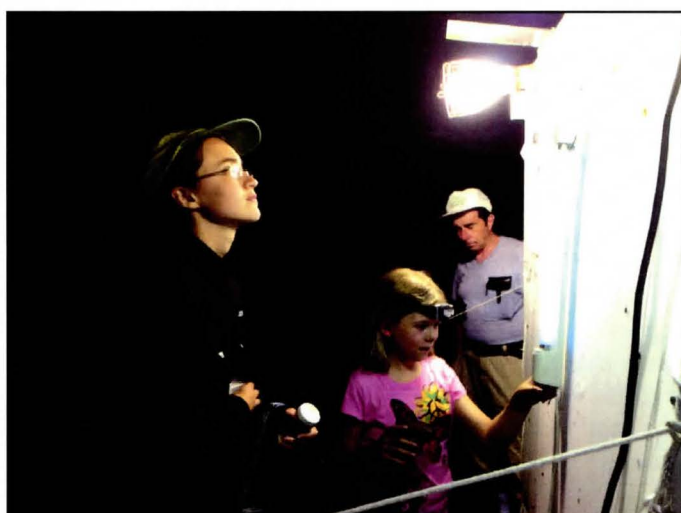
**Madison collecting moths during the meeting field trip
(Photo by Debbie Matthews Lott).**



**Male *Anisota pellucida* collected by Madison
(Photo by Rona Young).**



**Madison and Charlie Covell
(Photo by Debbie Matthews Lott).**



**Megan McCarty and Madison
(Photo by Debbie Matthews Lott).**

Jeff Slotten sends in the following photograph of the SLS Board Members (62nd Annual Meeting of the Lepidopterists' Society, June 27-30, Gainesville, FL):



Dave Morgan, Debbie Lott, Bob Belmont, Jeff Slotten, Rick Gillmore, and Lary Reeves.

REPORTS OF STATE COORDINATORS

Alabama: C. Howard Grisham, 573 Ohatchee Road, Huntsville, AL 35811, E-Mail: chgrisham@comcast.net

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

Florida: Charles V. Covell Jr., 207 NE 9th Ave, Gainesville, FL 32601, E-Mail: covell@louisville.edu

Charlie sends in the following 6 reports:

1. "Not many correspondents lately, especially from South Florida. I did hear that the annual Schaus Swallowtail survey in May and June in the Keys resulted in a modest number of sightings. Please send me some records from time to time: species names, locality & dates. Many thanks. Cheers, Charlie."

2. Rick Gillmore sent a little information on Aug. 2 from the Orlando area:

"I have seen lots of *X. tersa* inside several pool enclosures, since my last report. Also, I saw a fresh male Red Spotted Purple checking out a small Wild Cherry tree in my yard July 23, 2013. First time to see this species in my yard and I moved here in September of 1999.

I saw several Tiger Swallowtails yesterday in the backyard of an Southeast Orlando house just North of the Orlando International airport that I was doing repair work."

3. Barbara Woodmansee reported a big day Aug. 10 at Lower Suwannee National Wildlife Refuge, Levy and Dixie counties, where she records and photographs as many butterfly species as she can:

“On the spur of the moment, I got up (late) and took myself to the refuge. Didn't get there till 10, so I missed all the owls, but was pleasantly surprised by easily finding 36 species of butterflies between 10 and 4pm. I probably also saw a female *P. zabulon* and a checkered skipper, but they got away before I could focus my camera, so I'm not counting them. Although I never saw any Sweadners, I had the following:

Sleepy Orange, Cloudless Sulphur, 1 Southern Dogface, Little and Barred Yellows (zillions of them), lots of Ceraunus Blues, Gray Hairstreak, 1 (perfect) Little Metalmark, Palamedes, Spicebush, Zebra, black and yellow Tiger and (1) Giant Swallowtails, Horaces and Zarucco Duskywings, Saltmarsh, Northern Broken Dash, Little Glassywing, lots of Byssus, Palatka, Whirlabout, Fiery, Ocola, Eufala, Sachem and Least Skippers, Gulf Fritillary, Red-Spotted Purple, common Buckeye, Phaon and Pearl Crescents, at least 7 White Peacocks, 3 Zebra Heliconians, Queen and the Carolina Satyr.

Flowers are excellent out there right now. Ironweed, perennis milkweed, elephant's foot, tickseed coreopsis, some thistles, pickrel weed, miterwort, pink and yellow mallow and (just outside the Nature Drive) lots of blue eryngium are all blooming. A few buttonbush blooms are leftover also.”

4. Megan McCarty, student intern at the McGuire Center working after the Lepidopterists Society meeting for several days at the Museum, recorded a *Utetheisa ornatrix* (Arctiinae) at La Chua Trail, Paynes Prairie State Preserve Park, on July 4.

5. Charlie Covell's butterfly records for Gainesville and vicinity, June-Aug. 2013:

Heliconius charithonia and *Agraulus vanillae*: almost daily, June 10 – Aug. 31
Pontia protodice, June 11, July 4, 12
Junonia coenia, June 11, July 3, 4, 6, 13
Papilio glaucus, June 11, July 4, 29, Aug. 4, 13, 19, 22, 25, 29
Danaus plexippus, June 11, 14, July 2, 3, 7, 15, 16, 27, 31, Aug. 1, 4, 5, 8, 11, 12, 14, 19, 23, 31
Papilio palamedes, June 21, July 4, Aug. 13
Hylephila phyleus, June 22, July 3, 13, 16, 31, Aug. 23
Limnitis arthemis astyanax, June 22, July 4, Aug. 3
Erynnis horatius, July 3, 4, 6, 15, 16, 23, 25, 28, 31, Aug. 3, 4, 11
Urbanus proteus, July 3, 15, 16, 23, 31, Aug. 3, 4, 5, 13, 14, 20, 22, 23
Urbanus dorantes, July 3, 25, 27, 28, Aug. 1, 19
Pyrgus oileus, July 3, 4
Heraclides cresphontes, July 3, 4, 7, 25, Aug. 4, 7, 24, 31
Phoebis sennae, July 3, 31, Aug. 1, 3, 8, 11, 24
Parisitia lisa, July 3, 4
Calycopis cecropis, July 3, 4
Leptotes cassius, July 3, 4, 25, Aug. 31
Vanessa virginiensis, July 3
Pyrgus albescens, July 4
Ancyloxipha numitor, July 4
Papilio troilus, July 4, 25, 26, 27, Aug. 9, 25, 31
Papilio polyxenes asterius, July 4, 25
Eurytides marcellus, July 4, 28
Eurema daira, July 4, Aug. 29
Abaeis nicippe, July 4, Aug. 29
Strymon melinus, July 4, 7
Asterocampa celtis, July 4, Aug. 20
Hermeuptychia sosybius, July 4
Libytheana carinenta, July 6
Polygonia interrogationis, July 6
Epargyreus clarus, July 15, 25, Aug. 30
Euphyes vestris metacomet, July 15, 16, Aug. 3, 5, 19
Panoquina ocola, July 15, 25, Aug. 1, 19
Battus polydamas, July 25, 26, 27, 28, 31, Aug. 1, 4, 5, 7, 9, 11, 19, 20, 22, 23, 24, 25

Phoebis philea, July 25?, Aug. 13
Atalopedes campestris, July 27, Aug. 4
Lerema accius, July 31
38 species

6. Lepidopterists' Society night collecting at Paynes Prairie State Preserve, June 27, 2013, reported by Hugh McGuinness, Jeff Slotten, C.V. Covell *et al.* Those in boldface are new records in the Paynes Prairie survey.

Acrolophus sp., *Eupragia hospita* Hodges, ***Inguramorpha basalis* (Walker)**, *Ptycholoma peritana* (Clemens), *Sparganothis distincta* (Walsingham), *Megalopyge opercularis* (J. E. Smith), *Synclita oblitalis* (Walker), *Cossula magnifica* (Strecker), *Phobetron pithecium* (J. E. Smith), *Isa textula* (Herrich-Schäffer), *Euclea delphinii* (Boisduval), *Ptycholoma peritana* (Clemens), *Samea ecclesialis* Guenée, *Donacula* sp., *Argyria lacteella* (Fabricius), *Urola nivalis* (Drury), *Eoreuma* sp. ?, *Macalla superatalis* (Clemens), *Pococera* sp., *Nephoterix* sp., *Macaria aequiferaria* Walker, *Digrammia gnophosaria* (Guenée), *Glenoides texanaria* (Hulst), *Melanophia canadaria* (Guenée), *Hypagyrtis unipunctata* (Haworth), *Euchlaena amoenaria* (Guenée), *Eutrapela clemataria* (J. E. Smith), *Nemoria lixaria* (Guenée), *Idaea scintillularia* (Hulst), *Idaea taturata* (Walker), *Cyclophora packardi* (Prout), *Cyclophora myrtaria* (Guenée), *Lophosis labeculata* (Hulst), *Costaconvexa centrostrigaria* (Wollaston), *Eupithecia miserulata* Grote, *Dyspteris abortivaria* (Herrich-Schäffer), *Artace cribraria* (Ljungh), *Eacles imperialis* (Drury), ***Dryocampa rubicunda* (F.)**, *Anisota pellucida* (J. E. Smith), *Darapsa myron* (Cramer), *Datana contracta* Walker, *Nadata gibbosa* (J. E. Smith), *Peridea angulosa* (J. E. Smith), *Hypoprepia fucosa* (Hübner), *Halysidota tessellaris* (J. E. Smith), *Idia americalis* (Guenée), ***Zanclognatha marcidilinea* (Grote)**, ***Renia factiosalis* (Walker)**, *Renia* sp., *Palthis asopialis* (Guenée), *Hemeroplanis habitalis* (Walker), *Scolecocampa liburna* (Guenée), *Panopoda rufimargo* (Hübner), *Panopoda repanda* (Walker), *Ametria amella* (Guenée), ***Zale minerea* (Guenée)**, *Catocala connubialis* Guenée, *Paectes* sp., *Meganola phylla* (Dyar), *Marimatha nigrofimbria* (Guenée), *Spragueia onagrus* (Guenée), *Charadra deridens* (Guenée), *Acrionicta americana* (Harris), *Acrionicta vinnula* (Grote), *Acrionicta afflicta* Grote, *Acrionicta oblonga* (J. E. Smith), *Polygrammate hebraicum* Hübner, *Properigea tapeta* (J. B. Smith), *Elaphria nucicolora* (Guenée), *Elaphria exesa* (Guenée), *Condica vecors* (Guenée), *Condica sutor* (Guenée), and *Amolita obliqua* J. B. Smith.

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

The contributors include James Adams (JKA or no notation) and Irving Finkelstein (ILF). Other contributors are spelled out with the appropriate records. Most records presented here represent new or interesting records (range extensions, unusual dates, uncommon species, county records, *etc.*), or more complete lists for new locations/new times of year. All known new STATE and COUNTY records are indicated (except for Sapelo Island and the Laurel Mtn. Cabins in Towns county, where MANY of the records, especially the micros, are likely new county records), and all dates listed below are 2013 unless otherwise specified.

Carbondale, I-75 exit 326, Whitfield Co.:

SATURNIIDAE: *Citheronia regalis*, July 16; *Actias luna*, Sept. 12 (a bit LATE). **NOCTUIDAE:** *Harrismemna trisignata* (female), June 17; *Plagiomimicus pityochromus* (2), Sept. 6. **COSSIDAE:** *Cossula magnifica*, July 16; *Givira francesca*, Aug 26.

Calhoun, (JKA residence):

EREBIDAE: *Catocala lineela*, July 1; *Catocala alabamiae*, July 2.

Crest of Rocky Face Ridgeline, just SW of Dalton, Whitfield Co., August 19-20:

EREBIDAE: *Idia scobialis*, *Metalectra tantillus* (County). **NOCTUIDAE:** *Enigmogramma basigera*, *Schinia thoreau*, *S. lynx*, *Properigea* near *costa*. **GEOMETRIDAE:** *Tornos scolopacinaris*.

Taylor's Ridgeline, 5 mi. W of Villanow, Walker Co., June 15-16, JKA and ILF:

SATURNIIDAE: *Anisota virginianensis*. **APATELODIDAE:** *Olceclostera angelica*. **EREBIDAE:** *Hemeroplanes scopulepes* (yellow), *Zanclognatha atrilineella*, *Catocala ilia*, *C. andromedae*, *C. sordida*, *C. clintoni*. **NOCTUIDAE:** *Properigea tapeta*, *Noctua pronuba* (COUNTY), *Abagrotis magnicupida*, *Protolampra bruneicollis*. **GEOMETRIDAE:** *Tornos scolopacinaris*, *Digrammia ocellinata*, *Lytrosis unitaria* (huge female).

TORTRICIDAE: *Eucosma robinsonana*, *Argyrotaenia quercifolia*, *Cenopis ferreana*. **PYRALIDAE:** *Acrobasis kearfottella* (COUNTY).

Cooper's Creek Rec Area, SE of Morganton, N of Hwy. 60, near Union/Fannin Co. line, Fannin Co., June 16, 2012.

Paul Dennehy:

TORTRICIDAE: *Olethreutes auricapitana* (STATE).

Laurel Mt. Cabins, 5 mi. SE of Hiawasee, Towns Co., July 1, Ed Knudson and Charles Bordelon:

TINEIDAE: *Monopis pavloskii*. **ACROLOPHIDAE:** *Acrolophus plumifrontella*, *A. morus*. **OECOPHORIDAE:** *Rectiosoma xanthobasis*, *Callima argenticinctella*, *Inga sparsiciliella*. **GELECHIIDAE:** *Dichomeris flavocostella*.

YPONOMEUTIDAE: *Yponomeuta multipunctella*. **SESIIDAE:** *Paranthrene asilipennis* (COUNTY), *Synanthedon kathyae* (COUNTY), *S. rileyana*, *S. rubrofascia*, *S. acerni*, *Alcathoe caudata*. **COSSIDAE:** *Prionoxystus robiniae*.

LIMACODIDAE: *Tortricidea flexuosa*, *Lithocodes fasciola*, *Apoda y-inversum*, *A. biguttata*, *Prolimacodes badia*, *Isochaetes beutenmuelleri*, *Adoneta spinuloides*, *Euclea delphinii*, *Parasa chloris*, *P. indetermina*, *Acharia stimulea*.

TORTRICIDAE: *Episimus tyrius*, *Bactra verutana*, *Orthotaenia undulana*, *Paralobesia biteana*, *Olethreutes fasciatana*, *O. ferriferana*, *O. inornatanum*, *O. tiliana*, *Eucosma robinsonana*, *Proteoteras aesculana*, *Catastega aceriella*, *Gymnandrosoma punctidiscanum*, *Ecdytolopha insiticiana*, *Acleris logiana*, *A. chalybeana*, *Pandemis limitata*, *Argyrotaenia velutinana*, *A. floridana*, *A. juglandana*, *Choristoneura parallela*, *C. rosaceana*, *Archips purpurana*, *A. rileyana*, *Sparganothis sulphureana*, *Cenopis reticulatana*, *C. pettitana*, *C. ferreana*, *C. eulonicosta*, *c. directana*, *C. lamberti*, *Platynota semiusta*. **CRAMBIDAE:** *Glaphyria glaphyralis*, *G. fulminalis*, *Hahncappisia neomerulenta*, *Achyra rantalis*, *Diacme elealis*, *Desmia funeralis*, *Diathrausta harlequinialis*, *Blepharomastix ranalis*, *Herpetogramma aeglealis*, *Crambus agitatellus*, *C. multilinellus*, *C. albellus*, *Neodactrya luteolella*, *Microcrambus elegans*, *M. bigutellus*, *Urola nivalis*. **PYRALIDAE:** *Aglossa cuprina*, *Dolichomia olinalis*, *Condylolomia participalis*, *Oneida lunulalis*, *Pococera robustella*, *P. expandens*, *Acrobasis indigenella*, *A. rubrofasciella*, *A. kearfottella*, *A. minimella*, *A. palliolella*, *A. angusella*, *Sciota subcaesiella*, *S. versutella*, *Eulogia ochrifrontella*. **PTEROPHORIDAE:** *Oidaematophorus eupatorii*. **DREPANIDAE:** *Drepana arcuata*.

GEOMETRIDAE: *Speranza pustularia*, *Macaria fissinotata*, *M. signaria*, *M. granitata*, *M. aemulataria*, *Digrammia ocellinata*, *Glenoides texanaria*, *Iridopsis larvaria*, *I. ephyraria*, *Protoarmia porcelaria*, *Epimecis hortaria*, *Melanolophia canadaria*, *Hypagyrtis unipunctata*, *H. esther*, *Ilexia intractata*, *Lytrosis unitaria*, *Pero anetaria*, *Probole amicaria*, *Plagodis fervidaria*, *P. phlogosaria*, *Eugonobapta nivosaria*, *Campaea perlata*, *Besma endropiaria*, *Nepytia pellucidaria* (COUNTY), *Prochoerodes lineola*, *Nemoria bistriaria*, *Idaea furciferata*, *Scopula limboundata*, *Lophosis labeculata*, *Eulithis diversilineata*, *E. gracilineata*, *E. molliculata* (STATE), *Ecliptopera atricolorata*, *Hydrelia inornata*, *Horisme intestinata*, *Xanthorhoe lacustrata*, *Orthonamma obstipata*, *Eubaphe mendica*, *Cyclophora packardi*. **APATELODIDAE:** *Apatelodes torrefacta*.

LASIOCAMPIDAE: *Artace cribraria*, *Malacosoma distria*. **SATURNIIDAE:** *Eacles imperialis*, *Dryocampa rubicunda*, *Anisota stigma*, *Callosamia angulifera*. **SPHINGIDAE:** *Sphinx kalmiae*, *Lapara bombycoides*, *L. coniferarum*, *Paonias astylus*, *Darapsa versicolor*, *D. choerilus*, *D. myron*. **NOTODONTIDAE:** *Datana ministra*, *D. angusi*, *Nadata gibbosa*, *Peridea angulosa*, *Ellida caniplaga*, *Macrurocampa marthesia*, *Heterocampa guttivita*, *H. biundata*, *H. obliqua*, *Schizura unicornis*, *S. concinna*, *S. ipomoeae*, *Oligocentria lignicolor*. **EREBIDAE:** *Crambidia pallida*, *Cisthene plumbea*, *Hypoprepia miniata*, *Haploa clymene*, *H. lecontei*, *Spilosoma congrua*, *Hypercompe scribonia*, *Grammia anna*, *Halysidota tessellaris*, *H. harrisii*, *Cisseps fulvicollis*, *Dasychira obliquata*, *Orygia leucostigma*, *Idia americalis*, *I. aemula*, *I. lubricalis*, *Phalaenophana pyramusalis*, *Zanclognatha theralis*, *Z. lituralis*, *Z. martha*, *Z. cruralis*, *Z. jacchusalis*, *Z. marcidilinea*, *Renia discoloralis*, *Redectis vitrea*, *Colobochyla interpunctata*, *Hypena baltimoralis*, *H. scabra*, *Pangrapta decoralis*, *Metalectra discalis*, *Hyperstrotia pervertens*, *Hyperstrotia secta*, *Oruza albocostaliata*, *Hypsoropha hormos*, *Scolecocampa liburna*, *Panopoda rufimargo*, *P. carneicosta*, *Zale minerea*, *Z. confusa*, *Allotria elonympha*, *Euparthenos nubilis*, *Catocala ilia*, *C. epione*, *C. sordida*, *C. andromedae*, *C. blandula*, *C. similis*, *C. connubialis*, *C. micronympha*, *C. minuta*. **NOLIDAE:** *Baileya levitans*, *B. australis*, *Nola ovilla* (COUNTY). **EUTELIIDAE:** *Paectes abrostoloides*. **NOCTUIDAE:** *Autographa precationis*, *Marimatha nigrofimbria*, *Malliatha synochitis*, *Colocasia flavicornis*, *Acrionicta americana*, *A. dactylina*, *A. innotata*, *A. radcliffei*, *A. interrupta*, *A. superans* (STATE), *A. laetifica*, *A. hasta*, *A. modica*, *A. lobeliae*, *A. hamamelis* (COUNTY, few in STATE), *A. increta*, *A. ovata*, *A. retardata*, *A. haesitata*, *P. hebraeicum*, *C. cerintha*, *E. grata*, *C. vecors*, *Leuconycta diphtheroides*, *Homophoberia apicosa*, *Pyrrhia*



Eulithis molliculata (Geometridae)
(Photo by Charles Bordelon).

exprimens, *Callopietria mollissima*, *Phosphila miseloides*, *Chytonix palliatricula*, *Dypterygia rozmani* (COUNTY), *Elaphria versicolor*, *E. grata*, *Balsa malana*, *Amphipoea americana*, *Loscopia velata*, *Protapamea danieli* (COUNTY), *Mythimna unipuncta*, *Orthodes majuscula*, *O. detracta*, *Protolampra bruniecolis*, *Abagrotis alternata*, *Ochropleura implecta*, *Anicla infecta*, *Peridroma saucia*.

Salacoa Rd. at Salacoa Ck., 5 mi ESE of Fairmount, Bartow Co.:

June 9:

NOCTUIDAE: *Loscopia velata* (COUNTY).

August 24-25:

SPHINGIDAE: *Paonias astylus*. **EREBIDAE:** *Calyptra canadensis*. **NOCTUIDAE:** *Basilodes pepita*, *Stiria rugifrons*, *Papaipema polymniae*. **GEOMETRIDAE:** *Exelis pyrolaria*.

Atlanta, Fulton Co. (Irving Finkelstein residence):

NOCTUIDAE: *Acronicta betulae*, June 2; *Acronicta clarescens*; June 12 (few in STATE).

McDonough, Henry Co., Aug. 2, Doug Hughes:

CRAMBIDAE: *Terastia meticulosalis* (COUNTY).

Athens, Clarke Co., Sept. 3, Rhonda Christie:

EREBIDAE: *Ascalapha odorata*.

Ohoopsee Dunes, Tract 3 (Hall's Bridge Rd. tract), 8 mi. WSW of Swainsboro, Emanuel Co., Aug. 30-31, with ILF:

COSMOPTERIGIDAE: *Euclimensia bassetella*. **OECOPHORIDAE:** *Gonioterma crambitella*, *Inga sparsiciliella*. **SESIIDAE:** *Synanthedon acerni* "tepperi". **URODIDAE:** *Urodus parvula*. **TORTRICIDAE:** *Cenopsis lamberti*. **LIMACODIDAE:** *Lithacodes fasciola*, *Phobetron pithecium* (COUNTY), *Prolimacodes badia*. **MEGALOPYGIDAE:** *Megalopyge opercularis*. **CRAMBIDAE:** *Desmia funeralis*, *Palpita magniferalis*, *Parapoynx allionalis*, *Pyrausta acronalis*, *P. laticlavata*, *Synclita oblitalis*. **PYRALIDAE:** *Peoria approximella*. **GEOMETRIDAE:** *Nematocampa baggetaria*, *Eumacaria madopata*, *Macaria aequiferaria*, *M. bisignata*, *M. bicolorata*, *M. distribuaria*, *Digrammia eremiata*, *D. gnophosaria*, *Fernaldella georgiana*, *Anavitrinella pampinaria*, *Iridopsis defectaria*, *Glena cribataria*, *Epimecis hortaria*, *Hypomecis umbrosaria*, *Hypomecis* sp., *Hypagyrtis esther*, *H. unipunctata*, *Episemasia solitaria*, *Euchlaena madusaria*, *E. amoenaria*, *Pero morrisonaria*, *Plagodis fervidaria*, *Besma endropiaria*, *B. quercivoraria*, *Patalene olyzonaria*, *Nemoria* sp., *Chlorochlamys chloroleucaria*, *Eulithis gracilentia*, *Pleuroprucha insulsaria*, *Orthonama obstipata*, *Eupithecia miserulata*. **SATURNIIDAE:** *Anisota stigma*, *A. virginensis pellucida*, *Eacles imperialis*, *Automeris io*, *Callosamia securifera*. **LASIOCAMPIDAE:** *Tolyte notialis*, *T. mint*. **APATELODIDAE:** *Olceclostera indistincta*. **SPHINGIDAE:** *Ceratomia catalpae*, *C. undulosa*, *Lapara coniferarum*, *Paonias excaecatus*, *P. myops*, *Darapsa myron*. **NOTODONTIDAE:** *Datana perspicua*, *D. robusta*, *Heterocampa obliqua*, *H. astarte*, *Peridea angulosa*, *Lochmaeus manteo*, *Nadata gibbosa*, *Schizura leptinoides*, *Symmerista* sp. **EREBIDAE:** *Cisthene subjecta*, *Hypoprepia fucosa*, *H. miniata*, *Virbia aurantiaca*, *V. rubicundaria*, *Hyphantria cunea*, *Euerythra phasma* (few in STATE), *Halysidota tessellaris*, *Dasychira meridionalis*, *Idia americalis*, *I. aemula*, *I. lubricalis*, *Bleptina inferior*, *Renia adspersgillus*, *Zanclognatha minualis*, *Phalaenostola larentioides*, *Palthis angulalis*, *Hypena baltimoralis*, *H. scabra*, *Nigetia formosalis*, *Ledaea perditalis*, *Hemeroplanis scopulepes*, *Phyprosopus callitrichoides*, *Scolecocampa liburna*, *Hyperstrotia nana*, *H. pervertens*, *Isogona tenuis*, *Argyrostrotis flavistriaria*, *A. sylvarum*, *Drasteria grandirena*, *Panopoda rufimargo*, *Pangrapta decoralis*, *Zale lunata*, *Z. aeruginosa*. **EUTELIIDAE:** *Paectes abrostoloides*, *Marathyssa inficita*. **NOLIDAE:** *Meganola phylla*. **NOCTUIDAE:** *Autographa precationis*, *Marimatha nigrofimbria*, *Spragueia leo*, *Acronicta brumosa*, *A. vinnula*, *A. ovata*, *A. exilis*, *Harrismemna trisignata*, *Polygrammate*, *hebraeicum*, *Charadra deridens*, *Eudryas unio*, *Condica sutor*, *C. videns*, *C. mobilis*, *Ogdonconta cinereola*, *Helicoverpa zea*, *Schinia lynx*, *S. siren*, *S. scissoides*, *S. sordida*, *S. rivulosa*, *S. fulleri*, *Azenia obtusa*, *Chytonix palliatricula*, *Spodoptera ornithogalli*, *Leucania incognita*.

Ohoopsee Dunes, Tract 4 (Covena tract), 9 mi. SW of Swainsboro, Emanuel Co., with ILF:

June 24-25:

SATURNIIDAE: *Anisota virginensis*. **LASIOCAMPIDAE:** *Artace cribraria*. **NOTODONTIDAE:** *Nadata gibbosa*, *Heterocampa oblique*, *Hyparpax aurora*. **EREBIDAE:** *Hyphantria cunea*, *Virbia rubicundaria*, *Pygarctia abdominalis* (COUNTY, second in STATE), *Argyrostrotia flavistriaria*, *Gondysia similis*, *Catocala gracilis*, *C. alabamiae*, *C. jair*. **NOCTUIDAE:** *Spragueia onagrus*, *Callopietria cordata*. **GEOMETRIDAE:** *Hypomecis umbrosaria*, *Glena plumosaria*, *Besma endropiaria*, *Scopula lautaria*, *Lobocleta peralbata* (?).

MEGALOPYGIDAE: *Megalopyge crispata*. **TORTRICIDAE:** *Atroposia oenotherana* (STATE [though expected]). **PRODOXIDAE:** *Tegeticula yuccasella*.

Aug. 31-Sept. 1:

COSMOPTERIGIDAE: *Euclemensia bassetella*. **GELECHIIDAE:** *Dichomeris flavicostella*. **OECOPHORIDAE:** *Antaeotricha schlaegeri*, *Gonioterma crambitella*, *Inga sparsiciliella*. **URODIDAE:** *Urodus parvula*. **TORTRICIDAE:** *Spaganothis sulfureana*. **LIMACODIDAE:** *Isa textula*, *Prolimacodes badia*. **CRAMBIDAE:** *Desmia funeralis*, *D. maculalis*, *Parapoynx allionalis*, *Pyrausta acronalis*, *P. laticlavata*, *Spodalea recurvalis*, *Ategumia ebulialis*, *Argyria lacteola*. **PYRALIDAE:** *Lepidomys irrenosa*, *Dolichomia olinalis*, *Arta statalis*, *Dioryctria amatella*, *Tallula watsoni*. **DREPANIDAE:** *Oreta rosea*. **GEOMETRIDAE:** *Nematocampa baggetaria*, *Eumacaria madopata*, *Macaria transitaria*, *M. bicolorata*, *Exelis pyrolaria*, *Anavitrinella pampinaria*, *Iridopsis defectaria*, *Epimecis hortaria*, *Melanolophia canadaria*, *Hypagyrtis esther*, *H. unipunctata*, *Euchlaena obtusaria*, *Pero morrisonaria*, *Probole amicaria*, *Besma endropiaria*, *B. quercivoraria*, *Patalene olyzonaria*, *Nemoria lixaria*, *Synchlora frondaria*, *Cyclophora myrtaria*, *Pleuroprucha insulsaria*, *Idaea taturata*, *Lobocleta peralbata* (?), *L. ossularia*, *Orthonama obstipata*, *Eupithecia miserulata*, *Disclisioprocta stellata*. **SATURNIIDAE:** *Eacles imperialis*, *Automeris io*, *Antheraea polyphemus*, *Actias luna*, *Callosamia angulifera*. **LASIOCAMPIDAE:** *Artace cribraria*, *Tolype notialis*. **APATELODIDAE:** *Olceclostera indistincta*. **SPHINGIDAE:** *Lapara coniferarum*, *Amorpha juglandis*, *Enyo lugubris*, *Paonias excaecatus*, *Smerinthus jamaicensis*. **NOTONDONTIDAE:** *Datana modesta*, *Hyperaeschra georgica*, *Heterocampa oblique*, *H. astarte*, *Peridea angulosa*, *Lochmaeus manteo*, *Schizura concinna*, *S. leptinoides*, *Nadata gibbosa*, *Symmerista* sp. **EREBIDAE:** *Cisthene subjecta*, *Hypoprepia fucosa*, *Virbia opella*, *V. rubicundaria*, *V. laeta*, *Apantesis phalerata*, *Halysidota tessellaris*, *Pygarctia abdominalis* (second specimen from here, see June above), *Cisseps fulvicollis*, *Dasychira meridionalis*, *Orgyia definita*, *Idia americalis*, *I. aemula*, *I. rotundalis*, *Renia fraternalis*, *Zanclognatha martha*, *Phalaenostola larentioides*, *Machrochilo hypocritalis*, *Palthis angulalis*, *Metalectra discalis*, *Hypena baltimoralis*, *Oruza albocostaliata*, *Nigetia formosalis*, *Ledaea perditalis*, *Lesmone detrahens*, *Hemeroplanis habitalis*, *Phyprosopus callitrichoides*, *Scolecocampa liburna*, *Hyperstrotia nana*, *H. villificans*, *H. flaviguttata*, *Caenurgia chloropha*, *Anticarsia gemmatilis*, *Argyrostromis flavistriaria*, *A. deleta*, *Ptichodis herbarum*, *Drasteria grandirena*, *Parallelia bistriaris*, *Gondysia smithii*, *Mocis texana*, *Panopoda rufimargo*, *P. carneicosta*, *Pangrapta decoralis*, *Allotria elonympha*, *Zale horrida*. **EUTELIIDAE:** *Paectes nubifera* (COUNTY), *P. abrostoloides*. **NOCTUIDAE:** *Ctenoplusia oxygramma*, *Chrysodeixis includens*, *Marimatha nigrofimbria*, *Acrionicta americana*, *A. hasta*, *A. ovata*, *A. exilis*, *Polygrammate*, *hebraeicum*, *Charadra deridens*, *Eudryas unio*, *Condica sutor*, *C. videns*, *C. mobilis*, *Ogdonconta cinereola*, *Schinia sordida*, *S. trifascia*, *S. arefacta*, *Schinia* sp. nov., *Phosphila miseloides*, *P. turbulenta*, *Chytonix palliatricula*, *Elaphria chalcedonia*, *Mythimna unipuncta*, *Leucania incognita*, *Anicla infecta*.

Statesboro (Hunter's Point Subdivision), Bulloch Co., Alan Harvey:



Diastema tigris (Noctuidae)
(Second record from Alan Harvey
for Statesboro) (Photo by Alan
Harvey).

NOCTUIDAE: *Diastema tigris*, Aug. 31, 2011 and Sept. 8, 2013.

Chickasawhatchee WMA, 14 mi. WSW of Albany, along Mud Creek Rd., Dougherty Co., Sept. 1-2, with ILF:

EREBIDAE: *Estigmene acrea*, *Phytometra ernestinana*, *Catocala maestosa*. **NOCTUIDAE:** *Acrionicta laetifica*, *Tripudia rectangula*, *Ponometa fasciatella*, *Schinia sordida*, *S. lynx*. **GEOMETRIDAE:** *Speranza varadaria*, *Tornos scolopacinarius*. **LIMACODIDAE:** *Heterogenea shurtleffi*. **CRAMBIDAE:** *Nascia acutella* (COUNTY).

Dixon Memorial Forest WMA, Swamp SW of Laura Walker SP Lake, Ware Co., June 25-26, with ILF:

SPHINGIDAE: *Paonias excaecatus* (COUNTY). **EREBIDAE:** *Prosoparia floridana* (COUNTY, second in STATE), *Nigetia formosalis*, *Allotria elonympha*. **NOLIDAE:** *Nola*, sp. nov. (near *pustulata*, though half the size). **GEOMETRIDAE:** *Macaria distributaria*, *Glena cognataria*, *Iridopsis vellivolata*.

Dixon Memorial Forest, ENE of Laura Walker SP Lake, Ware Co., June 25-26, with ILF:

APATELODIDAE: *Apatelodes torrefacta* (female). **EREBIDAE:** *Zanclognatha*, sp. nov. (near *lituralis*, COUNTY), *Epidromia rotundata*, *Gondysia similis*, *Sigella eoides*, *Catocala similis*. **NOCTUIDAE:** *Spragueia onagrus*. **GEOMETRIDAE:** *Stenaspilates antidiscaria*. **PYRALIDAE:** *Carectocultus perstrialis*. **LIMACODIDAE:** *Apoda*, sp. nov. (near *rectilinea*). **TORTRICIDAE:** *Cenopsis lamberti*.

Sapelo Island, McIntosh Co., John Hyatt (JH), Lance Durden (LD), and Brian Scholtens (BS): Selected records from the larger list; some of the following are likely county records.

May 10-11, 2012, LD:

EREBIDAE: *Doryodes cf spadaria*.

Sept. 14-15, 2012, LD:

EREBIDAE: *Doryodes cf spadaria*.

Jan 10-11, 2012, LD:

EREBIDAE: *Doryodes cf spadaria*.

April 12-13, LD:

CRAMBIDAE: *Donacula melinellus*. **GEOMETRIDAE:** *Iridopsis vellivolata*, *Episemasia solitaria*, *Stenaspilatodes antidiscaria*, *Pero zalissaria*. **SPHINGIDAE:** *Deidamia inscriptum*. **NOTODONTIDAE:** *Datana major*, *Datana integerrima*, *Hyperaeschra georgica*, *Heterocampa subrotata*. **EREBIDAE:** *Clemensia albata*, *Hypercompe scribonia*, *Idia rotundalis*, *Idia diminuendis*, *Bleptina sangamonia*, *Hypenula cacuminalis*, *Metallata absumens*, *Ptichodis herbarum*, *Euclidean cuspidea*, *Doryodes cf spadaria*. **EUTELIIDAE:** *Paectes oculatrix*. **NOCTUIDAE:** *Acronicta oblongata*, *Phosphila turbulenta*, *Acherdoa ferraria*, *Callopietria granitosa*, *Callipistria cordata*, *Elaphria georgei*, *Morrisonia mucens*.

June 14-15, LD:

PSYCHIDAE: *Cryptothoele gloverii*. **GELECHIIDAE:** *Anacamptis coverdalella*. **TORTRICIDAE:** *Eucosma robinsonana*, *Sparganothis sulfureana*. **LIMACODIDAE:** *Monoleuca subdentosa*. **GEOMETRIDAE:** *Digrammia continuata*, *Pimaphera sparsaria*, *Xanthotype rufaria*. **SPHINGIDAE:** *Amphion floridensis*. **EREBIDAE:** *Virbia rubicundaria*, *Bleptina sangamonia*, *Metallata absumens*, *Epidromia rotundata*, *Panopoda repanda*, *Metria amella*, *Zale declarans*, *Zale obliqua*, *Doryodes cf bistrialis*, *Catocala muliercula*, *Catocala delilah*. **NOCTUIDAE:** *Ponometa semiflava*, *Properigea tapeta*, *Acherdoa ferraria*, *Amolita fessa*.

Aug. 14-15, LD:

LIMACODIDAE: *Monoleuca subdentosa*. **PYRALIDAE:** *Parachma ochracealis*. **GEOMETRIDAE:** *Stenaspilatodes antidiscaria*, *Scopula aemulata* (first confirmed for STATE). **SATURNIIDAE:** *Eacles imperialis*, *Automeris io*. **SPHINGIDAE:** *Hemaris thysbe*, *Eumorphia fasciata*. **EREBIDAE:** *Virbia rubicundaria*, *Bleptina sangamonia*, *Metallata absumens*, *Hypenula cacuminalis*, *Gabara distema*, *Gabara pulverosalis*, *Lesmone hinna*, *Mocis disseverans*, *Ptichodis vinculum*, *Doryodes cf bistrialis*, *Doryodes cf spadaria*. **NOCTUIDAE:** *Simyra insularis*, *Noctua pronuba*.

Aug. 22, JH:

PSYCHIDAE: *Oiketicus abbotti*. **LIMACODIDAE:** *Monoleuca semifascia*. **LASIOCAMPIDAE:** *Tolyte minta*. **EREBIDAE:** *Pygarcia abdominalis* (COUNTY, third location in STATE), *Doryodes cf bistrialis*. **NOCTUIDAE:** *Callopietria cordata*, *Acherdoa ferraria*.

Harris Neck NWR, Liberty Co., Sept. 10, James Fleullan:

NYMPHALIDAE: *Phyciodes phaon*. **LYCAENIDAE:** *Hemiargus ceraunus*. **RIODINIDAE:** *Calephelis virginensis*.

Townsend WMA, McIntosh Co., Aug. 31-Sept. 1, Mike Chapman:

HESPERIIDAE: *Euphyes arpa* (several, few records for STATE).

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The following **5 reports** were submitted by Steve Hall for North Carolina:

The **1st report** (omitted in the June Newsletter - error by Editor) on selected butterfly records was compiled by Harry LeGrand for the indicated time period. Place names refer to counties unless otherwise indicated, and records are not new county reports unless indicated. **Records are all from February through May 2013.** This was one of the coldest springs on record in the state, with March and May temperatures being far below normal. Rainfall was generally above normal. The cold weather delayed the flights of all species by 10-14 days, and the

temperatures combined with the rainfall seemed to have greatly depressed numbers of emerging butterflies, especially so in the eastern half of the state, which had one of its more dismal seasons in many years.

PIERIDAE:

Pontia protodice, the only report of the season was remarkably early, with one photographed by Doug Johnston on February 24 at Sandy Mush Game Land in Buncombe.

Euchloe olympia, the population first discovered in Madison in 2011 is still doing well, as evidenced by daily counts of eight on both April 1 and 9 (Gail Lankford, Doug Johnston *et al.*). Considering the lateness of the spring season, these numbers were remarkably early, strongly suggesting that the flight there begins well into March.

LYCAENIDAE:

Feniseca tarquinius, one was noted by Owen McConnell in Cherokee (COUNTY) on April 25.

Satyrium favonius, Mike Smith saw two at a known site at Fort Fisher in New Hanover on May 22. The population here leans strongly to *S. f. favonius*, whereas elsewhere in the state, *S.f. ontario* is the subspecies that is present.

Callophrys augustinus, Owen McConnell found one on April 30 in Cherokee (COUNTY); there were several other records this season, generally from previously known sites.

Callophrys niphon, one of the few species seen in greater than normal numbers this season, it was reported from Bladen, Buncombe, Franklin, Madison, Mecklenburg, and Wake; however, all reports were of single individuals.

Callophrys hesseli, the only report for the season was one photographed by Doug Johnston in Green Swamp (Brunswick) on April 26.

Parrhasius m-album, of the several spring reports, the one from Cabarrus (COUNTY) on the very early date of March 10 (Chris Talkington) was the most notable.

Celastrina neglectamajor, Richard Stickney had a very good count of five, on May 20 in Buncombe.

Celastrina nigra, at a known locale in Graham, as many as eight individuals (all males) were seen on April 29-30 by Owen McConnell and Mike Smith.

Glaucopsyche lygdamus, though not at new locations, the species was found in good numbers in Buncombe, Graham, Haywood, and Madison this season. Records ranged from a remarkably early March 16 to April 30, with a peak daily count of ten, in Madison on April 9 (Gail Lankford *et al.*).

NYMPHALIDAE:

Agraulis vanillae, only infrequently found in the spring, one was seen by Bob Cavanaugh on March 5 at Havelock in Craven.

Lethe appalachia, one seen by Gail Lankford on May 28 in Madison (COUNTY) was a good find for that area.

HESPERIIDAE:

Erynnis martialis, always a good find, one at a known site in Madison was found on May 28 by Gail Lankford.

Hesperia metea, the only report of the season was of one in Madison on April 30, as noted by Gail Lankford and party.

Hesperia sassacus, Sven Halling photographed one at E. B. Jeffress Park along the Blue Ridge Parkway in Wilkes on May 29; this is a scarce species in the state.

Poanes viator, Richard Stickney found one at Harris Lake in Wake on May 27; this is one of the few known inland North Carolina sites for the species, which appears to be advancing westward with the spread of its inland

hostplant, *Zizaniopsis miliacea*.

Euphyes bimacula, Ed Corey photographed one at a Voice of America site in Pitt (COUNTY) on May 30. This locale is a former forested wetland that now exists as extensive wet grassland, seemingly excellent habitat for this rare species.

Amblyscirtes hegon, a tally of 12 on April 30 in Madison by Gail Lankford and party ties the all-time high state one-day count.

The 2nd **report** on selected butterfly records was compiled by Harry LeGrand for the September issue of the SLS **NEWS**: Place names refer to counties unless otherwise indicated, and records are not new county reports unless indicated. **Records are all from June through August 2013.** Summer 2013 was one of the wettest and coolest on record, and it also was much cloudier than usual. Though there was some recovery of butterfly populations in the second broods from the first broods, numbers of individuals remained quite low, among the lowest in 10-20 years. In addition, there was practically no immigration of migrants into the state – e.g., *Vanessa cardui* (one record), *Pyrisitia lisa* (no records), and *Urbanus proteus* (no records). The *Danaus plexippus* flight was also very poor, with many observers going the season without seeing any. DJ = Doug Johnston, HL = Harry LeGrand, JN = Jim Nottke, GS = Gene Schepker, RS = Richard Stickney.

PAPILIONIDAE:

Papilio cresphontes, one photographed by HL at an arboretum in Raleigh (Wake) on July 4 was one of only a few records ever for the eastern Piedmont, where it is assumed to be a migrant/stray. Along the coast, where resident, there were a handful of sightings, with the best being the second highest one-day count for the state – about 20 at Pine Island Audubon Sanctuary in Currituck on July 23 (Jeff Cagle). Another good coastal tally was 11 found by Tom Stock in the Duck area of Dare, on August 5. In the foothills, David Campbell photographed a larva on *Ptelea trifoliata*, at a known site in Alexander on August 19. In the mountains, where it breeds sparingly, sightings were in Buncombe by DJ on August 9, and in Alleghany by Cecelia Mathis on August 22.

PIERIDAE:

Pontia protodice, the only records for the season came from sites where found in previous years: one at the Archie Elledge water treatment plant in Winston-Salem (Forsyth) on June 13 by GS, and two in a field in Iredell on August 28 (JN party).

LYCAENIDAE:

Atlides halesus, JN saw one at his farm in western Forsyth on June 1; the species is scarce in the northwestern Piedmont.

Satyrium caryaevorus, this rarity was found only once in the state, one well-photographed by DJ at Sandy Mush Game Land in Buncombe on June 13.

Satyrium liparops, also reported only once during the season, one was observed by RS in the Green Swamp in Brunswick on June 10.

Callophrys hesseli, RS had a decent count of four individuals at a known site at Aberdeen in Moore, on July 28.

Parrhasius m-album, an excellent count for this scarce species was 15, at Pine Island in Currituck as noted by Jeff Cagle on July 23.

NYMPHALIDAE:

Agraulis vanillae, the flight into the mountains and Piedmont was practically nonexistent this summer, with the only such report being of one in Wake seen by Mike Turner on July 20.

Heliconius charithonia, one seen in Forsyth (fide Dennis Burnette) on July 4 in a yard/garden was a very rare Piedmont sighting, and it might have eclosed locally from transported hostplant material, rather than be a legitimate stray.

Boloria bellona, poorly known from the Piedmont region, a tally of eight was excellent in northwestern Surry, not far from the mountains, as noted by GS on July 5.

Phyciodes phaon, John Fussell had a good count of 12 at Rachel Carson Estuarine Reserve (Carteret) on August 23.

Polygonia faunus smithii, As usual, the only summer records were from the spruce-fir zone, with two records from Mount Mitchell State Park (Yancey) and one from the Blue Ridge Parkway along the Yancey-Buncombe line, all between August 22-28.

Vanessa cardui, the species staged nary an irruption into the region this year, and the only report was of one seen in Greenville (Pitt) on August 9 by Salman Abdulali.

Danaus gilippus, the only report for the season was one seen by John Gerwin on August 22 at Bald Head Island (Brunswick), where the species is likely a sporadic breeder.

HESPERIIDAE:

Staphylus hayhurstii, always a good find in the mountains, there were two reports from Buncombe and one from Madison in early June; all mountain records are from these low-elevation counties.

Erynnis martialis, finding more than one a day is highly unusual in the state; thus, quite notable were three photographed by DJ in southeastern Graham on July 14; three more photographed by DJ at a known site (Sandy Mush Game Land) in Buncombe on July 28; and four counted by DJ and GS at the latter site on August 4. Sadly, there were no reports from east of the mountains.

Problema byssus, this species continues its "march" northward, despite the poor year for most grass skippers. In the first brood, RS saw one at the northern edge of the range in southeastern Chatham, in the Piedmont, on June 17. In the second and much larger brood, HL and Nick Flanders saw one on August 27 in Raleigh (Wake), which seems to be slightly north of the normal range, and just a second ever record for this well-studied county. Another seen by HL in southern Johnston on August 29 was almost certainly a local breeder, not far from the edge of the range, as well.

Poanes yehl, the species barely ranges into the eastern Piedmont, at least for its second brood, but it is seldom found in the first brood in the province. Thus, of note was one seen by RS on June 17 in extreme southeastern Chatham.

Euphyes dion, this species ranges inland to the eastern and southern Piedmont; records from near the edge of the range were singles found by Parker Backstrom near Bear Creek (Chatham) on June 16 and photographed by Tom Sanders in northern Mecklenburg on August 25.

Euphyes bimacula, Nick Flanders photographed one south of Jackson in Northampton (COUNTY) on June 2. There are few records for the upper Coastal Plain counties in the state.

Lerodea eufala, one of the few early summer records for the state was one seen by Parker Backstrom in his yard in western Chatham on June 16.

Megathymus cofaqui, this species is still hanging on at its only currently known state site, in Alexander. David Campbell photographed freshly hatched ova on August 19, on *Yucca filamentosa*.

The 3rd report (omitted in the June Newsletter - error by Editor) on selected moth records was compiled by Parker Backstrom, most from the vicinity of Goldston in Chatham County.

COSSIDAE:

Cossula magnifica – June 11, Chatham County.

Givira francesca – May 18, Moore County; photographed. *Inguromorpha basalis* – June 3, Chatham County.

DREPANIDAE:

Drepana arcuata – Apr. 25, Chatham County; photographed.

BOMBYCIDAE:

Olceclostera angelica – June 3, Chatham County.

LASIOCAMPIDAE:

Heteropacha rileyana – Apr. 10, Chatham County; photographed.

SATURNIIDAE:

Citeronia regalis -- June 3, Chatham County.

SPHINGIDAE:

Amorpha juglandis – June 3, Chatham County

Ceratomia amyntor – June 3, Chatham County

Dolba hyloeus – May 19, Moore County; photographed

Eumorpha pandorus -- June 3, Chatham County

Sphinx kalmiae – Apr. 30, Chatham County; photographed

EREBIDAE:

Catocala illecta – June 11, Chatham County

Gondysia smithii – Apr. 30, May 9, May 22, Chatham County; photographed

EUTELIIDAE:

Eutelia pulcherrimus – Apr. 25, May 17, Lee County, Chatham County, photographed

NOCTUIDAE:

Callopietria granitosa – May 18, Moore County, photographed

Lithophane viridipallens – Apr 4, Chatham County, photographed

The 4th report on selected moth records was compiled by Parker Backstrom for the September issue of the SLS NEWS; most of the records are from the vicinity of Goldston, NC, in Chatham County.

COSSIDAE:

Givira anna -- Jun 9, 17, 18, Chatham County

Givira francesca -- Jul 16; Aug 22, Lee County

Inguromorpha basalis -- Jun 3, Chatham County; photo



Cossidae: *Inguromorpha basalis* (Photo by Parker Backstrom)



Crambidae: *Glyphodes pyloalis* (Photo by Parker Backstrom)



Notodontidae: *Peridea n. sp. nr. ferruginea* (Photo by Parker Backstrom)

TORTRICIDAE:

Archips infumatana -- Jun 9, 10, 12, 13, Chatham County

Eucosma albiguttana -- Jun 2, Chatham County

CRAMBIDAE:

Diasemiopsis leodocusalis -- Aug 22, Chatham County

Glyphodes pyloalis -- Aug 27, Lee County; photo

PYRALIDAE:

Aglossa disciferalis -- May 28, Chatham County

Pococera maritimalis -- Aug 12, Chatham County

Pseudasopia intermedialis -- May 29, Chatham County

THYATIRIDAE:

Pseudothyatira cymatophoroides -- May 17, 29, 30, 31; Jun 1, 2, 3, 6, 8, 11; Aug 2, 7, 8, 28, 29, 31, Chatham County

GEOMETRIDAE:

Heterophleps triguttaria -- May 10, 23, Chatham County
Mellilla xanthometata -- May 9; Jun 2, 3, Chatham County

LASIOCAMPIDAE:

Heteropacha rileyana -- Jun 15, Chatham County

SATURNIIDAE:

Sphingicampa bicolor -- Jul 18, 26 (4), 30; Aug 3, 5, 9, 21, 22 (2), 27, 28, Chatham County

SPHINGIDAE:

Paonias astylus -- Jul 18, Chatham County

NOTODONTIDAE:

Dasylophia thyatiroides -- Jul 24, Wake County
Peridea n. sp. nr. ferruginea -- May 15; Aug 15, 28, Chatham County; photo
Schizura n. sp. -- Aug 10, Chatham County; photo
Schizura badia -- Jun 10, Chatham County



Notodontidae: *Schizura sp. ?*
(Photo by Parker Backstrom)



Erebidae: *Spiloloma lunilinea*
(Photo by Parker Backstrom)



Geometridae:
Metarranthis mollicularia
(Photo by Bo Sullivan)

EREBIDAE:

Anomis privata -- Jul 31, Chatham County
Catocala illecta -- Jun 12, Chatham County
Gondysia smithii -- Jun 1, Chatham County
Spargaloma sexpunctata -- May 18, Chatham County
Spiloloma lunilinea -- Jul 31, Chatham County; photo

NOCTUIDAE:

Acrionicta hamamelis -- Aug 6, Chatham County
Callopietria mollissima -- Aug 27, Lee County
Niphonyx segregata -- Jul 31, Chatham County
Oligia chlorostigma -- Jun 10, 12, 13, 14, Chatham County

The 5th report on the following selected moth records was compiled by Bo Sullivan from sites in Mecklenburg, Rutherford, and Yancey Counties.

GEOMETRIDAE:

Hypomecis longipectinaria -- May 8, 9, Rutherford County
Metarranthis amyrisaria -- May 8, 9, Rutherford County
Metarranthis mollicularia -- July 10, 11, Rutherford County (STATE)
Idaea productata -- May 10, Mecklenburg County
Idaea eremiata -- June 5, 6, Rutherford County
Scopula ordinata -- June 5, 6, Rutherford County
Eupithecia peckorum -- May 8, 9, Rutherford County

Eupithecia columbiata -- May 8, 9, Rutherford County

Eupithecia fletcherata -- May 8, 9, Rutherford County

EREBIDAE:

Ptichodis bistrigata -- June 5, 6, Rutherford County

Catocala miranda -- July 10, 11, Rutherford County

NOCTUIDAE:

Argillophora furcilla -- June 5, 6, Rutherford County

Acronicta hamamelis -- May 8, 9, Rutherford County

Neoligia crytora -- June, Rutherford County

Properigea n. sp. -- May 8, 9, Rutherford County

Apameine gn. 2 sp. 4 -- July 10, 11, Rutherford County

Morrisonia triangula -- May 8, 9, Rutherford County

Ulolonche modesta -- May 8, 9, Rutherford County

Noctua pronuba -- June 7, Yancey County; (very large volume)

Aplypia langtonii -- July 8, Yancey County (STATE)

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Ed states the following for Texas: Just a few things to report for TX this summer. Interesting Tropical Noctuids from east and south TX (July-September, 2013):

Erebidae: *Euclystis guerini* Harris Co., Spring Valley, 20 July 2013. Male specimen found under shutter, could not photograph or collect (Ed Knudson). We have one specimen from Kleberg Co, TX.; *Ophisma tropicalis* Harris Co., Spring Valley, 8 July 2013, at porch light in morning, flew off before I could get a jar (Ed Knudson), also McLennan Co., Harris Creek, 19 July 2013, photo (Ann Gordon), (Occasional in extreme south TX); *Gonodonta pyrgo*, female specimen, Harris Co., Spring Valley, 2 September 2013, at light (CW Bordelon); *Epidromia rotundata* Harris Co., Spring Valley, 31 August 2013, in bait trap (CW Bordelon).

Noctuidae: *Bagisara albicosta* Starr Co., Falcon Heights, 5 August 2013 (Berry Nall) (very rare in TX); *Neophaenis boucheri* Hidalgo Co., Mission, 19 August 2013 (photo Mike Rickard). This beautiful moth (previously reported as *N. respondens*) is known from 2 other TX specimens from Cameron Co., and Harris Co., TX. All of these except for *E. rotundata* are new county records.

Reports of the usual tropical species of butterflies from the Lower Rio Grande Valley and Texas Hill Country have trickled in.

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



Jim Miller visiting Vernon and Charlotte Brou in Abita Springs, Louisiana, October 23, 2012. Jim spent several days looking over about 3,300 spread specimens of Louisiana notodontids for the upcoming Moths of North America (MONA) fascicle on the family Notodontidae. Jim is holding one pair of five or more new species among this material, and the particular one he is holding is not only an undescribed species, but it will be placed in a newly erected genus as well.

 The Southern Lepidopterists' News is published four times annually. Membership dues are \$20.00 annually. The organization is open to anyone, especially those with an interest in the Lepidoptera of the southern United States. Information about the Society may be obtained from Marc Minno, Membership Coordinator, 600 NW 34 Terrace, Gainesville, FL 32607, E-Mail: mminno@bellsouth.net, and dues may be sent to Jeffrey R. Slotten, Treasurer, 5421 NW 69th Lane, Gainesville, FL 32653.

SOUTHERN LEPIDOPTERISTS' SOCIETY

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