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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

PYRAUSTA BICOLORALIS (GUENÉE) IN LOUISIANA

BY

VERNON ANTOINE BROU JR.

Fig. 1. ***Pyrausta bicoloralis***: a. male, b. female, both 4.2 mi NE of Abita Springs, LA.

Pyrausta bicoloralis (Guenée) (Fig. 1) was addressed by Munroe (1976). This author stated the range of ***bicoloralis*** to be Nova Scotia to Michigan, south to Florida, and west to eastern Texas. He listed the flight period in the south to include the months of May to October.

There appears to be at least six annual broods in Louisiana (Fig. 2), though a much larger sample

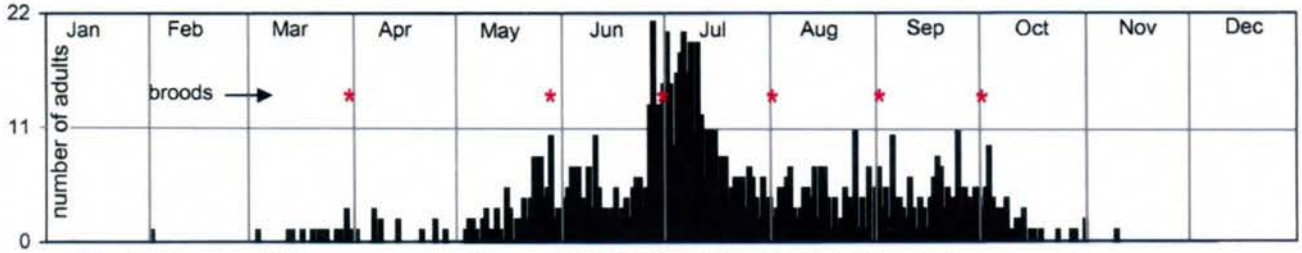

Fig. 2. ***Pyrausta bicoloralis*** captured at sec.24T6SR12E, 4.2 mi NE of Abita Springs, Louisiana. n = 912

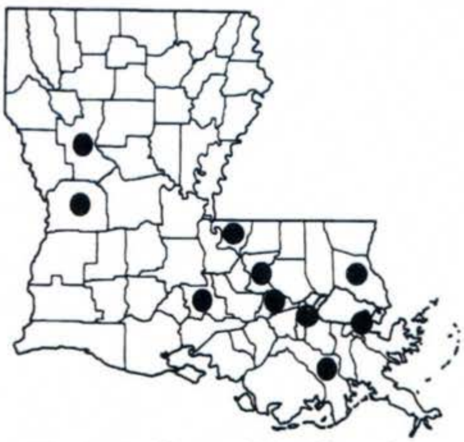

Fig. 3. Parish records by this author.

may reveal an additional lesser populated brood at the end of October.

The parish records are illustrated in Fig. 3, though most of my captures are from the southeast portion of the state.

Monroe (1976) indicated the early stages were unknown. I could find no reliable information regarding the immature stages of this species in a lengthy literature search. This is surprising for such a common and widespread species.

Literature Cited

Munroe, E., in Dominick, R. B., *et al.*, 1976. *The Moths of America North of Mexico*, Fasc. 13.2B, Pyraloidea (in part).

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

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Future lepidopterists attending the joint meeting of the SLS/ATL Societies held in Gainesville, Florida, October 2011 (photographs sent in by Tom Neal)

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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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VERY SPECIAL THANKS TO THOSE WHO DONATED TO THE SLS

(September - December)

Frances Weldon (Contributor)
C. Howard Grisham (Benefactor plus - Special Issue of the SLS NEWS)
James L. Monroe (Sustaining)
John F. Douglass (Sustaining)
Dave Morgan
Vernon Brou (Contributor)

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SECOND ADDENDUM TO THE SPHINGIDAE OF LOUISIANA

BY

VERNON ANTOINE BROU JR.

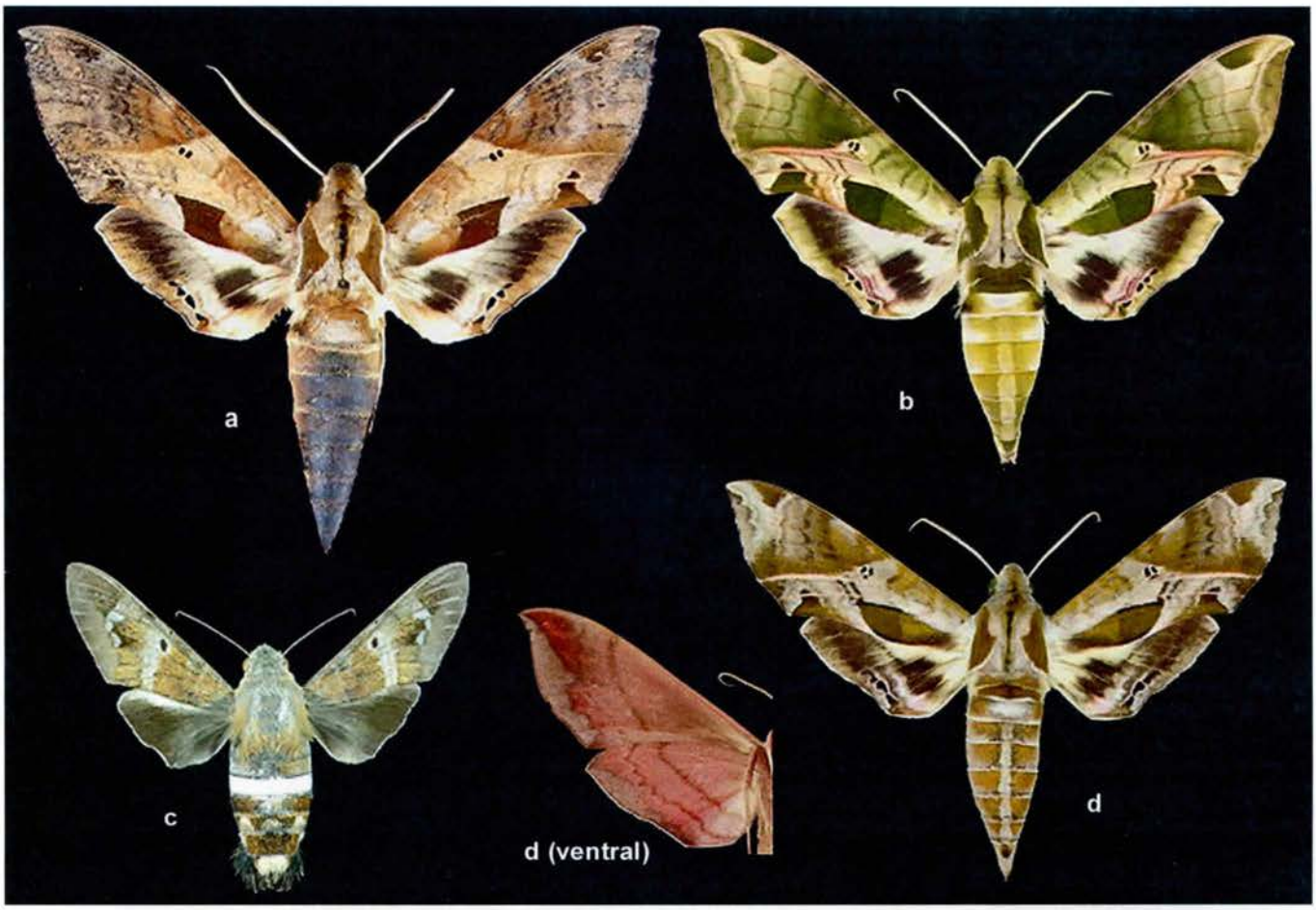

Fig. 1. a. ***Eumorpha satellitia*** male, b. ***Eumorpha pandorus*** male, c. ***Aellopos clavipes*** female, d. ***Eumorpha intermedia*** male, and pinkish-colored ventral wing surface.

In a review of the more recent sphingidae acquisitions of the Louisiana State Arthropod Museum (LSAM), I noted two specimens in particular needing documentation. The first is an adult male specimen of *Eumorpha satellitia* (Linnaeus) (Fig. 1a) captured March 24, 2001, lat./long. coordinates 30°47'N 91°15W, West Feliciana Parish, Louisiana, collector R.F. Souther. Fresh specimens of ***satellitia*** often have a pale greenish cast, and those occurring at the type locality Jamaica exhibit a stronger green coloration than mainland populations. This greenish cast of ***satellitia*** fades over time to brown. I have illustrated in Fig.1, two other similar species of the genus ***Eumorpha*** occurring in Louisiana from the Abita Springs Study Site (sec.24T6SR12E, 4.2 mi. NE of Abita Springs, LA): ***Eumorpha pandorus*** (Hübner) and ***Eumorpha intermedia*** (Clark) which were confused with ***satellitia*** in literature for numerous decades and still can be confused today. ***Eumorpha satellitia*** was first reported for Louisiana by Ottolengui (1894) as ***Philampelus licaon*** (Cramer). Later, (Clark, 1917) described ***Pholus satellitia intermedia***, type

locality: Baton Rouge, Louisiana. In 1971, Hodges incorrectly synonymized ***intermedia*** under ***E. pandorus*** (Hübner). In 1980, Brou proved ***intermedia*** was not a subspecies of ***satellitia*** nor a synonym of ***pandorus***, but a valid distinct species based on numerous attributes, including unique genitalia. Subsequently, Hodges (pers. comm.) indicated he had not actually seen ***intermedia*** at the time he synonymized it with ***pandorus***.

In Brou and Brou (1997), I surmised that Ottolengui's 1894 record of ***licaon*** (= ***satellitia***) was more likely the similar looking brown and olive-green colored ***intermedia***, a Louisiana species, unknown in 1894 would be described 23 years later by Clark as a subspecies of ***satellitia***. This West Feliciana Parish specimen (Fig. 1a) captured in 2001 confirms the presence of ***satellitia*** in Louisiana. The distal edge of the large median patch near the inner margin of the dorsal side of the forewings of the three ***Eumorpha*** species illustrated in Fig.1, are often diagnostic in distinguishing the three species, concave in ***satellitia***, convex in ***intermedia***, and somewhat straight in ***pandorus***.

The second specimen of note is a female of ***Aellopos clavipes*** (Rothschild and Jordan) (Fig. 1d), taken August 5, 1999, on Mobile Oil's Green Canyon 18-A platform in the Gulf of Mexico off the coast of Louisiana (Fig. 2), lat./long. coordinates 27°56'37", 91°01'45" collector Marshall Iliff. This platform was originally installed in 1986 and stands in water depth of 750 feet. This isolated platform is approximately 97 miles from the nearest shoreline. Fig 2 illustrates the location of this platform in the coastal waters midway along the state. Obviously a subject of future conjecture, I consider this a new Louisiana state record. This specimen is the one of 19 specimens of seven species of sphingidae listed by Russell (2005), as part of nearly 15,000 insects captured on oil and gas platforms in the northern Gulf of Mexico. This particular specimen was incorrectly identified in that report as ***Aellopos titan*** (Cramer). In the early 1970s, I identified a specimen of ***clavipes*** from in the collection of the LSAM captured at Bay St. Louis, Mississippi. Within the United States, adults of ***clavipes*** have been captured more commonly in southern Texas, and occasionally in southern Arizona, single specimens are known for Louisiana and Mississippi. Two other species of the genus: ***Aellopos fadus*** (Cram.) and ***Aellopos titan*** (Cram.) were first reported for Louisiana by von Reizenstein (1863), but have yet to be taken since.

Other noteworthy sphingidae records for Louisiana include a female specimen of ***Pseudosphinx tetrio*** taken on October 31, 2010, the third specimen taken at the Abita Springs study site, and a fresh female ***Eumorpha achemon*** (Drury) taken in 2010, the first taken at the Abita Springs study site in 28 consecutive years of light trapping at this location. Previously, ***achemon*** was only known in Louisiana from Natchitoches Parish in northwest part of the state. In Fig. 3, I illustrate phenotype variations of ***Lapara phaeobrachycerous*** Brou and in Fig. 4 and Fig. 5 of ***Lapara coniferarum*** (J.E. Smith) from the Abita Springs study site. ***L. phaeobrachycerous*** is still seldom collected anywhere in the southeastern U.S. since its description in 1994. Since Hurricane Katrina in 2005, both species of ***Lapara*** have become much scarcer at the Abita Springs study site, no doubt due to the tremendous loss of the mature pine forest as similarly occurred all along the Gulf Coastal States. These two species of ***Lapara*** are often mistakenly confused by lepidopterists and these images should aid in distinguishing the two entities. More often ***phaeobrachycerous*** exhibits one prominent postcellular dash of black scales on the forewings, unlike ***coniferarum*** which more often has two dashes.

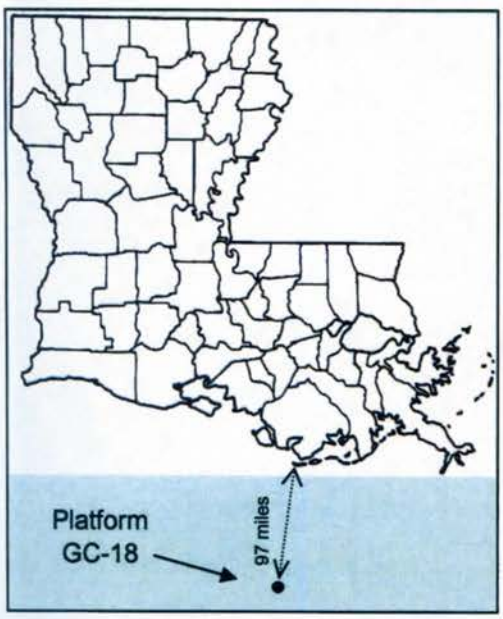

Fig. 2. Pictorial illustrating location of Offshore Oil Platform GC-18.

Following the initial 26-year Sphingidae of Louisiana study, Brou and Brou (1997) published a four year addendum (Brou and Brou, 2002). No further daily cataloging of Louisiana Sphingidae continued beyond those 30 consecutive years, though collecting has continued to present day.

I thank the following persons for their assistance and for providing access to the LSAM facilities: Christopher E. Carlton and Victoria M. Bayless.

Side note: Rodrigues Ottolengui (March 15, 1861 - July 11, 1937) was an American writer and dentist born in Charleston, South Carolina. In 1877 he moved to New York, where he would spend most of his adult life. A dental pioneer, Ottolengui was one of the first to use X-rays and was a specialist in orthodontics and root canal therapy. He was also interested in entomology, taxidermy, and photography. (Wikipedia, 2011)

Fig. 3. Phenotype variations of ***Lapara phaeobrachycerous*** males (a-f), females (g-m).

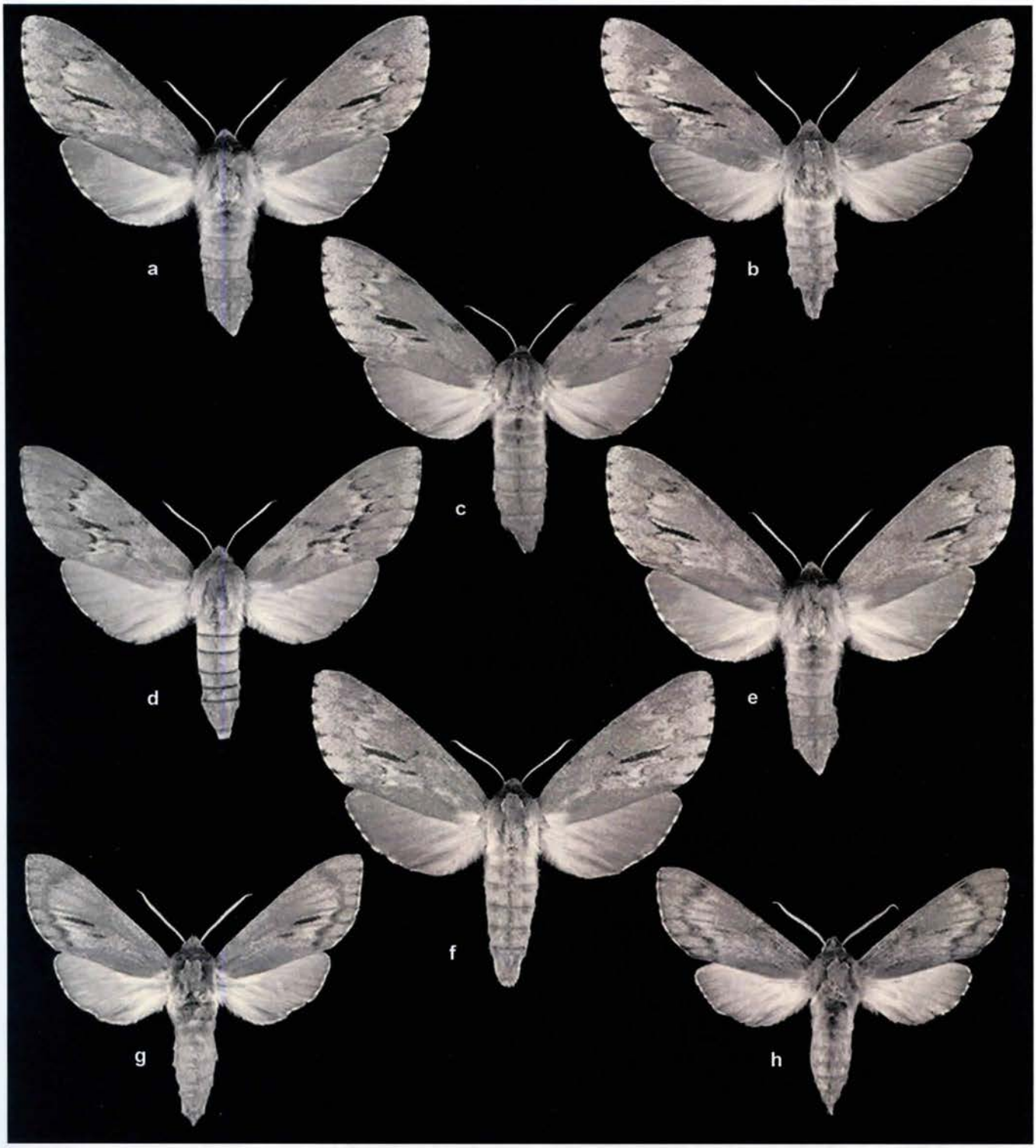

Fig. 4. Phenotype variations of ***Lapara coniferarum*** females (a-f), males (g-h).

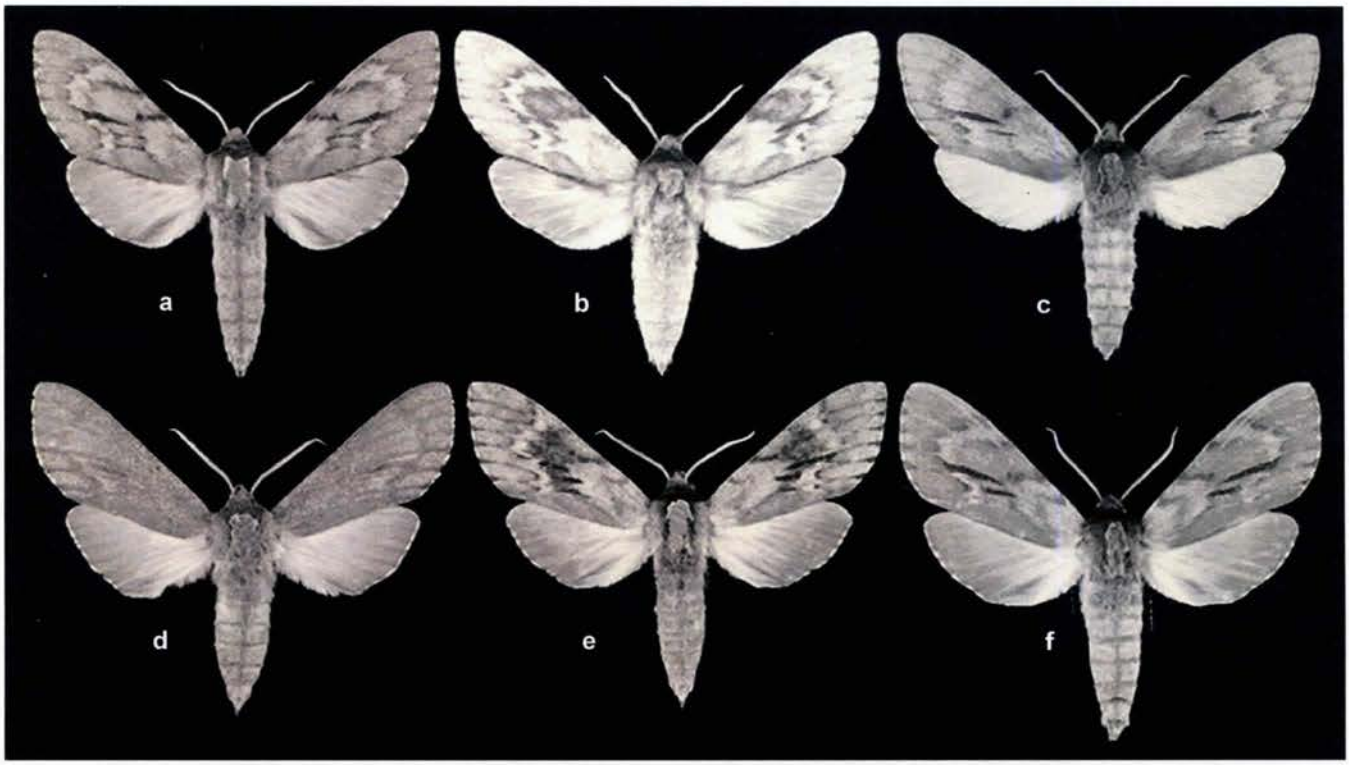

Fig. 5. Phenotype variations of ***Lapara coniferarum*** males (a-f).

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The following photos are by Irving Finkelstein - the joint meeting of the SLS / ATL Societies held in Gainesville, Florida, October 2011.

General View with Jackie Miller, Nancy Turner, Peter Eliazar, with back view of Jon D. Turner's head

James Adams (back), Jim Taylor, John Calhoun, Andy Warren, Debbie Matthews

James Adams (in background), Charlie Covell, Beth Patterson, Bob Patterson

Bill Russell, Arthur Shapiro in back

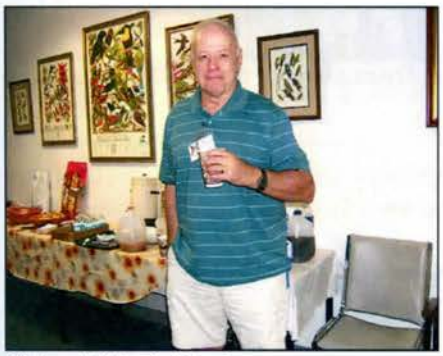
Tom Neal, Rick Gillmore, Jeff Slotten

Tom Emmel

Charlie Covell

Andy Warren and Art Shapiro

Bob Belmont and Art Shapiro



Richard "Andy"Anderson

Stephanie Stocks and Andrei Sourakov

James Hayden and Akito Kawahara

James Adams presenting his paper

Debbie Matthews and Jackie Miller

James Adams and Bill Russell

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TREASURER'S REPORT SLS FOR 2011

As of September 30, 2011:

Beginning Bank Balance with SunTrust of Gainesville as of January 1, 2011: **$4,463.76**

Ending Balance as of September 30, 2011: **$4375.94**

Deposits and Credits: **$4400.60** This includes dues, donations, collections from meetings and sales of old newsletters. Barry Lombardini, our Editor, thanks members who have given donations to the Society.

Bank Fees: **$16.52** . These include the following:

Electronic/ACH Debit St Collection item: **$ 0.52** ; Account Analysis Fee: **$4.00**; Deposit Correction Fee, April, 2011: **$6.00**; Deposit Correction Fee, May 31, 2011: **$6.00**

Withdrawals (postage, printing, supplies, meeting expenses): **$4471.90**

Newsletter printing, postage fees, and miscellaneous fees:

Printing newsletter Volume 32 #4: **$2080.49** (This is because of the cost of cartridges for a few newsletter issues. Our Editor, Barry Lombardini, states that it costs about **$900** per issue in cartridge ink - black and all the colors; **$200** for binding and **$100** for shipping to my office, and **$275** for my mailing which is an average of about **$1475** per issue. That is about **$5900** for the year. Fortunately, donations are able to cover over what our society can afford as dues and meeting fees are less than the cost of production.)

Postage newsletter Volume 32 #4: **$276.00**

Postage newsletter Volume 33 #1: **$281.46**

Printing newsletter Volume 33 #2: **$1480.65**

There are 157 paid members, 108 of whom are from Florida. The others are from all over the U.S. and Canada and one from Germany.

Suntrust sent a notice stating that beginning on October 1, 2010, the Southern Lepidopterists' Society Free Business Checking account will be converted to a Primary Business Checking account. There will now be a $1,000 average monthly balance requirement to avoid a $10 monthly maintenance fee.

Respectfully Submitted,
Jeff Slotten

THE *EUBAPHE* HÜBNER, 1823 (GEOMETRIDAE) OF LOUISIANA

BY

VERNON ANTOINE BROU JR.

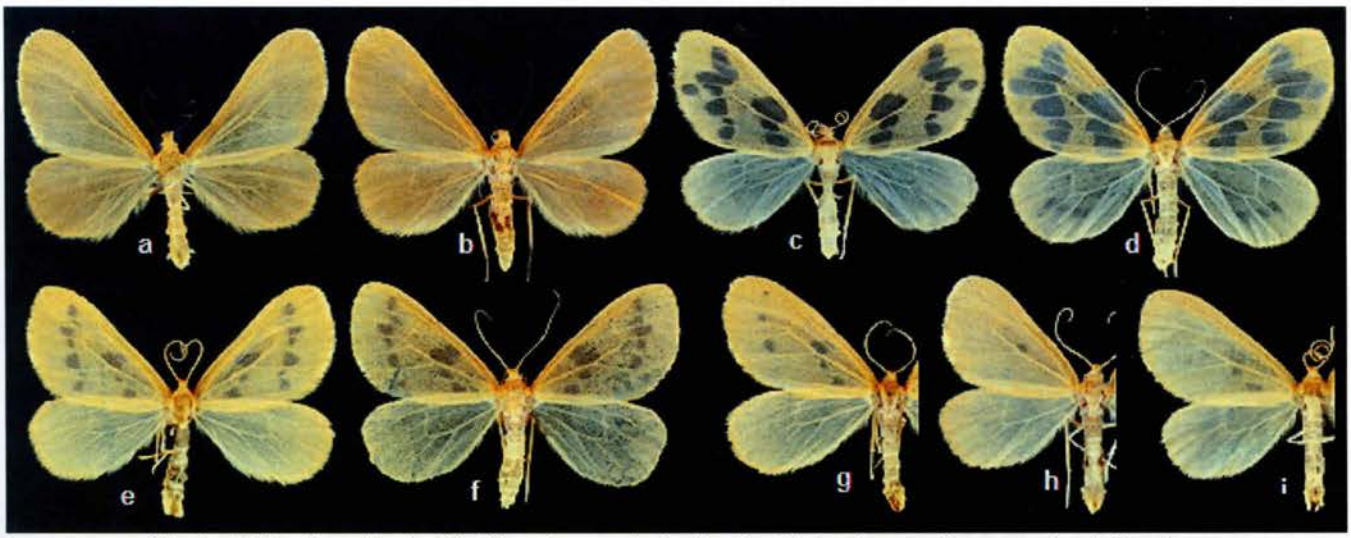

Fig. 1. ***Eubaphe unicolor*** (Robinson): a. male, b. female, ***Eubaphe mendica***: c. male, d. female, ***Eubaphe meridina***: e. male, f. female, g, h, j. male ***meridiana*** variants.

In the checklist, (Hodges, 1983), five species of the geometrid genus ***Eubaphe*** Hübner are listed. In Louisiana three species (Fig. 1) of this genus are presently known: ***Eubaphe unicolor*** (Robinson), ***Eubaphe mendica*** (Walker), and ***Eubaphe meridiana*** (Slosson). Heppner (2003) lists only two of these species to occur in Florida and their geographical ranges as: ***mendica*** to occur in North America: Nova Scotia to Florida and British Colombia to Texas and the range of ***meridiana*** in North America: New York to Florida and Kentucky to Texas.

A total of 1152 specimens of ***Eubaphe*** were logged for this study. The phenograms illustrating the flight periods for the three species are illustrated in Fig. 2, 3, and 4. The scarcest of the ***Eubaphe*** was ***unicolor*** for which the few dates of capture records indicated at least two broods. The remaining two species ***mendica*** and ***meridiana*** appear to have four annual broods similarly peaking April, June, August and October.

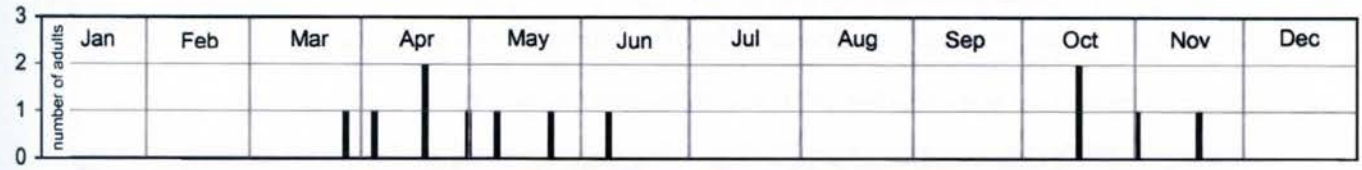

Fig. 2. Adult ***Eubaphe unicolor*** captured in Louisiana. n = 12

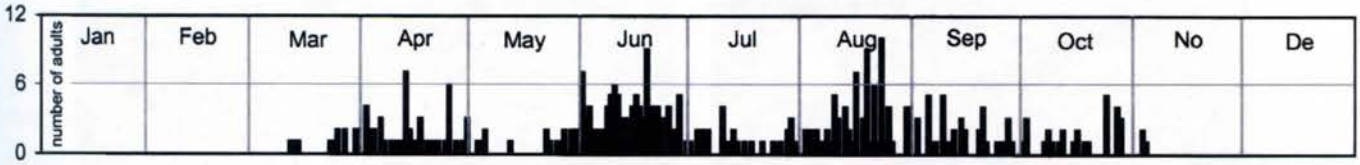

Fig. 3. Adult ***Eubaphe mendica*** captured in Louisiana. n = 347

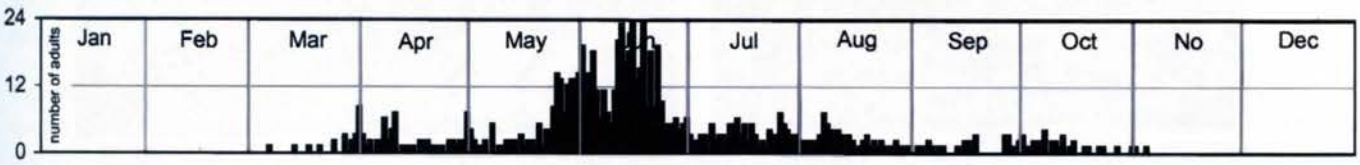

Fig. 4 Adult ***Eubaphe meridiana*** captured in Louisiana. n = 794

Fig 5. Parish records for ***Eubaphe unicolor.***

Fig 6. Parish records for ***Eubaphe mendica*** .

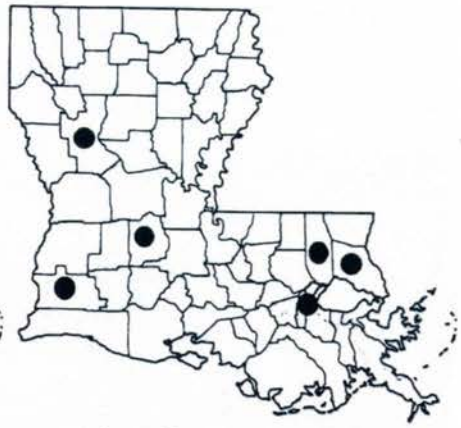

Fig 7. Parish records for ***Eubaphe meridiana*** .

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DEFINITIONS:

***Sympatric* (*sympatrically*) -** pertaining to closely related species of organisms which do not interbreed but occur in the same geographic area.

***Xeric* -** having dry or desert like conditions; adapted to a very dry habitat. Plants such as cacti are considered to be xeric plants.

***Sphagnum* -** a genus of highly absorbent, spongelike, grayish mosses found in bogs; peat moss.

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Flowers of "Miss Huff" lantana. Flowers are three-toned: youngest are yellow, oldest lavender. Flowers of another variety - "Son Rise" - are similar and equally attractive to butterflies.

Gull Fritillary butterfly on its favorite nectar plant, "Miss Huff" lantana.

Both photographs are by Gary Noel Ross from his Garden in Baton Rouge, Louisiana.

A NEW LOUISIANA STATE RECORD *PROBLEMA BYSSUS BYSSUS* (W. H. EDWARDS)

BY

KEVIN J. CUNNINGHAM

Since returning to collecting in 1992, I've dreamed of discovering a new state butterfly. In September 1996, I found what I thought to be Meske's Skipper *Hesperia meskei* (W. H. Edwards) in the northern part of Terrebonne Parish. After identifying the specimen (or so I thought) using the publication *"The Butterflies of North America"* (Scott, 1986), I enthusiastically contacted Charles Bordelon to submit the new record only to learn Mr. Bordelon himself had earlier (1991) captured this species in Vernon Parish.

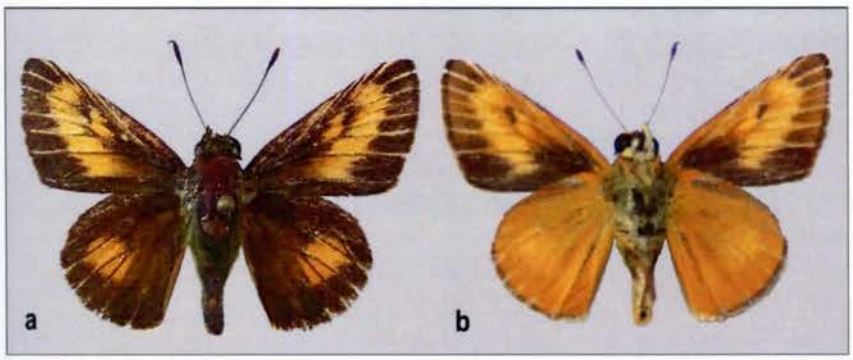

Fig. 1. ***Problema b. byssus*:** a. dorsal, b. ventral.

Recently, a fellow collector whom had asked for a picture of this specimen, relayed his doubts to me about it being a *'meskei'* and possibly being a *'pilatka'*. I sent a picture to Andrew Warren who confirmed it to be a *Poanes yehl*. Though my initial and later enthusiasm was dashed, I took comfort in knowing that still it was a Terrebonne Parish record.

Fig. 2. Parish record for ***Problema b. byssus***

On June, 2005, I captured a skipper in an area with slightly disturbed vegetation of Morehouse Parish, off of LA 142 near Chemin-A-Haut State Park (Fig. 2). Recently, Andrew Warren confirmed the identity of this specimen as ***Problema byssus byssus*** (W. H. Edwards)(Fig. 1). Andrew offered to dissect the genitalia if needed for further confirmation. Finally, and unequivocally my fist state record.

Literature Cited

Scott, J.A., 1986. *The Butterflies of North America.* Stanford University Press, Standford, California.

(Kevin Cunningham, E-mail: kncunning@charter.net)

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SLS 2011 ANNUAL MEETING MINUTES

After welcoming remarks and announcements by Jackie Miller, Chairman Brian Scholtens opened the 2011 Joint Meeting of the SLS and ATL at 9:00 A.M., Saturday October 15, and the program was underway. Throughout the program Saturday and on Sunday morning, the prescribed time limits per presentation were observed and the schedule was maintained, with appropriate breaks for the group photo, lunch, and short time outs for refreshment and socializing. This year the banquet was held in the front gallery of the museum, alleviating the need in past years to relocate to another part of town.

For those who could not attend the 2011 Annual Meeting, the full program is available on both the SLS and ATL websites. There were many excellent papers presented, some by seasoned pros, some by graduate students. Among the most noteworthy were John Calhoun's riveting depiction of Theodore L. Mead's exploration and lepidoptera discoveries in Colorado in 1871, documented in his recently discovered 1871 Journal, Arthur Shapiro's summation of his 39-year research project tracking the climatological and land-use records in an area of northern California and their impact on the lepidoptera, and James Adams' typically informative, lively and entertaining overview of the fluctuations in abundance among select lepidoptera species in Georgia.

Upon conclusion of the Saturday afternoon session at 4:30 and a short break, the SLS Business Meeting was convened by Brian Scholtens at 4:40. Although the printed program listed a separate Board Meeting at 5:00, all business was conducted, with all those present, in one continuous session.

In the absence of the Secretary, it was agreed that the Minutes of the 2010 Meeting would be distributed and approved at a later date. The Treasurer's Report was delivered, and it appears separately in this issue of the NEWS. It is timely to add that there are currently 157 paid members, the majority from Florida. The treasurer also assured the members present that the monies from the Annual Meeting registration will be equitably divided between SLS and ATL.

There were no other committee reports.

Under New Business, the question was raised as to the recurrent absence of reports from several State Coordinators. It was noted that information is not forthcoming to those coordinators, especially in states (*e.g.*, Arkansas) which have very few members. It was recommended that coordinators solicit input from the members in their state, and that e-mail addresses of all members be updated and provided to the coordinators.

The main item in New Business was the nomination and election of new Officers for 2011-2012. They are as follows:

Chairman: Debbie Matthews
Treasurer: Jeff Slotten
Secretary: Don Stillwaugh (conditional on his agreeing to serve another term)
Editor: J. Barry Lombardini
Members-at-Large: Tom Neal
Lary Reeves

All of the Officers were elected unanimously.

Brian appointed a committee, consisting of Charlie Covell, Brian Scholtens and Debbie Matthews, to look into the By-Laws, specifically for the purpose of making a change, if necessary, to include a student Member-at-Large.

A discussion followed regarding the Abbot Award, which has not been awarded for the past several years. It was agreed that a Nominating Committee be selected to draw up a list of nominees, to include two previous nominees who did not receive the award, and one new nominee. Also raised was the matter of field trips organized in conjunction with Annual Meetings. The members were reminded that the issuance of special use permits by agencies to collect on public lands requires that any specimens collected <u>not</u> go into private collections.

Brief reports on the two field trips on Friday, October 14, were presented. Marc Minno indicated that the day field trip to Gulf Hammock was excellent, with a good turnout of participants, perfect weather and some 26 butterfly species collected. Jeff Slotten noted that the night collecting at Kanapaha Botanical Gardens in Gainesville was only *"so-so,"* in part due to the full moon, resulting in relatively few moths at the sheets and in the traps.

Finally, there was a discussion of how to schedule the 2013 Meeting, as the Lepidopterists' Society will be holding its Annual Meeting at the McGuire Center. Considered were a possible SLS/ATL field meeting, or separate SLS/ATL sessions during the course of the Lepidopterists' Society Meeting. This will be decided at a later date.

The Business Meeting/Board Meeting adjourned at 5:35, allowing a little time to rest and prepare to gather for the evening Banquet, with lots of good food and informal camaraderie. The banqueteers regaled each other afterward with varied stories of their lepping adventures and misadventures over the years, and the evening concluded with the perennial climax, Door Prizes, hosted as always by Charlie Covell.

Sunday morning saw another full session of papers presented under the heading of SLS/ATL Conservation Symposium. At noon the formal sessions ended, and the ATL members convened for their Business and Board Meetings, and all the rest of this year's attendees exchanged parting words before heading off. Till next year!!!

Respectfully submitted by Irving L. Finkelstein
(for Don Stillwaugh, Secretary, who was unable to attend the Annual Meeting)

CONDICA CLAUFACTA (WALKER, 1857) (LEPIDOPTERA: NOCTUIDAE) IN LOUISIANA

BY
VERNON ANTOINE BROU JR.

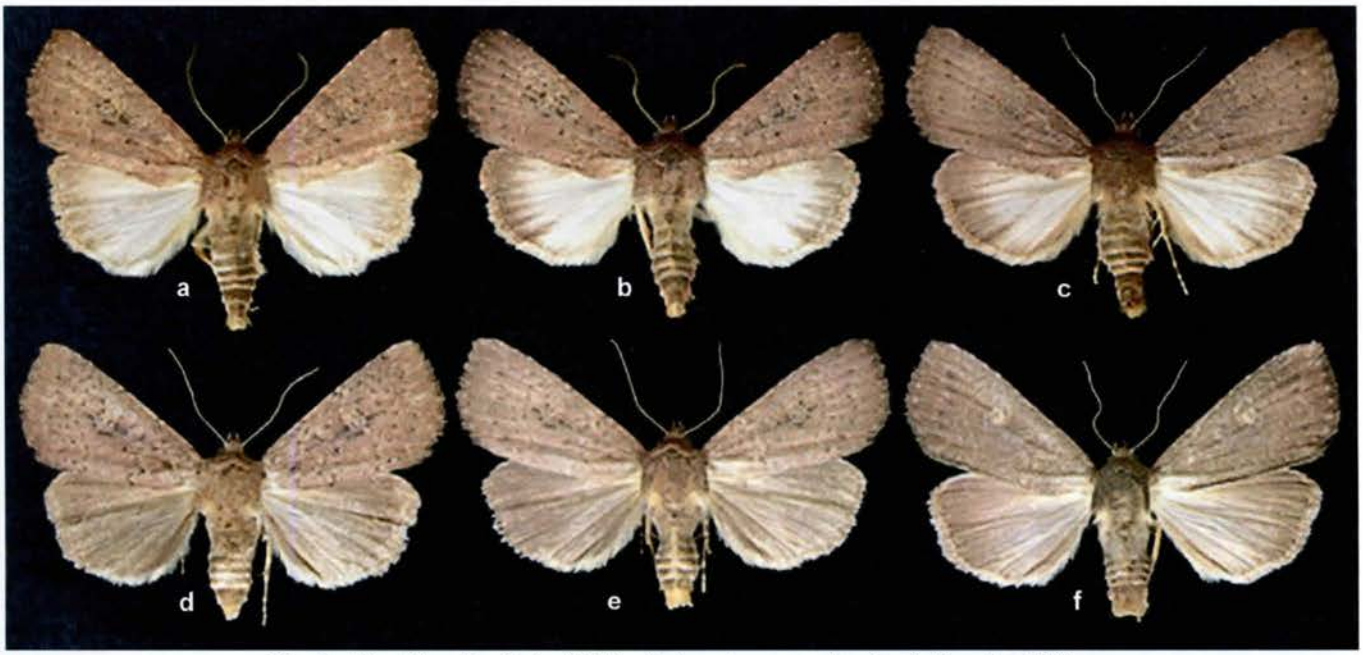

Fig. 1. ***Condica claufacta*** (Walker) phenotypes: males (a-c), females (d-f).

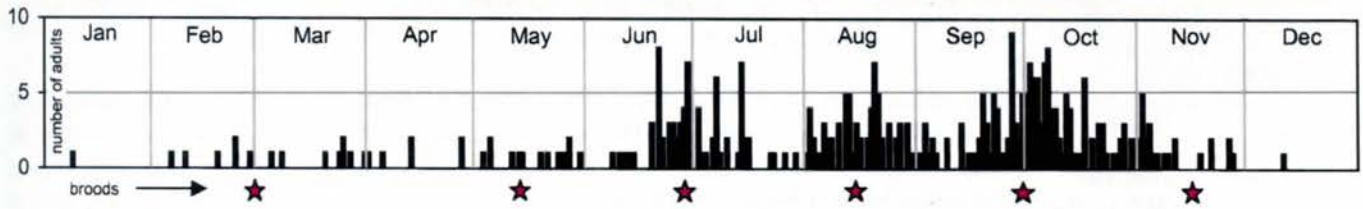

Fig. 2. Adult ***C. claufacta*** captured at sec.24T6SR12E, 4.2 mi. NE of Abita Springs, Louisiana. n = 352

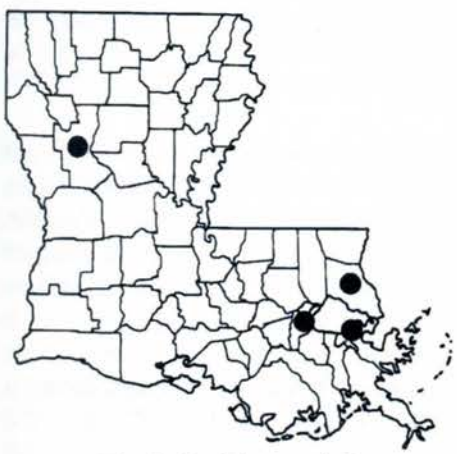

Fig. 3. Parish records for ***C. claufacta***.

I have taken the noctuid moth ***Condica claufacta*** (Walker, 1857) (Fig. 1) syn. ***C. cervina*** (Smith, 1900) in ultraviolet light traps for nearly four decades in Louisiana. This species was not previously reported for Louisiana. ***C. claufacta*** can often be misidentified with the very common species ***Condica sutor*** (Guenée, 1852) where it occurs sympatrically.

C. claufacta displays sexual dimorphism with respect to hindwing color, males exhibiting white colored hindwings with darker wing scales as a broad diffuse band along outer margins and females most often exhibiting entirely darker scaled hindwings.

There appears to be six annual broods of adults (Fig. 2), the initial brood peaking early March, the second brood peaking around mid-May with subsequent broods peaking at 46-day intervals. This species is also often captured in fermenting fruit bait traps.

The parish records are illustrated in Fig. 3.

Note: Literature Cited - None.

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

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TWIN SONS OF DIFFERENT MOTHERS

BY

CRAIG W. MARKS

On May 14, 2011, I was in Cameron Parish at one of the "pull-offs" on Highway 27E. I was looking for a couple of specific bugs, *Panoquina panoquinoides* and *Euphyes pilatka*, and this was my first stop of the day, around 9:45. The wind was blowing and the temperatures were in the low 70's, but the skies were clear and blue. I had already seen at least 20 Red-banded Hairstreaks, but nothing else. As I walked along a tree-line fronting a canal with an open field to my left, I noticed a small brown skipper move a few inches and land nearly at my feet. As I netted it, my thought was a female "Swarthy Skipper," *Nastra lherminier*. Later that night, when I gave it a closer look, I wondered if it might be a Neamathla Skipper, *N. neamathla,* instead (Fig. 1).

Fig. 1. *Nastra neamathla* (Neamathla Skipper) Cameron Parish, May 14, 2011

Fig. 2. *Nastra lherminier* (Swarthy Skipper) Rapides Parish, April 19, 2008

I am familiar with Swarthy Skippers, first finding it in 2008 during a NABA Count at Kisatchie National Forest in Natchitoches Parish. On that date, May 24, 2008, Jeff Trahan and I had seen several small brown skippers with absolutely no discernable identifying marks. They were flying along an old road through an area of grass-filled, open pine woods. After capturing a few, we concluded they were Swarthy Skippers. Since then, I've also found then in Rapides Parish during the months of March through May and July through September and Grant Parish (July and October) (Fig. 2). Swarthy Skippers have also been reported from fourteen other parishes: St. Tammany and Orleans (NABA Count Results); Beauregard and Desoto (Lambremont and Ross, 1963); St. Helena, Tangipohoa, Union and Madison (Lambremont, 1954); Caddo, Claiborne, Bienville, Bossier and Winn (J. Trahan, pers. comm.) and Sabine (K. Ellzey, pers. comm.).

However, I also was aware there was another *Nastra* skipper reported to be present along the coast in Louisiana. The Neamathla Skipper was recognized as a species in 1923 but, as several authors have noted, little has been learned of its life history and its range boundaries are still imprecisely known. Gayle Strickland, in an unpublished manuscript *circa* 1971, reported, "There is no known previous record of *N. neamathla* for Louisiana. The first specimen was a male taken on September 2, 1967, in Cameron Parish. The habitat was the wooded cheniers as described under *Amblyscirtes celia*. A second male was collected there on April 26, 1968, and an additional male and female which is probably this species were taken on September 13 and 14 respectively in 1969. The males were determined by genitalic examination. No specimens of *lherminier* have been collected on coastal LA and no *neamathla* has been collected inland."

I was able to make contact with Gayle, and he has given me access to his collection. Below are pictures of four *neamathla* from his collection (Figs. 3 and 4 on next page, from top to bottom): April 26, 1968, from Cameron Parish; April 20, 1969, from Calcasieu Parish; September 2, 1967, from Cameron Parish; and another from April 20, 1969, at Calcasieu Parish. Four *lherminier* are also shown (Figs. 5 and 6 on next page, again, from top to bottom): August 17, 1970, from St. Helena Parish; September 9, 1967, from East Baton Rouge Parish; July 6, 1968, from St. Helena Parish; and September 10, 1967, from East Baton Rouge Parish.

Since Strickland made those comments, *neamathla* has been reported during several NABA 4th of July Counts in Cameron Parish, centered at the Audubon Migratory Bird Sanctuary near Johnson's Bayou. In 1992 (July 18), Strickland and Gary N. Ross, both extremely familiar with Louisiana's butterfly population, reported two, and specifically indicated identity was verified by capture. In 1997 (July 20), Ross reported one. Through personal conversations with Rosemary Seidler, I am aware she also has sight records of that bug in Cameron Parish.

Aside from Strickland's two specimens from Calcasieu Parish, I am aware of two Louisiana reports for *neamathla* outside of Cameron Parish. In 2000 (July 16), Ross reported one as part of the NABA count centered at the Global Wildlife Center near Folsom LA., in St. Tammany Parish. He also reported two *lherminier* for that count. St. Tammany Parish is on the Louisiana-Mississippi border.

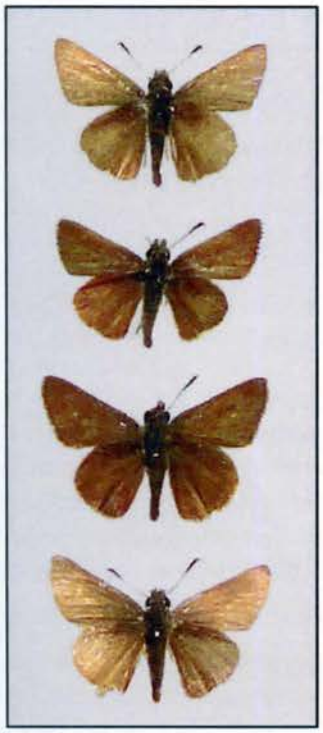

Fig. 3. ***Nastra neamathla*** **(dorsal)**

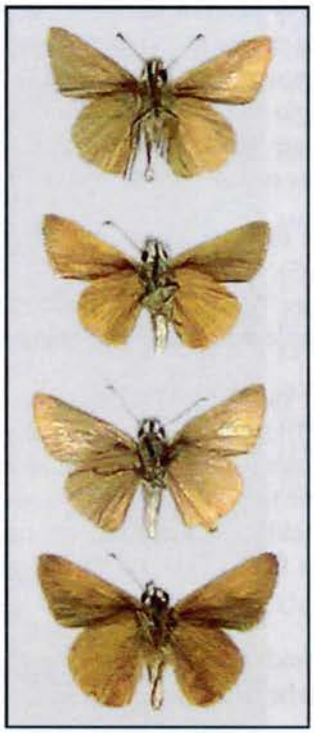

Fig. 4. ***Nastra neamathla*** **(ventral)**

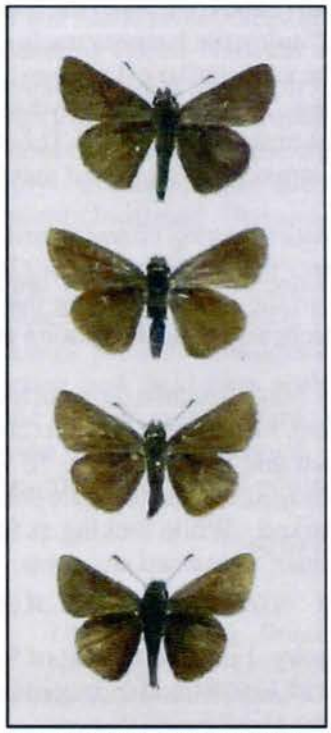

Fig. 5. ***Nastra lherminier*** **(dorsal)**

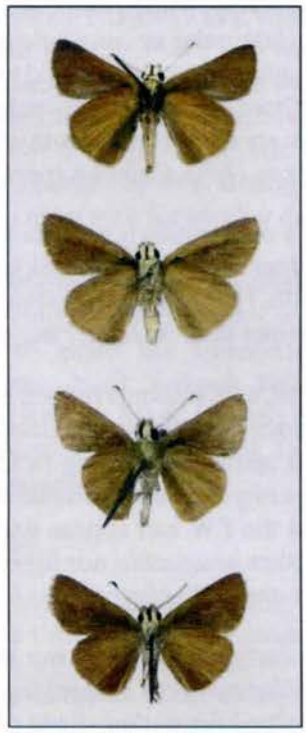

Fig. 6. ***Nastra lherminier*** **(ventral)**

In Mississippi, Mather and Mather (1958) listed *neamathla* as a species of "probable or possible occurrence in MS." Quoting Klots (1969) who identifying its range as "perhaps Gulf States," they noted a specimen was taken at Chickasaw Alabama in September (year not given). Ricky Patterson has reported specimens taken at Big Biloxi Recreation Area just north of Gulf Port, MS (pers. comm., dates unknown). So, although not directly on the coast like Cameron Parish, St. Tammany is still extremely close, and is less than one hour from Gulf Port. As such, the presence of *neamathla* there is not surprising.

The other report outside of Cameron Parish did surprise me. Specifically, there was a report of eleven *neamathla* during another count in 2000 (August 20), in Rapides Parish. Rapides Parish is located in central Louisiana, far from the coast. Where these bugs were seen, or who and how this determination was made are questions I cannot answer. As noted above, I have found *lherminier* in Rapides but not *neamathla*; however, during personal conversations with Strickland, he advised that he has also caught one *neamathla* in Rapides Parish, and the report referenced above should not be discounted outright.

So, given the location in Cameron Parish, had I found another *neamathla*? The habitat certainly matched what is reported, that being dry barrens and grassy spots but also at times, grassy marsh edges. However, as I did my research, I noted a caution by Cech and Tudor (2005), "It is difficult to distinguish *neamathla* from *lherminier* in terms of behavior and habitats, based on current knowledge," thus I continued my inquiry.

Klots (1951) indicated *lherminier* is distinguished mainly by lack of distinguishing characteristics, stating, "If you have a specimen that looks as neutral, dull, drab and undistinguished as possible, think of *lherminier*." He also stated that, "the recent description of *julia* from Texas makes it doubtful whether old records of *neamathla* from the Gulf States, Texas and north to Missouri refer to it or to Julia."

Scott (1986) reported *neamathla* as "like" *lherminier*, but that its range is the southeastern US, south of 32 degree latitude. The under hindwing (HW) is more yellow brown without light veins, and the under forewing (FW) has black that covers not more than one half and is blended into a yellow-brown tip. He reported that its habitat is open grassy pine forests in Florida, west to Harris and Galveston Counties of Texas. He stated that *julia* is "like" *neamathla*, but ranges further west and has two to five distinct yellow FW spots ("absent or a trace of two in *lherminier* and *neamathla*"). He also stated that all three fly together in Harris and Galveston Counties, and he suggested *julia* may hybridize with *neamathla* in these areas, though, "completely intermediate individuals are not seen."

Glassberg, Minno and Calhoun (2000) described the Swarthy Skipper as a small dark yellowish-brown skipper with slightly paler veining below ("enjoy the intricate tracing of the veins in the pale yellow on fresh individuals.") The Neamathla Skipper is said to be very similar to the more common and wide-spread Swarthy. Below, it is duller brown without the pale yellow veining. Above, it generally has two pale spots in median FW and especially two subapical FW spots that the Swarthy "almost always lack." The range was of *neamathla* described as all of Florida and east Texas. John Calhoun (pers. comm.) has suggested that this reflects confusion over the intervening area.

The one regularly reported distinguishing characteristic is that the veins on the under hindwing (HW) are slightly lighter on the Swarthy Skipper. Per Cech and Tudor (2005), the "light HW veins are distinctive." For *neamathla,* Klots (1969) reported spots on the upper forewing that are "a trifle more prominent than in *lherminier*, and less distinct than *N. julia*, "but practically all identification should be checked by the genitalia."

Well, as the photos reflect, my May specimen does not have the light HW veining as described and shown in the field guides [best shown in Glassberg, Minno and Calhoun (2000)], as well as Strickland's specimens; however, it also has NO spots. According to Cech and Tudor (2005), "if it has essentially no field marks at all, it is likely to be a Swarthy." They also acknowledged that the two pale dots on the central FW of *neamathla* can be variably expressed, and the FW can appear unmarked. While looking at Strickland's pictured specimens, I noted that none of them, neither *neamathla* nor *lherminier,* possessed any spots. In fact, Stickland had 12 specimens of these two bugs and not one had any spots.

To further complicate my inquiry, I noticed that all of Strickland's *neamathla* specimens were lighter colored than his *lherminier*. On speaking with him, Strickland noted that he had reached the same conclusion. My specimen better matched the darker shade of his *lherminier*.

Again, presented with no clearly definitive answer, I continued my research, turning to Tveten and Tveten (1996) since *neamathla's* range had been documented in their area of study. They reported that all three *Nastras* known from the US overlap in the Houston area, and emphasized that they are extremely difficult to separate in the field. *Nastra lherminier* was described as sometimes having a trace of two light spots in the FW, while *julia* has 2-5 light spots on the FW. They also state *neamathla* "sometimes" has light minute spots on the FW. Both *neamathla* and *julia* lack any pale veins on under HW. These authors (and others) suggest dissection and microscopic examination of genitalia as the best proof of identity. They also reference studies by Mike Rickard of specimens from the east, west and middle of this region (where specimens were intermediate) that suggest *neamathla* and *julia* were a clinal species. Cech and Tudor (2005) also mentioned this potential.

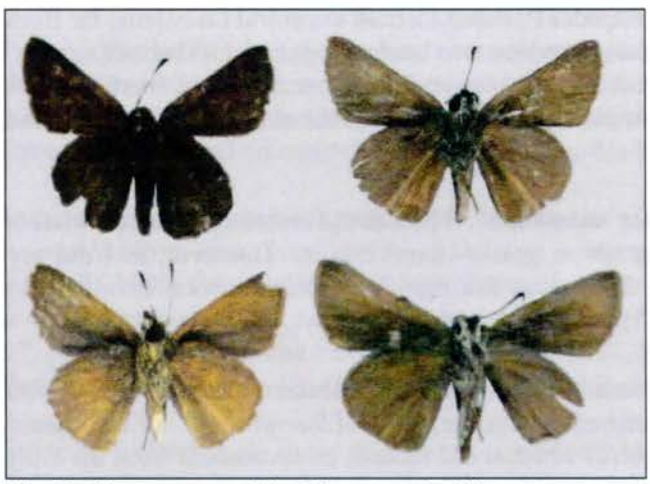

Fig. 7. *Nastra neamathla*, Cameron Parish, October 16, 2011

I felt I needed more specimens, and returned to Cameron Parish in June and August, 2011, but found none. In October, I saw seven. As I believe the photographs reflect (Fig. 7), my mystery seems solved, and the May bug from Cameron Parish is *neamathla.* Specifically, the skippers taken in October from central Cameron Parish in the Creole area match the *neamathla* taken by Strickland in Cameron and identified by genitalic examination.

None of the Neamathla Skippers seen in Cameron Parish (to include those collected by Strickland), possess any spots. In fact, none of the Swarthy Skippers seen by me and/or included in Strickland's collection have any spots. Also, the dorsal coloring appears to vary from light to dark. So, from the standpoint of making a field determination, the only readily apparent distinguishing characteristic would be the veining on the lower ventral wings.

I intend to pursue microscopic examination of the genitalia of these specimens with the assistance of Gayle Strickland. As John Calhoun has warned me, even though I have tried to weigh as many characters as possible and see what the majority seem to indicate, the genitalia may invalidate that ID. With help from more knowledgeable people like Gayle and John, I hope to learn how to differentiate the genitalia of the two.

But, as is sometimes the case, one riddle solved can then give rise to another riddle. In September, 2011, while with

Fig. 8. Could *Nastra neamathla* and *Nastra lherminier* be hybridizing in southwest Louisiana (Cameron Parish), September 11, 2011?

Holly and Mark Salvato in an area along Highway 27E within the Cameron Prairie National wildlife Refuge, we saw what we initially thought were three *neamathla*, two of which were mating (Fig 8). However, after looking at Holly's pictures I had doubts as one had the light HW veins diagnostic of Swarthy. Could *lherinier* and *neamathla* be hybridizing in southwest Louisiana? That answer must wait for another day.

I would like to thank several people for their invaluable assistance as I put this article together. First, I thank Gayle Strickland for his willingness to share his knowledge, collection and field data with me. Next, I thank Hollie Salvato for her great picture, as well as Mark Salvato for referring me to John Calhoun. Finally, I would thank John for his interest, input and editing suggestions.

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(Craig W. Marks, 106 Duncan Circle, Lafayette, LA 70503; E-mail: cwmaple@aol.com)

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Dwarf purple angel's trumpet (Double flower variety) in flower bed between walkways

Althaea or Rose of Sharon *(Hibiscus syriacus)*, a species within the mallow family. In our area, serves as one of the host plants for the Gray Hairstreak.

[Both photographs are by Gary Noel Ross from his Garden in Baton Rouge, Louisiana.]

GORGONE CHECKERSPOTS IN GEORGIA REVISITED

TEXT BY
PAULETTE HAYWOOD OGARD
PHOTOGRAPH BY
SARA BRIGHT

When last we wrote of Georgia's intrepid Gorgone Checkerspots (*SLS News*, Vol. 33 NO. 2, 2011), we left readers to ponder two cliffhangers: would a second flight follow their initial spring emergence; and what was the true identity of their mysterious helianthus host plant? Happily, both questions have now been answered.

On June 6, 2011, Sara Bright and I re-visited the Cooper's Furnace Day Use Area to look for a second flight of Gorgone Checkerspots (*Chlosyne gorgone)*. Conditions were extremely hot and dry, and little was blooming streamside or along the roadway. The power easement's lower elevation was virtually flowerless but as it ascended, blossoms of daisy fleabane (*Erigeron* sp.), Butterfly Milkweed (*Asclepias tuberosa*), Whorled Tickseed (*Coreopsis major*) and Slender Mountain Mint (*Pycnanthemum tenuifolium*) began to dot the landscape. Pearl Crescents, Variegated Fritillaries, and Buckeyes were visiting these flowers. We were excited to see that five Gorgone Checkerspots were also in their company. The gorgones were nectaring on Slender Mountain Mint.

Giant or Tall Sunflower (*Helianthus giganteus*)

Establishing the identity of the sunflower used as the checkerspot caterpillar host at this site required us to call in reinforcements. Fortunately James R. Allison, botanist extraordinaire and self-described *"novice butterflier,"* was willing to help. When he visited Cooper's Furnace Day Use Area in early October, he found the plants in full bloom and identified them as *Helianthus giganteus*—commonly called Giant or Tall Sunflower. Although this species ranges throughout the eastern United States, its presence on this steep power cut is somewhat puzzling. Habitat is typically described as swamps, wet thickets, moist woods, and marshes. Jim commented that he is *"accustomed to seeing it in moist sunny places with calcareous soil."* So how and why did it end up here? Will it continue to thrive? Will the Gorgone Checkerspot population persist over time? Once again, we are left with cliffhangers!

The authors are grateful to Jim Allison for sharing his botanical expertise to this project; and to wildflower expert Jan Midgley, who contributed plants as well as her own wealth of native plant knowledge.

(Paulette Haywoo Ogard, E-mail: habitatdesigns@hotmail.com; Sara Bright, E-mail: sarabright@aol.com)

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WELCOME TO OUR NINE NEW MEMBERS

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Leslie Angel
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Fort Myers, FL 33913

Jim R. Goetz
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Laredo, TX 78045

Reuben Judd
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Gainesville, FL 32601

James Monroe
1799 Second Street
Beaver , PA 15009

Steve Johnson
1068 Reagan Street
Sunbury, PA 17801

John F. Douglas

Cassandra Romero

Mark J. Simon

FIRST ENCOUNTERS: A (MOTH) NIGHT TO REMEMBER

BY

PARKER BACKSTROM [1] AND J. MERRILL LYNCH [2]

Currently 175 species of butterflies are listed as occurring, or as having occurred, in North Carolina (LeGrand and Howard, 2011). A definitive number for the moth species found in the state, however, is more elusive. To date approximately 1,450 species of macro-moths have been entered into the database of the North Carolina Natural Heritage Program, considered a fairly thorough accounting (Steve Hall, pers. comm.). Assuming a roughly 1:1 ratio of macro-moths to micro-moths (J. Bolling Sullivan, pers. comm.), approximately 3,000 species of moths occur in North Carolina, though this is almost certainly conservative due to the incomplete understanding of the micro-lepidopterans found in the state.

In early 2010 an internet listserv was created to give moth enthusiasts in North Carolina a venue through which to exchange questions, relay experiences, and share photographs having to do with moths. North Carolina's listserv was preceded by several months by a similar listserv created for Tennessee "moth'ers." Today many of us subscribe to both. Despite the relatively modest numbers of subscribers (currently 39 and 45 respectively), the opportunity for like-minded individuals to connect with one another has helped foster an appreciation in both states of this largely underappreciated group of lepidopterans.

Until recently the number of resident moth'ers in North Carolina was limited to a handful of collectors and biologists. Since the creation of the listserv, the geographic distribution of subscribers has greatly expanded sampling both across the state and throughout the year. Within the past year-and-a-half listserv members have documented a number of first state records, such as *Arcutelphusa talladega*, Bisected Honey Locust Moth (*Syssphinx bisecta*), Hop Angle Shades (*Niphonyx segregata*), Lost Sallow (*Eupsilia devia*), Immigrant Pinion (*Lithophane oriunda*), and *L. semiusta*, as well as provided a better understanding about the timing and distribution of lesser known and infrequently observed species.

In early 2011 moth'ers in Tennessee and North Carolina began planning for a night dedicated to the observation of moths. Individuals and teams of people would choose a local site to survey then have 24 hours in which to record as many species of moths as possible. This would be a fun way for the region's moth enthusiasts to share their passion with one another, and the information collected would help contribute to a better understanding of the region's lepifauna. This initiative was dubbed "Moth Night." The date chosen was July 30, 2011, when moth diversity across the state should be near its zenith. Nine o'clock a.m. was arbitrarily chosen as the starting time to give moth'ers the opportunity to find day-flying species as well. The effort would conclude at 9:00 a.m. on July 31. Word was circulated as widely as possible in the hope that as many people as possible would participate. Ultimately, moth'ers from North Carolina, Tennessee, Virginia, Georgia, and Florida took part. Brian Bockhahn, a park ranger at North Carolina's Falls Lake State Park, served as coordinator for the event.

The purpose of Moth Night was threefold:

- RESEARCH – To count and inventory moths at state parks, county parks, backyards, *etc.*
- EDUCATION – To increase awareness of moths and mothing among the general public through programs, night hikes, light trapping and counting.
- COMPETITION – To compete for the highest total in a number of categories, including: greatest number of taxa recorded; greatest numbers of individuals; highest total species in each state; highest total species per backyard (defined as fewer than 10 acres); greatest number of counters; most time spent counting; and rarest moth (as voted upon by the members of the listservs).

More than anything, though, Moth Night was an excuse to get out and do what we all love to do, delve into the diverse nocturnal lepifauna found in our respective states.

Like much of the country, North Carolina suffered under interminably hot weather for much of the summer of 2011. The average daily high temperature at the Raleigh-Durham International Airport for the month of June was 80.5° F, the third warmest on record for that month, while the average high temperature for the month of July was 83.7° F, the warmest on record (National Weather Service). Five consecutive days with a maximum high of 100° F or higher

between July 20 and 24, also a record, more or less summed up the interminable feel that the summer had here. The combination of unseasonably hot temperatures and continuing moderate to severe drought conditions across most of the eastern two-thirds of the state may explain why moth numbers were noticeably reduced from recent summers past. By contrast, in the mountains more moderate temperatures and average or above average precipitation levels resulted in moth'ers there enjoying much better species diversity and individual numbers. Given this lead up to Moth Night, nobody knew what such a dedicated effort would bring.

The authors met at 7:00 p.m. on July 29 at Merrill Lynch's home in Watauga County, North Carolina. Merrill's home, Echo Valley Farm (EVF), would serve as our base for the next couple of nights. The farm is located about 15 miles north of the town of Boone and less than one mile from the Tennessee border. At an elevation of 3,400 feet, it is nestled near the headwaters of the North Fork of the New River. Merrill has been sampling moths on his property since 2009. To date he has recorded 930 species, including rare and unusual species for the state such as Gold-spotted Ghost Moth (*Sthenopis auratus*), Oval Abrostola (*Abrostola ovalis*), and Barred Itame (*Speranza subcessaria*), as well as the aforementioned *Eupsilia devia*, *Lithophane oriunda*, and *L. semiusta*.

The area is dominated by a small mountain range known as the Amphibolite Mountains, which extend from Rich Mountain, just north of the town of Boone in Watauga County, to Phoenix Mountain, located near the town of West Jefferson in Ashe County, a distance of about 25 miles. These mountains are underlain by amphibolite, an uncommon rock type which contains high levels of magnesium and iron and which weathers to high pH soils. The range is characterized by a dozen or so peaks, with summits ranging from around 5,000 feet to a maximum of 5,580 feet at Snake Mountain. The Amphibolite Mountains are designated by the North Carolina Natural Heritage Program as Nationally Significant and contain more than 90 rare and endangered plants and 25 rare animals. It is also the most important area in North Carolina for disjunct northern plant species. The range is dominated by rich northern hardwood forests containing a number of tree species such as sugar maple (*Acer saccharum*), white ash (*Fraxinus americana*), black cherry (*Prunus serotina*), tulip poplar (*Liriodendron tulipifera*), buckeye (*Aesculus* spp.), American basswood (*Tilia americana*), yellow birch (*Betula alleghaniensis*), American beech (*Fagus grandifolia*), and northern red oak (*Quercus rubra*). The mountains also contain the largest aggregation of highly endangered Southern Appalachian bogs remaining in the Southeast and a number of pristine examples of High Elevation Rocky Summit community, which support some of the world's largest populations of very rare, federally-listed plants such as Heller's blazing star (*Liatris helleri*), mountain bluet (*Centaurea montana*), and spreading avens (*Geum radiatum*). Evergreens are notably scarce due to the high pH soils, but there are scattered patches of Carolina hemlock (*Tsuga caroliniana*) and a few stands of white pine (*Pinus strobus*) and Canadian hemlock (*T. canadensis*). There is also one small area of native red spruce (*Picea rubens*) that contains many disjunct plant and animal species. Many former pastures have been planted in Fraser fir (*Abies fraseri*) Christmas tree plantations, and there are scattered farms and small communities imbedded across the landscape.

The equipment we employed for Moth Night at EVF was one 160 watt mercury vapor lamp illuminating two sheets located in the front yard near a small stream; two white sheets placed 50 to 100 feet from the mercury vapor lamp, each illuminated by a 15 watt fluorescent black light; and two 15 watt compact fluorescent white lights illuminating the exterior walls of two buildings. With a New Moon and above average night time lows forecasted for July 30, our hopes for good mothing were high.

In advance of Moth Night, we scouted out a site on public land, located near one of the Amphibolite Mountain peaks, as another place to set up lights. The site we chose held interest to us because of the possibility that Great Tiger Moth (*Arctia caja*), a species of considerable rarity in the southern Appalachian Mountains and one neither of us had ever seen, might be found there. It is believed that the state's first record of this Holarctic species was of a single specimen observed by Tom Neal in 1963 mounted in a display case in the visitor's center at Mt. Mitchell State Park in Yancey County. A mere 40 years later, on July 21-23, 2006, Tom returned to collect a series of 21 specimens of *A. caja* along a road leading to Mt. Mitchell, at an elevation of about 5,000 feet (Tom Neal, pers. comm.). (We would subsequently learn that Jeff Slotten and Rick Gillmore returned to the Mt. Mitchell area in late July 2011 and once again encountered good numbers (*fide* Tom Neal)). To our knowledge the only other record of *A. caja* for North Carolina was a single specimen collected by J. Bolling Sullivan at Elk Knob State Park on August 10, 2010 (pers. comm., *Southern Lepidopterists' News*, Vol. 33, No. 3, pg. 147). Apart from these North Carolina records, the species is not known in eastern North America south of the Adirondack Mountains.

By 7:30 p.m. on July 29, we had finished setting up lights at EVF and set out for our site in the Amphibolites, located

Fig. 1. Hawthorn Underwing (*Catocala crataegi*)

Fig. 2. Lettered Habrosyne (*Habrosyne scripta*)

Fig. 3. Pink-patched Looper (*Eosphoropteryx thyatyroides*)

Fig. 4. Gray Spruce Looper (*Caripeta divisata*)

in classic hardwood forest adjacent to a small glade at an elevation of approximately 4,930 feet. There we set up a no-kill bucket trap and 15 watt black light. About 100 feet away from the trap site we set up a second black light and a sheet.

Between 9:00 and 10:30 p.m. we observed moderately good moth activity. The overwhelming majority of moths that appeared in the first hour were *Scoparia spp.*—Double-striped (*biplagialis*) and Many-spotted (*basilis*) primarily—though we also saw more enticing species such as Hawthorn Underwing (*Catocala crataegi* – Fig.1); Tufted Thyratirid (*Pseudothyatira cymatophoroides*), and the snappy looking Lettered Habrosyne (*Habrosyne scripta* – Fig. 2).

With plans to return to the site pre-dawn the following day, we returned to EVF at 10:30 p.m. Despite favorable conditions, moth activity would prove to be rather disappointing, with common species such as Exasperating Platynota (*Platynota exasperatana*), Maple Webworm (*Pococera asperatella*), Canadian Melanolophia (*Melanolophia canadaria*), Ferguson's Scallop Shell (*Rheumaptera prunivorata*), and Yellowhorn (*Colocasia flavicornis*), making up a bulk of the species present. Pink-patched Looper (*Eosphoropteryx thyatyroides* – Fig. 3) was nice to see and helped alleviate some of the disappointment. We made the rounds between several sheets until about 1:30 a.m., tallying about 75 species, down significantly from the 125 to 150 species Merrill had been recording nightly as recently as July 27.

We arose at 4:00 a.m. on July 30 and did a quick check of the sheets, finding Friendly Probole (*Probole amicaria*), Blind-eyed Sphinx (*Paonias excaecata*), Variable Zanclognatha (*Zanclognatha laevigata*), and Scarlet Underwing (*Catocala coccinata*) among the cast of characters that had arrived in the interim. But with anticipation building we made our way back to the Amphibolites.

Never having seen *Arctia caja* and knowing next to nothing about the species in North Carolina—was the date too early?; had we set up at the proper elevation, in the proper habitat?—our hopes were high but our expectations low. A cursory examination of the bucket trap found good numbers of moths. Basswood Leafroller (*Pantographa limata*), *Aglossa costiferalis*, Spruce Needleworm Moth (*Dolichomia thymetusalis*), and False Underwing (*Allotria elonympha*) were among the species we found clinging to the outside of the trap and resting on nearby vegetation. Geometrids were well represented with Gray Spruce Looper (*Caripeta divisata* – Fig. 4), Dark-banded Geometer (*Ecliptoptera atricolorata*), Double-banded Carpet (*Spargania magnoliata*), and Welsh Wave (*Venusia cambrica*), putting in appearances, the latter three in good numbers. Pink-shaded Fern Moth (*Callopistria mollissima*), Splendid Dagger (*Acronicta superans*), Hitched Arches (*Melanchra adjunct*), and Olive Arches (*Lacinipolia olivacea*), were a few of the noctuids we saw.

After 20 minutes, as we readied ourselves to continue on to our other set-up, Merrill suddenly exclaimed excitedly "HEY! HEY! HEY!" and pointed at the ground. Nestled in among the grass and decaying leaves just a couple of feet away was the object of our desire—*Arctia caja*, and a rather fresh specimen at that (Fig. 5, next page)! Hands

Fig. 5. *Arctia caja*

reached for cameras and we scuttled around taking lots of photographs, expressions of "Please, after you," punctuated by the occasional "Move out of my way". It quickly became apparent, though, that urgency was hardly necessary with this large, docile beauty. Once documentary shots were taken, it permitted us to gently relocate it to a place of safety where we could more leisurely appreciate its beauty (Fig. 6). Being the first to photograph a living *A. caja* in the wild this far south, to the best of our knowledge, was pretty cool. Parker soon spotted a second one, a bit more tattered than the first but no less beautiful. That we'd managed to avoid trodding upon the moths was a great relief—a flattened first look would have been very disappointing for us, and even more so for the moth! With whatever pressure we'd put upon ourselves to find this mythical beast now alleviated, there was virtually no way the rest of the weekend could be anything less than a smashing success.

Fig. 6. J. Merrill Lynch

With curiosity piqued and an intoxicating optimism about what might lie in wait for us, we made our way to the sheet. Much to our delight, it, too, was covered with moths. We would find two additional *A. cajas* as well as *Choristostigma roseopennalis*, *Speranza subcessaria*, a number of Hemlock Loopers (*Lambdina fiscellaria*) and Horned Spanworm Moths (*Nematocampa resistaria*), a few Straight-lined Plagodis (*Plagodis phlogosaria* – Fig. 7), and an Ilia Underwing (*Catocala ilia*), as well as lots more *S. magnoliata*, *V. cambrica*, and *Scoparias*. There was a variety of notodontids present—Angulose Prominent (*Peridea angulosa*), Gray-patched Prominent (*Dasylophia thyratiroides* – Fig. 8), Mottled Prominent (*Macrurocampa marthesia*), and Wavy-lined Heterocampa (*Heterocampa biundata*), among them—as well as a number of *Acronictas*, including Unmarked (*innotata*), Ochre (*morula*), Ovate (*ovata*), Medium (*modica*), and Hesitant (*haesitata*). Other common species included Oak Webworm (*Archips fervidata*), Snowy Geometer (*Eugonobapta nivosaria*), numerous Painted Lichen Moths (*Hypoprepia fucosa*), Leconte's Haploa (*Haploa lecontei*), and many Banded Tussock Moths (*Halysidota tessellaris*).

Fig. 7. Straight-lined Plagodis (*Plagodis phlogosaria*)

Fig. 8. Gray-patched Prominent (*Dasylophia thyratiroides*)

After we'd identified as many of the moths as we could on the sheet we returned to the bucket trap. When we opened it we were thrilled to find seven more *A. caja* resting quietly inside. We would end up seeing a total of 14 of this beautiful arctiid this morning (Fig. 9, next page). Being that we'd hoped to luck into a single individual, we were more than pleased. It was definitely a moth worth waiting, and working, for.

As the light came up and the moths began dissipating back into the woods, Merrill left to accompany patrons of the Nature Conservancy, for which he works, on a nature hike. Parker bided his time at the site until 9:00 a.m. rolled around—the official start of Moth Night—so he could ensure that as many of the remaining species, including *A. caja*, made it onto the official list. If nothing else, we were pretty confident that we'd take home the "rarest moth" award.

Hoping for encounters with day-fliers such as *Hemaris* or *Thyris*, a casual attempt was made at some daytime mothing, but Three-spotted Fillip (*Heterophleps triguttaria*) and White-striped Black (*Trichodezia albovittata*) were among the few new additions.

Fig. 9. *Arctia caja*

Poised now to kick Moth Night into high gear we reconvened about 6:00 p.m. on July 30. Given the success we'd had at the *A. caja* site the night before, we decided to return there to again set up our lights. Unlike the night before, and again planning a pre-dawn return, we did not linger after we'd set up. Back at EVF diversity and numbers were again something of a disappointment, a sentiment undoubtedly shared by Jabba, the resident over-sized American Toad that hangs out beneath one of the lights. By 10:30 p.m. spears of lightning began to pierce the sky and a moderate rain began to fall. This seemingly negative turn would actually prove beneficial by focusing our attention on a couple of areas that were protected from the rain, areas that might have not been given such attention otherwise. We scrutinized the walls around the fluorescent white lights for micro-moths. A number of species that might not otherwise have been seen—such as Gooseberry Barkminer (*Pseudopostega quadristrigella*), Yellow Wave (*Hybroma servulella*), *Philonome clemensella*, *Caloptilia bimaculatella*, *Leucospilapteryx venustella*, Spotted Tentiform Leafminer (*Phyllonorycter propinquinella*), and Bronze Alder Moth (*Argyresthia goedartella*)—helped pad a list that was becoming obvious would need as much padding as possible.

Fig. 10. Red-shawled Moth (*Pseudasopia intermedialis*)

After grabbing a full hour-and-a-half of sleep it was up again at 3:00 a.m. on July 31 for one final canvassing of the sheets at EVF, before leaving again for the Amphibolite Mountains. We managed to tally a number of new species, including Terrenella Bee Moth (*Aphomia terrenella*), Gray Scoopwing (*Callizzia amorata*), Red-shawled Moth (*Pseudasopia intermedialis* – Fig. 10), and Walnut Sphinx (*Amorpha juglandis*). At the mountain site the diversity was down from the previous morning, but we got to add a few new species such as Cherry Leaf-cone Caterpillar Moth (*Caloptilia invariabilis*), Elm Spanworm (*Ennomos subsignaria*), Variable Antepione (*Antepione thisoaria*), Showy Emerald (*Dichorda iridaria*), Pale Baileya (*Baileya levitans*), and American Angle Shades (*Euplexia benesimilis*), as well as saw most of the species we'd seen the day before. We were amazed to find no fewer than a dozen *A. caja* inside the bucket trap this time, and before the morning was over we would record a total of at least 17.

As the clock wound down to 9:00 a.m. on July 31, ending our mothing blitz, we sat back to enjoy the dulcet tones of a Hermit Thrush singing nearby and run through the check list. It had been a most exhausting but enlightening 36 hours.

Our inaugural Moth Night proved to be much fun for all the participants, though an ill-timed series of widely-scattered rain storms that rolled across the region the night of July 30 truncated participation by several teams and undoubtedly suppressed moth numbers. A composite total of 473 species was reported by nine teams. The two surveys done by the authors at EVF and the Amphibolite Mountains site produced 145 and 115 species respectively (Table 1). As expected, *A. caja* claimed for us "rarest moth" accolades. And despite our relatively modest species totals—going into it, 200 at EVF seemed a realistic expectation—we also managed to capture both "state" and overall "event champion" honors. As such, we'll have the pleasure of throwing down the proverbial gauntlet next year, fully expecting that with, hopefully, many more participants and the additional knowledge and experience gained by everyone between now and then, new champions will be crowned … but not without a challenge from us. All in all, it was an enjoyable, good-natured event that, for the authors, was well worth a weekend of sleep deprivation and questionable eating habits.

Without doubt, finding the number of *A. caja* that we did was the highlight for us. We tried to photograph every individual we saw thinking that we might later be able to determine the total number of individuals based upon wing

maculation and wear patterns. Using this method we were able to confirm at least 31 different *A. caja*s over the two nights. This number suggests that our choice of dates coincided well with the specie's flight period, and suggests that it may not be especially rare in the proper locations. With other amphibolite peaks of similar elevations—though variable levels of accessibility—we are left to wonder the true extent of populations of *A. caja* in North Carolina, and perhaps even elsewhere in the Appalachians.

Plans are already underway for next year's Moth Night, again slated for late July. We're also talking about holding a mothing workshop the week prior so listserv members can share some field time together, perhaps even allowing the authors to introduce a few others into the *caja* club. There is a great deal yet to learn about North Carolina's moths. As our mothing community continues to grow, we anticipate being able to contribute some of that knowledge.

For more about mothing in Watauga County, North Carolina, readers are encouraged to visit Merrill Lynch's 2010 Moth Big Year blog at http://tinyurl.com/3s4x2o8, and check out his photo gallery at http://tinyurl.com/3cjemuv.

Acknowledgements: The authors wish to thank Steve Hall and Bo Sullivan for their infinite patience with and unfailing encouragement of novice moth'ers in North Carolina.

Table 1. Moths recorded in Watauga County, NC, on July 30-31, 2011

EVF = **E**cho **V**alley **F**arm
AM = **A**mphibolite **M**ountains

Scientific Name	Common Name	EVF	AM
Ectoedemia sp.		x	x
Pseudopostega quadristrigella	Gooseberry Barkminer	x	
Hybroma servulella	Yellow Wave	x	
Philonome clemensella		x	
Bucculatrix sp.			x
Caloptilia bimaculatella		x	
Caloptilia blandella		x	
Caloptilia invariabilis	Cherry Leaf-cone Caterpillar Moth		x
Caloptilia superbifrontella			x
Parectopa robiniella	Locust Digitate Leafminer		x
Leucospilapteryx venustella		x	
Phyllonorycter propinquinella	Cherry Blotch Miner	x	
Phyllonorycter quercialbella		x	
Cameraria sp.		x	
Agonopteryx sp.		x	x
Psilocorsis quercicella	Oak Leaftier	x	
Epicallima argenticinctella	Orange-headed Epicallima	x	
Blastobasis glandulella	Acorn Moth	x	x
Metzneria lappella	Burdock Seedhead Moth	x	
Arogalea cristifasciella	Stripe-backed Moth	x	
Chionodes sp.		x	
Dichomeris ligulella	Palmerworm		x
Dichomeris punctipennella	Many-spotted Dichomeris	x	
Dichomeris bilobella	Bilobed Dichomeris	x	
Argyresthia goedartella	Bronze Alder Moth	x	x
Argyresthia oreasella	Cherry Shoot Borer	x	x
Schreckensteinia sp.		x	
Bactra maiorina		x	
Endothenia hebesana	Verbena Bud Moth	x	
Pristerognatha fuligana		x	
Olethreutes sp.		x	x
Metendothenia separatana	Pink-washed Leafroller	x	
Hedya chionosema	White-spotted Hedya	x	

Phaneta parmatana		x	
Proteoteras aesculana	Maple Twig Borer	x	
Proteoteras moffatiana	Maple Bud Borer	x	x
Gretchena bolliana	Pecan Bud Moth	x	
Ancylis metamelana	Black-marked Ancylis	x	
Ancylis divisana	Two-toned Ancylis	x	x
Cydia caryana	Hickory Shuckworm	x	
Acleris subnivana		x	
Pandemis lamprosana	Woodgrain Leafroller	x	x
Archips fervidana	Oak Webworm	x	x
Clepsis peritana	Garden Tortrix	x	
Sparganothis sulfureana	Sparganothis Fruitworm	x	
Platynota idaeusalis	Tufted Apple Budmoth	x	
Platynota semiustana		x	
Platynota exasperatana	Exasperating Platynota	x	x
Coelostathma discopunctana	The Batman		x
Cochylis hoffmanana	Hoffman's Cochlid	x	
Rolandylis maiana	Kearfott's Rolandylis	x	
Scoparia biplagialis	Double-striped Scoparia	x	x
Scoparia cinereomedia		x	x
Scoparia basalis	Many-spotted Scoparia	x	x
Glaphyria sequistrialis	White-roped Glaphyria	x	
Lipocosma sicalis		x	
Pyrausta acrionalis	Mint-loving Pyrausta	x	
Udea rubigalis	Celery Leaftier	x	
Choristostigma roseopennalis			x
Palpita magniferalis	Splendid Palpita	x	
Polygrammodes flavidalis	Ironweed Root Moth	x	
Pantographa limata	Basswood Leafroller	x	x
Herpetogramma pertextalis	Bold-feathered Grass Moth	x	
Herpetogramma abdominalis		x	x
Herpetogramma aeglealis	Serpentine Webworm	x	
Crambus praefectellus	Common Grass-veneer Moth	x	
Crambus agitatellus	Double-banded Grass-veneer Moth	x	
Neodactria luteolellus	Mottled Grass-veneer Moth	x	
Chrysoteuchia topiarius	Topiary Grass-veneer Moth	x	
Microcrambus biguttellus	Gold-stripe Grass-veneer Moth	x	
Microcrambus elegans	Elegant Grass-veneer Moth	x	
Microcrambus minor		x	
Parapediasia teterrella	Bluegrass Webworm	x	
Aglossa costiferalis		x	x
Pseudasopia intermedialis	Red-shawled Moth	x	
Dolichomia thymetusalis	Spruce Needleworm		x
Tosale oviplagalis	Dimorphic Tosale	x	
Condylolomia participalis	Drab Condylolomia	x	x
Pococera asperatella	Maple Webworm	x	x
Aphomia terrenella	Terrenella Bee Moth	x	
Acrobasis indigenella	Leaf Crumpler	x	
Acrobasis caryae	Hickory Shoot Borer	x	
Acrobasis stigmella		x	
Sciota subcaesiella	Locust Leafroller	x	x
Euzophera ostricolorella	Root Collar Borer	x	
Habrosyne scripta	Lettered Habrosyne		x
Pseudothyatira cymatophoroides	Tufted Thyatirid	x	x
Speranza pustularia	Lesser Maple Spanworm		x
Speranza subcessaria	Barred Itame		x

Macaria pinistrobata	White Pine Angle	x	
Digrammia ocellinata	Faint-spotted Angle	x	
Iridopsis larvaria	Bent-line Gray	x	x
Ectropis crepuscularia	Small Engrailed	x	x
Epimecis hortaria	Tulip-tree Beauty	x	
Melanolophia canadaria	Canadian Melanolophia	x	x
Biston betularia	Peppered Moth	x	
Xanthotype sp.		x	x
Pero sp.		x	x
Ennomos subsignaria	Elm Spanworm		x
Plagodis pulveraria	American Barred Umber	x	x
Plagodis phlogosaria	Straight-lined Plagodis		x
Plagodis alcoolaria	Hollow-spotted Plagodis		x
Caripeta divisata	Gray Spruce Looper		x
Besma quercivoraria	Oak Besma		x
Lambdina fiscellaria	Hemlock Looper		x
Eugonobapta nivosaria	Snowy Geometer	x	x
Prochoerodes lineola	Large Maple Spanworm	x	
Antepione thisoaria	Variable Antepione		x
Nematocampa resistaria	Horned Spanworm		x
Nemoria lixaria	Red-bordered Emerald		x
Dichorda iridaria	Showy Emerald		x
Synchlora aerata	Wavy-lined Emerald	x	
Idaea demissaria	Red-bordered Wave	x	
Scopula limboundata	Large Lace-border		x
Ecliptopera atricolorata	Dark-banded Geometer	x	x
Rheumaptera prunivorata	Ferguson's Scallop Shell	x	x
Spargania magnoliata	Double-banded Carpet		x
Xanthorhoe ferrugata	Red Twin-Spot	x	x
Xanthorhoe lacustrata	Toothed Brown Carpet	x	x
Euphyia intermediata	Sharp-angled Carpet	x	x
Costaconvexa centrostrigaria	Bent-line Carpet		x
Venusia cambrica	The Welsh Wave		x
Trichodezia albovittata	White-striped Black	x	
Horisme intestinata	Brown Bark Carpet	x	
Eupithecia sp.			x
Heterophleps refusaria	Three-patched Bigwing	x	x
Heterophleps triguttaria	Three-spotted Fillip	x	
Dyspteris abortivaria	The Badwing	x	x
Callizzia amorata	Gray Scoopwing	x	
Paonias excaecata	Blind-eyed Sphinx	x	
Amorpha juglandis	Walnut Sphinx	x	
Clostera inclusa	Angle-lined Prominent	x	
Nadata gibbosa	White-dotted Prominent	x	x
Peridea angulosa	Angulose Prominent		x
Symmerista leucitys	Orange-humped Mapleworm		x
Dasylophia thyratyroides	Gray-patched Prominent		x
Macrurocampa marthesia	Mottled Prominent	x	x
Heterocampa guttivitta	Saddled Prominent		x
Heterocampa biundata	Wavy-lined Heterocampa	x	x
Lochmaeus manteo	Variable Oakleaf Caterpillar Moth		x
Schizura ipomoeae	Morning-glory Prominent	x	
Oligocentria semirufescens	Red-washed Prominent	x	x
Hypoprepia fucosa	Painted Lichen Moth	x	x
Clemensia albata	Little White Lichen Moth		x
Haploa clymene	Clymene Moth	x	

Haploa lecontei	Leconte's Haploa		x
Arctia caja	Great Tiger Moth		x
Halysidota tessellaris	Banded Tussock Moth	x	x
Dasychira vagans	Variable Tussock Moth		x
Dasychira obliquata	Streaked Tussock Moth	x	x
Orgyia definata	Definite Tussock Moth		x
Orgyia leucostigma	White-marked Tussock Moth		x
Idia americalis	American Idia	x	x
Idia aemula	Common Idia		x
Idia terrebralis			x
Idia lubricalis	Glossy Black Idia	x	x
Phalaenophana pyramusalis	Dark-banded Owlet Moth		x
Zanclognatha theralis		x	
Zanclognatha laevigata	Variable Zanclognatha	x	x
Zanclognatha cruralis	Early Zanclognatha	x	
Phalaenostola metonalis	Pale Phalaenostola	x	
Renia factiosalis	Sociable Renia	x	x
Lascoria ambigualis	Ambiguous Moth	x	
Palthis angulalis	Dark-spotted Palthis	x	
Palthis asopialis	Faint-spotted Palthis	x	
Rivula propinqualis	Spotted Grass Moth	x	
Hypena baltimoralis	Baltimore Bomolocha	x	
Hypena palparia	Mottled Bomolocha		x
Hypena edictalis	Large Bomolocha	x	
Hypena humuli	Hop Vine Moth	x	
Hypena scabra	Green Cloverworm	x	
Panopoda rufimargo	Red-lined Panopoda	x	
Zale minerea	Colorful Zale		x
Euparthenos nubilis	Locust Underwing		x
Allotria elonympha	False Underwing		x
Catocala ilia	Ilia Underwing		x
Catocala ultronia	Ultronia Underwing		x
Catocala crataegi	Hawthorne Underwing		x
Eosphoropteryx thyatyroides	Pink-patched Looper	x	
Baileya ophthalmica	Eyed Baileya	x	
Baileya levitans	Pale Baileya		x
Meganola spodia	Ashy Meganola	x	
Marimatha nigrofimbria	Black-bordered Lemon Moth	x	
Protodeltote muscosula	Large Mossy Lithacodia	x	x
Pseudeustrotia carneola	Pink-barred Lithacodia	x	
Leuconycta diphteroides	Green Leuconycta	x	
Colocasia flavicornis	Yellowhorn	x	x
Charadra deridens	The Laugher		x
Acronicta americana	American Dagger		x
Acronicta innotata	Unmarked Dagger		x
Acronicta vinnula	Delightful Dagger		x
Acronicta superans	Splendid Dagger		x
Acronicta morula	Ochre Dagger		x
Acronicta lobeliae	Greater Oak Dagger		x
Acronicta ovata	Ovate Dagger		x
Acronicta modica	Medium Dagger		x
Acronicta haesitata	Hesitant Dagger		x
Eudryas grata	Beautiful Wood-nymph	x	x
Euplexia benesimilis	American Angle Shades		x
Callopistria mollissima	Pink-shaded Fern Moth		x
Balsa malana	Many-dotted Appleworm		x

Balsa labecula	White-blotched Balsa	x	
Elaphria versicolor	Variegated Midget	x	
Galgula partita	The Wedgling	x	
Condica vecors	Dusky Groundling	x	x
Melanchra adjuncta	Hitched Arches		x
Lacinipolia olivacea	Olive Arches		x
Feltia tricosa	Confused Dart	x	
Euxoa velleripennis	Fleece-winged Dart		x
Xestia dolosa	Greater Black-letter Dart		x

[All photographs by Parker Backstrom.]

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LeGrand, Harry and Tom Howard, 2011. *Butterflies of North Carolina – Eighteenth Approximation.* Website: http://149.168.1.196/nbnc/index.html.

(Parker Backstrom[1]: P. O. Box 31, Bear Creek, NC 27207; E-mail: dpbackstrom @ embarqmail.com;
J. Merrill Lynch[2]: P. O. Box 58, Trade, TN 37691; E-mail: jmerrilllynch @ gmail.com)

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Three Emperor Butterflies: the Gray Emperor, female (top), the Tawny Emperor, female (middle), the Goatweed Emperor, female (bottom)

Five Interesting Butterflies: the Spring Azure (top), the Falcate Orange-Tip, the Bronze Copper, the Spring Azure (on leaf), the Great Purple Hairstreak

"In popular esteem the butterflies among the insects are what the birds are among the higher animals - the most attractive and beautiful members of the great group of which they belong. They are primarily day fliers and are remarkable for the delicacy and beauty of their membranous wings, covered with myriads of tiny scales that overlap one another like the shingles on a house and show an infinite variety of hue through the coloring of the scales and their arrangement upon the translucent membrane running between the wing veins. It is this characteristic structure of the wings that gives to the great order of butterflies and moths its name Lepidoptera, meaning scale-winged."

Introduction to *"Butterflies Worth Knowing"* by Clarence M. Weed, D. Sc. Published by Doubleday, Page & Company, 1925, Garden City, N.Y.

Following photos on the next 4 pages are by Andy Warren - the joint meeting of the SLS /ATL Societies held in Gainesville, Florida, October 2011. Thanks to Debbie Matthews who supplied the legends.

Drew Bliss working in pinning lab

McGuire staff pinner Galileo Encabo

FSCA Lepidoptera curator James Hayden

Beth Patterson and Bob Patterson, Moth Photographers Group

Stephanie Stocks and Bob Patterson

Group discussion

Waiting for something to happen

James Monroe, James Hayden and Marc Minno

New member Cassie Romero

Galileo Encabo, Lukasz Barzczak, Cassie Romero (on right)

Andy Anderson, Charlie Covell (both at head of the lunch line)

Craig Segebarth, Brian Scholtens

Tom Emmel, Jon D. Turner, and Peter Eliazar

McGuire Center graduate student, Jade Badon

Keth Willmott and Debbie Matthews

Elena Ortiz presenting her dissertation work on Preponini

Lary Reeves recounting details of his recent field work in the Philippines

Ian Segebarth, Tom Emmel, Craig Segebarth, Akito Kawahara, and Sandy Koi

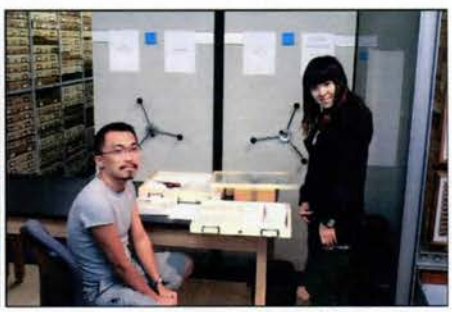
James Monroe, Jeff Slotten, Debbie Matthews, and Irving Finkelstein

Saturday banquet in the main gallery of the Florida Museum of Natural History

Audience for evening program of door prizes and stories from the field

Galileo Encabo and Elena Ortiz at the registration table

Saturday morning session in the McGuire Conference room



Shen-Horn Yen and Ling-YingTsai from Taiwan attended the meeting and worked on Acentropinae in the McGuire Collections

Craig Segebarth, Dale Halbritter, Sandy Koi (next to Dale) and Brian Scholtens

Andrei Sourakov and Brian Scholtens

Andy Anderson and Jeff Slotten

Jim Taylor and James Adams

Brian Scholtens, Art Shapiro, Marc Minno, and James Monroe

Stephanie Stocks

Brian Scholtens

Peter Eliazar moderating Saturday morning session

Jon D.Turner (far left), Court Whelan apparently caught enjoying a snack during the coffee break and Jackie Miller (partially hidden)

Jon D. Turner

Maria Checa

Tom Emmel

Banquet

Jackie Miller, Debbie Matthews, and Bob Belmont

Keith Willmott and son Jamie with their door prize, and John Douglass

Mirian Hay-Roe presenting an update on butterfly farming in Peru

Andrei Sourakov at ATL business meeting

Jon D. Turner at ATL business meeting

Bob Beiriger, Bob Belmont, and Rick Gillmore

Galileo Encabo and Elena Ortiz

Visitors touring the butterfly rainforest at the Florida Museum of Natural History

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DEAR SLS MEMBERS

2012 DUES ARE NOW DUE !!!

Please send remittance to Jeffery Slotten, Treasurer (5421 NW 69th Lane, Gainesville, FL 32653). Also, please send to Jeff your correct mailing address (if changed) and your current E-mail address. We are attempting to upgrade our records.

Many thanks,

The Editor

ESTIGMENE ACREA (DRURY, 1773) (LEPIDOPTERA: ARCTIIDAE) IN LOUISIANA

BY

VERNON ANTOINE BROU JR.

Fig. 1. ***Estigmene acrea*** phenotype variations: males (a-j), females (k-q).

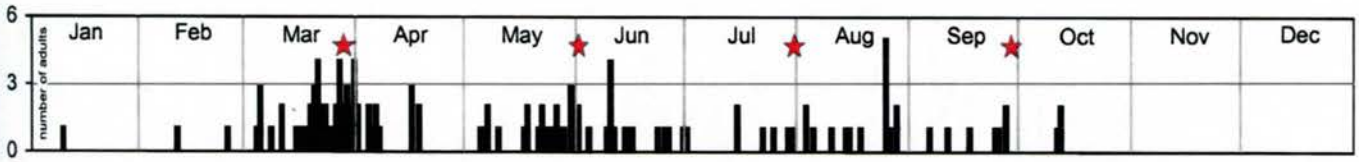

Fig. 2. Adult ***Estigmene acrea*** captured in Louisiana. n = 127

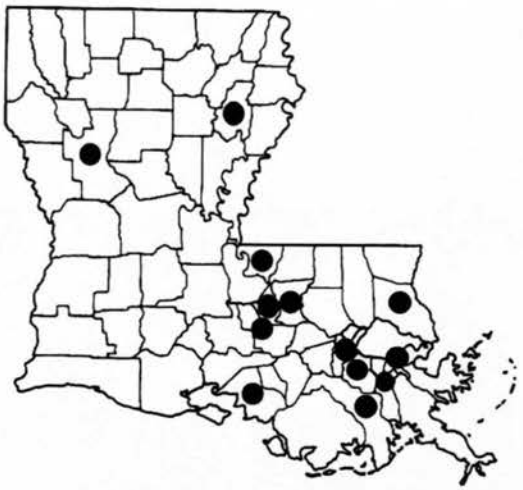

Fig. 3. Parish records for ***E. acrea***.

The common arctiid species ***Estigmene acrea*** (Drury, 1773) (Fig. 1) is reported in various literature of the times to include southern Canada to Colombia and Cuba. It occurs throughout much of the United States, coast to coast. This species is quite variable with respect to its forewing and hindwing maculation. A small number of specimens taken during this study exhibited a character previously reported for several species of the family Arctiidae, including ***acrea*** as having the *"greasy wing gene"* attribute in which the usual white forewing basal color appears as a dull vitreous gray color (Fig. 1c, g, and m) and to a lesser extent in Figs. 1d, and f.

Based on my records from a rather small sample population, there appears to be at least four annual broods within Louisiana, identified by red markers in Fig. 2. Numerous authors. *e.g.*, Covell (1984) list the same information concerning the number of broods *"May-Aug.; 2 broods"*.

Some of the information concerning various physical and biological attributes about this species available in past and present entomological literature as well as information currently on the internet is invalid, either based on insufficient information and/or unsubstantiated statements and assumptions from past literature. This species was previously reported for Louisiana by Stracener (1931) and was reported captured on an offshore oil platform off the coast of Louisiana in the Gulf of Mexico (Russell, 2005).

The parish records by this author are illustrated in Fig.3.

Literature Cited

Covell, Jr., C.V., 1984. *A Field Guide to the Moths of Eastern North America.* The Peterson Field Guide Series No. 30. Houghton Mifflin Co., Boston. xv + 496pp., 64 plates.

Russell, R.W., 2005. *Interactions between migrating birds and offshore oil and gas platforms in the northern Gulf of Mexico: Final Report.* U.S. Dept. of the Interior, Minerals Management Service, Gulf of Mexico OCS Region, New Orleans, LA. OCAS Study MMS 2005-2009. 348 pp.

Stracener C.L., 1931. Economic importance of the salt-marsh caterpillar (*Estigmene acraea* Drury) in Louisiana. *Journal of Economic Entomology* 24: 835-838.

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DEFINITIONS:

Brachypterous - having non-functional, incompletely developed, or very short wings. This is a condition that one sees frequently in the insect world. Possible reason is to save energy.

Macropterous - having (unusually) long or large wings or fins. Again fairly common in the insect world.

Endophagous - an insect larva feeding from within the parasitized animal or plant (host).

Exophagous - an insect larva not feeding within a parasitized host, but feeding externally. Opposite of endophagous.

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ACRONICTA OBLINITA (J. E. SMITH, 1797) (LEPIDOPTERA: NOCTUIDAE) IN LOUISIANA

BY

VERNON ANTOINE BROU JR.

Fig. 1. ***Acronicta oblinita*** phenotype variations: males a-d, females e-k.

The medium size noctuid moth ***Acronicta oblinita*** (J.E. Smith) (Fig. 1) is a fairly common species of the genus occurring across Louisiana. The adults have white, somewhat pointed forewings with longitudinal finely striated black markings.

Considered a synonym of ***oblinita***, ***Acronicta arioch*** Strecker, 1898 (Fig. 1f) is touted to have less prominent markings on yellowish forewings and was described from New Orleans, Louisiana. This form occurs along the Mississippi River system within the state.

Based on a multiyear composite phenogram (Fig. 2) ***A. oblinita*** appears to have six annual broods in Louisiana, with adults occurring January through October. The initial brood peaks about mid-March, the second brood peaks about mid-May with remaining broods occurring at 34-day intervals. Covell (1984) listed ***oblinita*** as occurring April - September in two or more broods. The parish records by this author are illustrated in Fig. 3.

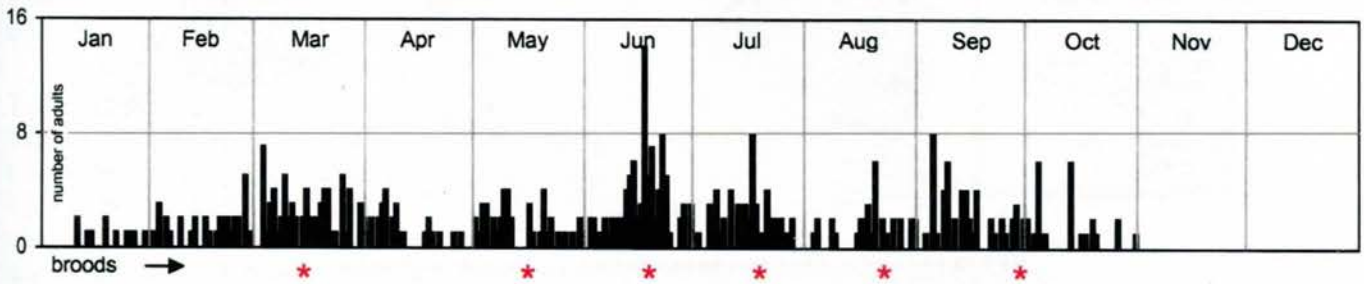

Fig. 2. Adult ***Acronicta oblinita*** captured in Louisiana. n = 430

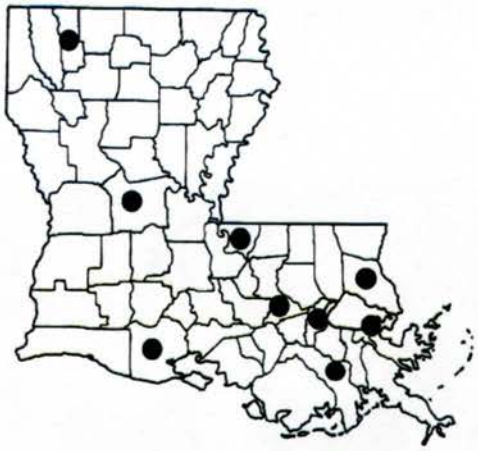

Fig. 3. Parish records for ***A. oblinita***.

The color plates upon which adults were illustrated (Smith & Dyar, 1898) show forewings with highly exaggerated post median lines on forewings, unlike anything I have seen within Louisiana populations. Also (Covell, 1984) illustrates a specimen of ***oblinita*** from Nova Scotia with extremely heavy black forewing markings, so much so, that black is the predominate forewing color.

Smith & Dyar (1898) state concerning ***oblinita***, *"This is perhaps the most common species of the genus ...".*

Heppner (2003) provides a lengthy list of well over 33 larval host plants for ***oblinita***.

Literature Cited

Covell, Jr., C.V., 1984. A Field Guide to the Moths of Eastern North America. The Peterson Field Guide Series No. 30. Houghton Mifflin Co., Boston. xv + 496pp., 64 plates.

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

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Robert Bryant sends in the following playing cards that show a variety of butterflies and moths.

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EXTRALIMITAL RECORDS OF THE SAGE PLUME MOTH, *ANSTENOPTILIA MARMARODACTYLA* (LEPIDOPTERA: PTEROPHORIDAE)

BY

DEBORAH L. MATTHEWS AND REED A. WATKINS

The sage plume moth, *Anstenoptilia marmarodactyla* (Dyar, [1903]) is typically a western species, common in California, New Mexico, and Arizona, but extending north to Canada, south into Mexico, and east into Texas. It is an immigrant species in Hawaii (Perkins 1913, Zimmerman 1958) and there are a few records from Central and South America (Gielis 2006). We recently identified three specimens from Connecticut and a single specimen from north Florida. While we believe this species most likely transported via shipments of ornamental sage plants, the latter Florida record is of special interest as there is potential for the species, if not already established, to become naturalized to the area.

Fig. 1. *Anstenoptilia marmarodactyla* and similar species from Florida: a) Florida specimen of *A. marmarodactyla*; b) labels accompanying Florida specimen; c) forewing of *Stenoptilodes brevipennis*; d) *S. taprobanes*; e) *Lantanophaga pusillidactyla*. Figures a, c, d, e at same scale as line inset.

Larvae feed externally on terminal shoots and flowerbuds of several species of sage, *Salvia* spp. and other mints of the family Lamiaceae. These include *Salvia spathacea*, *S. dorrii*, and *S. mellifera*, as well as certain species of *Agastache*, *Lepechinia*, *Mentha*, *Mondardella*, *Pycnanthemum*, and *Trichostema*. A complete list of recorded hosts is given by Matthews and Lott (2005). Of the known host species, *Mentha spicata* (spearmint) occurs in Florida as well as the reported hosts in Hawaii, *Lantana camara* (Verbenaceae) and *Ageratum conyzoides* (Asteraceae) (USDA Plants database, USDA 2011). Other genera, such as *Salvia* and *Trichostema*, are represented by native species in Florida, which, while not recorded host species for *A. marmarodactyla*, represent potential hosts. In addition to the myriad of non-native *Salvia*, other mints cultivated for ornamental use and nectar sources in butterfly gardens could also be possible larval hosts in Florida and elsewhere. The life history in California has been described and illustrated by Lange (1942, 1950) and larval chaetotaxy and pupal morphology further detailed by Matthews (2006). The favored host plant in California is *S. spathacea* with at least three generations per year (Lange 1942). Damage to plants is significant as the shoots and flowers are impacted, but no control measures have been established.

The Florida specimen was discovered within a series of similarly marked plume moths collected by the late George T. Austin, as part of a survey of North Central Florida moths from his backyard in southeast Gainesville, collecting two nights each week from 2005-2009 (Austin 2010). The specimen (Fig. 1a, b), a female, was collected 25 April 2005 at a time when it was likely he would have been adding nectar plants to his yard (A. Warren and J. Miller, pers. comm.). Three other species occur in North Central Florida, which, although smaller, have similar forewing markings and clusters of dark fringe scales along the anal margin of the forewing and the third lobe of the hindwing. These include *Stenoptilodes brevipennis* (Zeller, 1874) (Fig. 1c), *S. taprobanes* (Felder & Rogenhoffer, 1875) (Fig. 1d), and

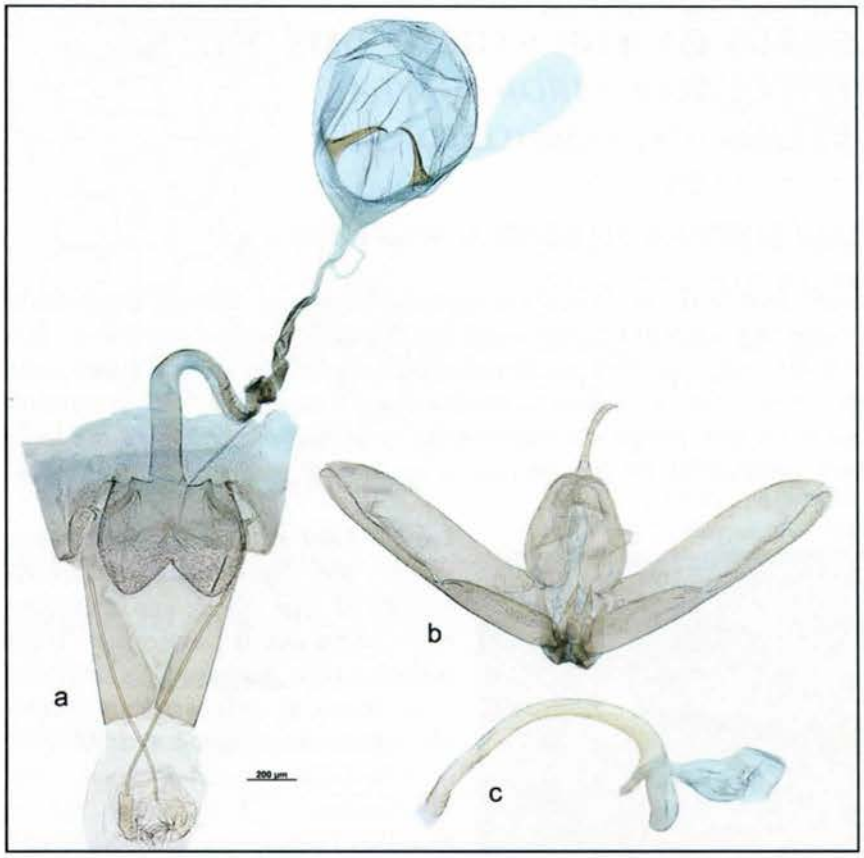

Fig. 2. *Anstenoptilia marmarodactyla* genitalia: a) female from Florida, slide DM 1622; b) male, San Diego Co., California, 23 March 1985, R. H. Leuschner, slide DM 1623; c) aedeagus, same individual. Both specimens MGCL – McGuire Center for Lepidoptera and Biodiversity, Florida Museum of Natural History.

Lantanophaga pusillidactyla (Walker, 1864) (Fig. 1e). Adults of *A. marmarodactyla* can be distinguished from the aforementioned three species by the distinct pale beige mark on the anterior lobe of the forewing which extends transversely across the lobe and is nearly white at the costa (see arrow, Fig. 1a). As this feature may be obscured in rubbed or worn specimens, we include images of the male and female genitalia of *A. marmarodactyla* (Fig. 2a-c) as an identification aid. Comparative drawings of the genitalia of similar species are also available in Lange (1950), Matthews (1989), and Gielis (2006).

The Connecticut specimens were all collected in a single 1998 season by Dr. David Wagner of the University of Connecticut in the yard of his home in Mansfield. He and his wife Sylvia have several gardens with numerous annual and perennial nursery plantings. In summary form, the label data for the three specimens are as follows: — CT, Tolland Co., Mansfield, 22 H. Run. Male, 8-VIII-1998; male, 18-VIII-1998; female, 10-IX-1998. D. L.Wagner MV lt. Deposited in Wagner collection.

Previous extralimital records include one pinned specimen from Ohio with data courtesy of the Ohio Lepidoptera Survey database as follows: — OH, Hancock County, Cass Township, NE ¼ Section. male, 24-VI-1998. Michael J. Gilligan. Genitalia in vial with pinned specimen. Deposited in M. J. Gilligan collection.

In the United States, this species is now presently recorded from the following states: Arizona, California, Colorado, Connecticut, Florida, Hawaii, New Mexico, Nevada, Ohio, Texas, and Utah. We encourage collectors and photographers, as well as nursery growers of *Salvia* and other mints, to report further state records for this species. The addition of this species to the Florida fauna brings the current total known species to 43 (Matthews, unpublished data), adding to the 32 species reported by Matthews et al. (1990).

Acknowledgements

We thank Terry A. Lott and Jacqueline Y. Miller for comments on the text. We also acknowledge, George Austin, Mike Gilligan, Dave Wagner, and Ron Leuschner for supplying material examined. Dave Wagner provided additional collection record details and we likewise thank David Horn and Rick Ruggles of The Ohio Lepidopterists for access to and continuing maintenance of the Survey.

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(Deborah L. Matthews, E-mail: mothnut@hotmail.com; Reed A. Watkins, E-mail: rwatkins@intercom.net)

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From a drawing by Mary E. Walker, Giant Swallowtails visiting blossoming branches of the orange tree.

From a drawing by W. I. Beecroft, the Silver-spotted Skipper, caterpillar, chrysalis and adult.

"In this little book an attempt has been made to discuss the more abundant and widely distributed butterflies of eastern North America from the point of view of their life histories and their relations to their surroundings. In so doing I have of course availed myself of the written records of a host of students of butterflies, without whose labors no such volume would be possible. Among these two names stand out preëminent - William H. Edwards and Samuel H. Scudder."

Preface to *"Butterflies Worth Knowing"* by Clarence M. Weed, D. Sc. Published by Doubleday, Page & Company, 1925, Garden City, NY.

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TRY ARIZONA, PART I

BY

KELLY RICHERS

If you are contemplating a summer trip, consider moth collecting in Arizona, if you have not done so already. In fact, if you have, consider another one, as Arizona is to moth collectors what New England is to fall foliage—unusual, beautiful and different every time. I will give an overview of some of the ranges here and show a few interesting moths in both parts.

Arizona is unique because there are small mountain ranges amid the desert landscape that transform the area completely. These can be divided into several main areas of interest, each with unique features and unusual moth species. Starting at the New Mexico border, these areas are distinct and worth visiting. Briefly mentioned, the first would be the Chiricahua Mountains. There are two commonly used entrances to these mountains, and the eastern entrance is from the town of Portal. Accommodations can be procured in Portal. Collecting there off the porch of a rented cabin can be very good, but the skunks are educated to black lights and will often take over. It is best to let them, especially if you plan to be in the company of other humans in the near future. Driving up the road from Portal the road passes a couple of campsites at lower elevation, then winds up to Onion Saddle at 7600' elevation, a popular collecting spot. This is a place where the collector can pull off the road and catch many large species of moths. Taking the road that goes back down to toward the northwest one finds two campgrounds in Pinery Canyon, both of which are usually open and provide collectible areas at about 6800' elevation.

If, however, you take the road that goes uphill from Onion Saddle, you can access Rustler Park and Barfoot Park, both at the 8500' or higher elevation, and both containing unusual species of moths. Rustler Park has a parking lot at the lower end where you can collect without disturbing the campers higher up, and Barfoot Park is usually less visited, so there are many spots to collect, although for the most part Rustler seems to have more unusual insects. Beware of sudden thunderstorms from the middle of July to the middle of August, as these can be both violent and dangerous around Rustler Park. If one starts, close up and wait it out in a vehicle, as lightning can strike frequently and with devastating effect. This past year wildfires swept several large areas of the Chiricahua Mountains.

The farthest west of the mountain chains that are in this same category would be the Baboquivari Mountains, southwest of Tucson. These mountains are much lower, being only about 4000' elevation in most collecting areas, but having the advantage of running south to north and bringing with that direction many moths that fly north from Mexico on the seasonal summer winds. Access to these canyons can be difficult, and consulting someone knowledgeable in the area is advised. This area has been collected since the time of O.C. Poling in the 1920's however, so it is amazing that new things still come from that area. Access is on the east side of the mountains as the west is reservation land.

So, this is but the beginning of the interesting areas. Between these two mountain chains there are several other areas of interest, all with different attractions. West of the Chiricahua Mountains lay the Huachuca Mountains. This chain also extends into Mexico, and comprises a number of interesting canyons that all seem to harbor unique species of moths. Sierra Vista is a good base from which to visit this area. From Sierra Vista the longest recommended trip is into Copper Canyon, the southernmost canyon of the area. Beetle collectors frequent this low lying canyon, so there may be company there. However, Ash Canyon, Carr Canyon and Garden Canyon are also in this mountain chain, and very interesting collecting can take place there. Garden Canyon is inside the military base, so check for access. Unfortunately, this last year devastating wildfires swept this mountain chain, causing much destruction. Scouting out the area would be called for this next summer. I must stress that each canyon has different moths, for reasons best left to persons who are there studying them more frequently!

Further west, before reaching the Baboquivari Mountains, are the Atascosa Highlands, which rarely actually go by that name. Usually they are referred to as Pena Blanca and Sycamore Canyon. These two canyons open into Mexico and moths fly north, at about a 3900' elevation. Many campers are in Pena Blanca, but there generally room for a few collectors. Sycamore is west of Pena Blanca, and more nondescript, but contains some unusual species. Further west on the Ruby Road is California Gulch, which is the last canyon of interest before the Baboquivari Mountains across the valley from Arivaca.

The reason that Arizona mountains are so unusual is that the variety seems to change every year. Fully a third of what can be caught in one year will be different in subsequent years, so visiting one year may leave one with a bunch of new species for the collection, but visiting several years will continue to do so. I know of no other area that is like this.

Keep in mind that most of these areas are remote, and safety is a concern as they are very near the border with Mexico, and many are prime crossing areas. It is recommended that persons travel with a partner if possible.

I would strongly recommend visiting the website about The Moths of Southeastern Arizona, http://nitro.biosci.arizona.edu/zeeb/butterflies/mothlist.html

Next article: Santa Rita Mountains, Pinaleno Mts. (Mt. Graham), Oak Creek Canyon and Prescott, the Hualapai Mountains and the Greer area.

***Trosia oblescens*, male, Brown Cyn, Baboquivari Mts, 4125', Aug. 2, 2008 on left; *Magalopyge bissesa*, male, Brown Cyn, Baboquivari Mts, 4125', Aug. 7, 2005.**

***Anisota oslari*, female, Brown Cyn, Baboquivari Mts, 4125', Aug. 1, 2008.**

***Parasa chloris*, female, taken in Carr Cyn, Aug. 7, 1999 on left; *Euclea incise*, male, Brown Cyn, Baboquivari Mts, 4125', Aug. 1, 2008.**

***Caloexia juvenalis*, male, Onion Saddle, 7600', Aug. 1, 2005.**

***Dalcerides ingenitus*, male, Ash Cyn, 5200', Aug. 5, 1999 on left; *Seryda constans*, male, Oak Cr. Cyn, July 2, 1993, R.P. Meyer collector.**

***Automeris cecrops pamina*, female, 1 mi S Pena Blanca Lake, 3960', Aug. 4, 1999.**

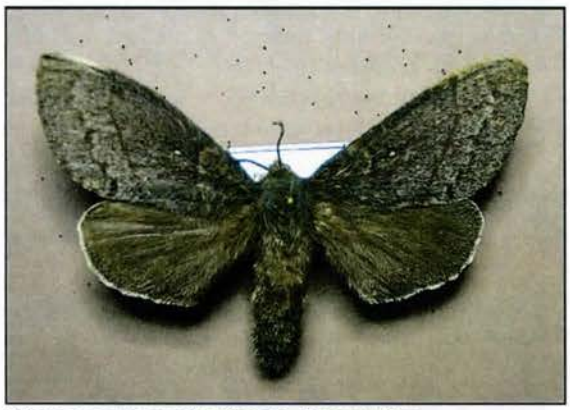
***Citheronia splendens sinaloensis*, female, Brown Cyn, Baboquivari Mts, 4130', July 27, 2007.**

Dicogaster coronada, female, 1 mi S Pena Blanca Lake, 3960', Aug. 5, 2005.

Dicogaster coronada, male, California Gulch, 3790', Aug. 1, 2009.

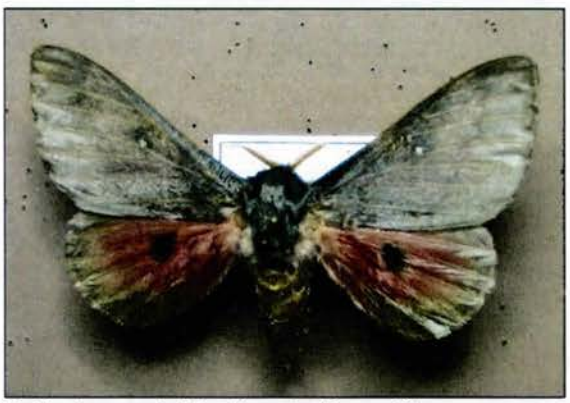
Eacles oslari, 1 mi S Pena Blanca Lake, 3960', Santa Cruz Co., AZ, Aug. 4, 1999.

Gloveria arizonensis, female, Rustler Park, 8500', Cochise Co., Aug. 1, 2005.



Gloveria gargamelle, female, Brown Cyn, Baboquivari Mts, 4125', Aug. 2, 2008.

Quadrina diazoma, male, Pinery Canyon, 6800', Aug. 1, 2005.



Sphingicampa hubbardi, male, Brown Cyn, Baboquivari Mts, 4130', July 28, 2007.

Sphingicampa montana, female, Brown Cyn, Baboquivari Mts, 4130', Aug. 2, 2008.

[All moths captured by Kelly Richers.] (Kelly Richers , E-mail: kerichers@wuesd.org)

Following photos on this page of the joint meeting of the SLS/ATL Societies held in Gainesville, Florida, October 2011, are by Charlie Covell:

Moth light at Kanapaha Botanical Gardens

Madison Young hiding in bamboo thicket, Kanapaha Gardens

Blacklighting at Kanapaha Gardens (Cassandra Romero and David Auth facing camera)

Checking out the moths at Lary Reeves' sheet, Kanapaha Gardens

Sheet watching at Lary Reeves' sheet, Kanapaha Gardens

Andy Warren presenting at the SLS paper session

Lunch break at the Saturday session

Art Shapiro (beard) and Irving Finkelstein listening to a talk

Jim Monroe, Marc Minno and Jim Hayden

Irving Finkelstein

Jeff Slotten

Debbie Matthews (new SLS President)

Following photos on first half of page are by Charlie Covell:

Irving Finkelstein, James Adams, and Brian Scholtens

"Gali" Encabo, Elena Ortiz and Cassandra Romero working the SLS registration table

Keith Willmott speaking on Andean butterflies (ATL part of program)

Craig Segebarth, Nancy Turner and ATL President Jon D. Turner

Brian Scholtens fills his plate during lunch break

Jeff Slottern (left) and Jim Monroe conversing (taking a break from the meeting)

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Group photo of the participants of the SLS/ATL Society meeting held in Gainesville, Florida, October 2011 (Photo is by Andy Warren)

TEN DAYS IN THE LOWER RIO GRANDE VALLEY

BY
RO WAUER

Butterfly enthusiasts know that the best place and time for butterflies in all of North America is the Lower Rio Grande Valley during October and November. More than 300 species have been recorded there and every year at least one more is added to the list. Beyond the numerous resident butterflies that regularly occur in the Valley are the Mexican species that stray north of the border in late summer and fall.

White-spotted Satyr (*Manataria hercyna maculate*) (Photo by Rick Snider)

Every year for the last many years Betty and I have made our annual fall visit to the Valley during this peak butterfly period. This year we spent ten days, from November 18 to 27, visiting the numerous sites containing butterfly gardens. Although we spent the majority of our time at the National Butterfly Center (NBC) in Mission, we also visited Hidalgo Pumphouse in Hidalgo, Estero Llano Grande State Park and Frontera Audubon Society Center in Weslaco, Sabal Palm Sanctuary near Brownsville, and Laguna Atascosa National Wildlife Refuge. By the end of our ten days we had recorded 96 species; the majority of those were also photographed.

Mercurial Skipper (*Proteides mercurius*) (Photo by Ro Wauer)

Finding 96 butterfly species in ten days may seem like a huge number. But during a *"normal"* year in the Valley, not subject to the extreme drought conditions that prevails throughout most of Texas, that number has previous reached 150 or more. And yet we were very content with the 96 species because it included a few we had not previously seen in the U.S., including one individual – White-spotted Satyr – that represented a brand new species for North America.

There were more than a dozen folks wandering about the NBC gardens when a cell phone message was received from Rick Snider, naturalist volunteer at Estero Llano Grande, informing us that he had found a White-spotted Satyr (*Manataria hercyna maculate*) in the park. The satyr had never before been recorded in the U.S. We all immediately headed eastward to see this new bug; it was like an army ant colony on the run. Forty-five minutes later more than 25 butterfly enthusiasts were there to further document Rick's amazing find. Although a White-spotted Satyr is not included in any of the U.S. butterfly field guides, we did find a photo on page 134 in Jeffrey Glassberg's *"A Swift Guide to the Butterflies of Mexico and Central America."* Rick first found it at a feeder, but it had soon flown to a shaded tree trunk where many of us were able to obtain photographs. The best of the many photographs that I saw was taken by Rick, and one is included here. Within the hour news of this extra special bug was sent to additional enthusiasts, either by phone or placed on the TX-Butterflies list.

Florida Purplewing (*Eunica tatila*)(Photo by Ro Wauer)

Turquoise Longtail (*Urbanus evona*) (Photo by Ro Wauer)

The satyr was seen for three more days before it disappeared, and Rick discovered a wing from a White-spotted Satyr on the fifth day that he saved at the park.

Blomfild Beauty (*Smyrna blomfildia*)(Photo by Ro Wauer)

Guava Skipper (*Phocides palemon*) (Photo by Ro Wauer)

Blue Metalmark (*Lasaia sula*) (Photo by Ro Wauer)

The White-winged Satyr was a truly special butterfly for Betty and me. Although we have made many trips to Mexico for butterflies over the last several years, we had missed it on each trip. It is large for a satyr; the white spots are located on the upper side of the forewings.

The majority of the 96 butterflies we recorded were found in the NBC gardens. Several of those were also special. Three represented our first U.S. sightings: Mercurial Skipper (*Proteides mercurius*), Turquoise Longtail (*Urbanus evona*), and Florida Purplewing (*Eunica tatila*). The skipper and longtail were found on crucitas (*Eupatorium odoratum*), a native shrub that has been planted in numerous locations in the gardens; it blooms only in fall and it undoubtedly is one of the very best butterfly magnets in the Valley. The purplewing was found at a feeder but had then flown to a downed tree trunk where I was able to photograph it from a distance.

Marius Hairstreak (*Rekoa marius*) (Photo by Ro Wauer)

In addition, several Blomfild's Beauties (*Smyrna blomfildia*), most perched on feeders, attracted considerable attention; this amazing tropical creature is not found in the Valley every year. Although I had photographed it on a few earlier occasions, my new digital images were better than any previous shots. This was also true for a Guava Skipper (*Phocides palemon*) that we found at Estero Llano Grande. And on our day at Sabal Palms, I was able to improve my earlier photographs of Blue Metalmarks (*Lasaia sula*).

Red-bordered Pixie (*Melanis pixe*)(Photo by Ro Wauer)

The garden at Sabal Palm Sanctuary has been neglected in recent years, and so has not received much attention by butterfly enthusiasts. However, on the chance of finding something special we, along with friends Steve Moore and Barbara Volkle, checked it out. We discovered that the Sanctuary was under new management; the garden had been cleaned up and a good variety of plants were blooming. Besides finding a total of 10 Blue Metalmarks, we also recorded three trip species: Orange-barred Sulphur (*Phoebis philea*), Boisduval's Yellow (*Eurema boisduvaliana*), and Mazans Scallopwing (*Staphylus mazans*).

Back at NBC, we recorded several additional Valley specialties. Examples included Yellow Angled-Sulphur (*Anteos maerula*), Marius Hairstreak (*Rekoa marius*), Silver-banded Hairstreak (*Chlorostrymon simaethis*), Red-bordered Metalmark (*Caria ino*), Red-bordered Pixie (*Melanis pixe*), Zebra Heliconian (*Heliconius charithonia*), Mexican Fritillary (*Euptoieta hegesia*), Band-celled Sister (*Adelpha fessonia*), Mexican Bluewing (*Myscelia ethusa*), Gray Cracker (*Hamadryas februa*), Ruddy Daggerwing (*Marpesia petreus*), White-patched Skipper (*Chiomara georgina*), and Purple-washed Skipper (*Panoquina lucas*).

Mexican bluewing (*Myscelia ethusa*) (Photo by Ro Wauer)

Purple-washed Skipper (*Panoquina lucas*)(Photo by Ro Wauer)

The timing of our Valley visit was about right for finding the various resident butterflies as well as a few strays. But a few days before we arrived two other extremely rare Mexican butterflies were recorded, a lone Erato Heliconian (*Heliconius erato*) and two Orion Cecropians (*Historis odius*). Both would have been new for our North American butterfly list. But one can't have everything.

I suppose that the chance of finding and photographing new species is a major reason for my constant desire to visit the Valley for butterflies. Not a season goes by without something truly amazing showing up in the Valley. As long as we are able we will continue our annual fall trek to what undoubtedly is the Mecca of North American butterflies.

Note: Ro is the author of two pertinent butterfly books: *"Butterflies of the Lower Rio Grande Valley"* and *"Finding Butterflies in Texas,"* both published by Johnson Books (now Big Earth Publishing) of Boulder, Colorado.

(Ro Wauer, E-mail: rowauer@yahoo.com)

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QUOTES FROM *NABOKOV'S BUTTERFLIES*

"...it had rained the first two days of our stay in Zermatt. 'Oh, when will it clear, when will it clear?' Groaned Nabokov, pacing the hotel lobby as through the world had been created the previous night, and he had to examine at once its resplendent marvels, describe and name them. On the third day there was light; and early that morning - far too early that morning - we accompanied the seventy-five-year-old writer-naturalist on butterfly hunting trip ("lepping" he always called it) into the mountains. His sedentary guests walked along quite stoically, their thin-skinned office shoes no help at all, as amply soled Nabokov, squinting and scanning the horizon, talked on steadily, mainly about the flora and fauna around us...."

From Alfred Appel, Jr., memoir of June 1974; from "remembering Nabokov," in Vladimir Nabokov: A Tribute, ed. Peter Quennel (1979). On page 708 of *Nabokov's Butterflies*, edited and annotated by Brian Boyd and Robert Michael Pyle, Beacon Press, Boston, 2000.

Haven't we all had such a beginning for an anticipated trip — rain for the first few days [The Editor].

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"I also found out very soon that a "lepist" indulging in his quiet quest was apt to provoke strange reactions in other creatures. How often when a picnic had been arranged, and I would be self-consciously trying to get my humble implements ..., some cousin or aunt of mine would remark: 'Must you really take that net with you? Can't you enjoy yourself like a normal boy? Don't you think you are spoiling everybody's pleasure?..."

On page 90-91 of *Nabokov's Butterflies*, edited and annotated by Brian Boyd and Robert Michael Pyle, Beacon Press, Boston, 2000.

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UNUSUAL NYMPHALID NECTARING: ADDENDUM

BY
MIKE RICKARD

My original aricle published in *Southern Lepidopterists' News* Vol. 33 NO.3 contained photos of two species, *Hamadryas februa ferentina* (Godart, 1824) and *Eunica monima* (Stoll, 1782), appearing to nectar at Lantana blossoms, though neither genus is known to visit flowers. Close examination of the photos revealed that the proboscises were inserted not into the flower tube but the flower head itself, presumably seeking compounds such as alkaloids rather than nectar. On October 14, 2011, I photographed similar behavior by *Myscelia ethusa* (Doyere, 1840), a member of another genus not known to seek nectar. The flower in this instance was an Asteraceae, *Wedelia acapulcensis* Kunth. Note that the proboscis is inserted into the lower part of a spent flower head. I've seen many *M. ethusa* in my years of field experience, but this is the first time I've seen one on a flower. The photographs were taken at Estero Llano Grande State Park in Hidalgo County, Texas.

***Myscelia ethusa* on Wedelia, Estero Llano Grande State Park, October 14, 2011.**

(Mike Rickard, Texas Lepidoptera Survey. E-Mail: folksinger4@yahoo.com)

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SOME NEW DISTRIBUTIONAL RECORDS FOR *EUMORPHA INTERMEDIA* (SPHINGIDAE)

BY

LANCE A. DURDEN and JAMES K. ADAMS

Eumorpha intermedia (Clark, 1917) (MONA No. 7860) was originally described as a subspecies of *Eumorpha satellitia* (Linnaeus, 1771) from specimens collected in Baton Rouge, LA (Hodges, 1971; Tuttle, 2007). However, Hodges (1971) treated *intermedia* as a junior synonym of *Eumorpha pandorus* (Hübner) ("Pandora Sphinx"). Later, Brou (1980) elevated it to full species status based on careful assessments of adult morphological characters. Hodges et al. (1983) also recognized *E. intermedia* as a distinct species. The second through fifth larval instars were described by Tuttle (2007) who also included an image of the final instar larva. Larval morphology confirms the status of *E. intermedia* as a distinct species and shows that larval integumental patterns are closer to those of *E. satellitia* than to those of *E. pandorus* as shown by Tuttle (2007).

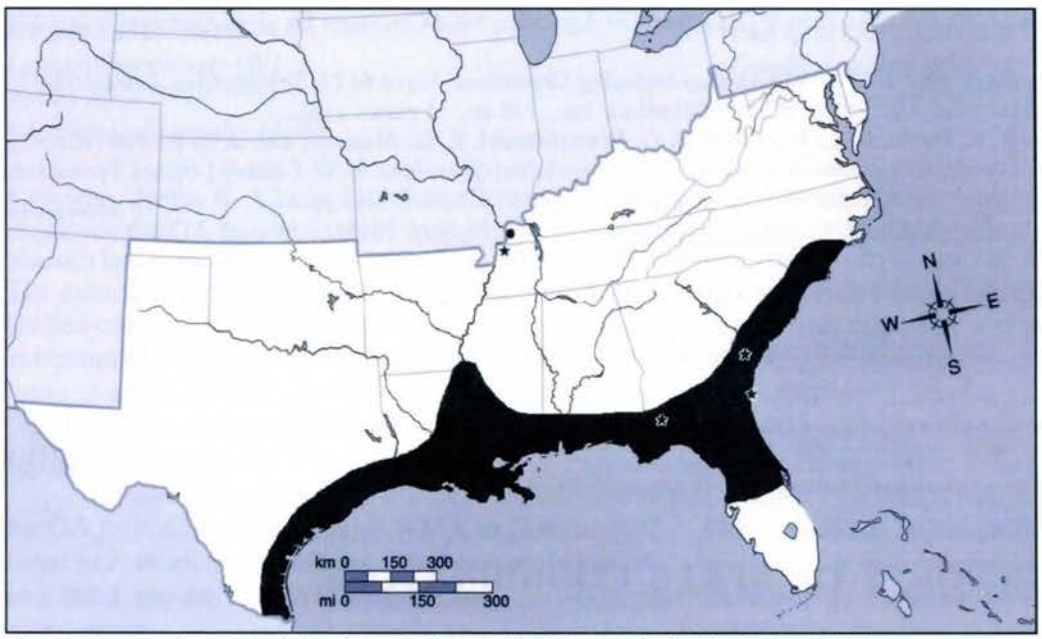

Fig. 1. Approximate distribution of *Eumorpha intermedia* in the United States (solid black) following Tuttle (2007) and BAMONA (2011) with new records reported in this note (black stars), and KY records indicated by the black circle (from Covell and Gibson, 2008).

Brou (1980) reported specimens of *E. intermedia* from coastal NC, SC, GA, northern FL, MS, LA and TX as far south as Brownsville near the Mexican border. Heppner (2003) listed this species from northern FL and from the southeastern U.S. (NC to FL and as far west as TX and possibly north to AR). Tuttle (2007) provided a distributional map for *E. intermedia* (Fig. 1) and quoted Brou (1980) in stating that existing records indicate it occurs along the Mississippi River drainage north at least as far as northern MS. Oehlke (2011) and the BAMONA (2011) website reiterate the distribution reported by Tuttle (2007). Most specimens of *E. intermedia* are from LA and were collected from May through August (Brou and Brou, 1997) but Tuttle (2007) stated that the scarcity of this species makes it impossible to determine the number of annual generations. Oehlke (2011) and the BAMONA (2011) website both state that the adult phenology extends from April through October.

Fig. 2. Specimen of *Eumorpha intermedia* attracted to light in northwestern TN (Obion county), 14 September 1980.

Examination of sphingids in the collection of LAD has revealed a specimen of *E. intermedia* (Fig. 2) from extreme northwestern TN (along the shores of Reelfoot Lake in Obion county) that was attracted to a Mercury Vapor lamp on 14 September 1980. In addition, the species has been taken in Carlisle County, KY (Covell and Gibson, 2008), north of the TN Reelfoot Lake site. The

KY specimens were taken in Doug Travis WMA by Gerald Burnett on 12 and 25 June 2004, 20 August 2004, and 18 June 2005. Further, Oehlke (2011) shows a specimen of *E. intermedia* from Jekyll Island (Glynn county), GA photographed on 4 October 2010. Additional unreported GA records are from Bainbridge, Decatur County (extreme SW GA), 22 May 1970 (in the collection at Georgia Southwestern State University, Americus), and New Ebenezer, Effingham County, 3 May 1997 (collected by Kendra Heneisen, in JKA collection). Because of their abilities to fly long distances, Tuttle (2007) emphasized the difficulty in deciphering the geographical distributions of many species of sphingids. However, it appears that the geographical distribution of *E. intermedia* extends northwards close to the Mississippi River near wetland habitats at least as far north as extreme northwestern TN and extreme western KY.

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(Lance A. Durden, E-mail: ldurden@georgiasouthern.edu; James K. Adams, E-mail: jadams@daltonstate.edu)

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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

Tom Neal sends in the following records for Florida for 2010 and 2011:

SPHINGIDAE: *Xylophanes pluto,* Gainesville, Alachua Co., FL, 18 October 2010. Never saw it here before, only a stray in N. Florida. County record.

Erinnyis alope, Papaya Sphinx, Gainesville, Alachua Co., FL, a regular late summer/fall migrant and temporary breeder. Common this year; currently (8 October 2011) I am rearing 22 larvae. Was totally absent last year along with other tropical migrants, probably due to the severely cold 2009-2010 winter. Still have not seen *Heliconius charitonius* and *Battus polydamas,* normally common here most of the year.

NYMPHALIDAE: *Polygonia interrogationis,* Florida City, Dade Co., FL, 16 December 2010. No records for southern Florida; southernmost US record.

NOCTUIDAE: *Catocala coccinata,* Gainesville, Alachua Co., FL, 26 April 2011, 8 May 2011. Fairly common in my backyard light trap the past two years; most years I never see it. The inner hind wing black band ranges from thin to completely obsolete in most Florida specimens.

Jean Evoy sends in the following report: Moths seen in the fall of 2011 in Desoto County, FL. These are species that

I have only seen once or twice:

Inguromorpha basalis 10/15
Zomaria interruptolineana 10/1
Olethreutes permundana 10/12
Adoneta spinuloides 9/17
Glaphyria glyphyralis 10/5
Glyphyria basiflavalis 9/1,12/9
Chalcoela pegasalis 10/25
Epipagis huronalis 10/5
Diaphania nitidalis 10/11
Clydonopteron sacculana 9/20,11/17
Streptopalpia minusculalis 9/12
Moodna ostrinella 10/2
Eudeillinae sp. 10/13
Mellila xanthometata 9/24
Leptostales crossii 10/1
Actias luna 10/14
Lascoria ambigualis 11/20
Hypena minualis 10/28
Scoleococampa liburna 10/24
Cecharismena nectarea 10/2
Ephyrodes cacata 10/1
Caenurgia chloropha 10/24
Argyrogramma verruca 9/9, 10/31
Paectes oculatrix 9/8
Tripudia quadrifera 9/18
Ozarba nebula 9/15, 10/23
Bellura oblique 11/28
Spodoptera eridania 12/11
Elaphria fuscimacola 9/29
Elaphria nucicolora 9/22
Elaphria chalcedonia 9/18,10/11
Condica vecors 9/30
Condica cupentia 9/21

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 (JA or no notation) and Irving Finkelstein (IF). 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 dates listed below are 2011 unless otherwise specified.

CORRECTIONS:

I need to correct two mistakes in the last newsletter. I listed *Ponometia tortricina* as a new STATE record for GA from Chickasawhatchee WMA in Dougherty Co. The species was misidentified (my bad!) and should be listed as *Ponometia fasciatella*. The two specimens of *P. fasciatella* Irving Finkelstein and I took were the second and third records for GA that I know of. Also, records listed as *Scopula umbilicata* should be *Scopula compensata*.

Dalton (SE), Whitfield Co., Sept. 17, with David Desroschers:
EREBIDAE: *Catocala robinsoni.* **NOCTUIDAE**: *Schinia nundina.*

Dalton, Dalton State College Campus, Whitfield Co., Oct. 1:
NOCTUIDAE: *Anathix ralla.* **GEOMETRIDAE**: *Cymatophora approximaria* (northernmost record for GA).

Carbondale, I-75 exit 326, Whitfield Co.:
SPHINGIDAE: *Agrius cingulata*, Sept. 17 and Oct. 19. **SATURNIIDAE**: *Hemileuca maia* (at lights), Nov. 14. **EREBIDAE**: *Ascalapha odorata,* Oct. 19, *Hypocala andremona*, Oct. 20. **NOCTUIDAE**: *Metaxaglaea semitaria*, Nov. 6.

Taylor's Ridge, 5 mi. W of Villanow, Walker Co.:
SATURNIIDAE: *Hemileuca maia*, Nov. 13 (common).

Gates Chapel Rd., 8 mi. WNW of Ellijay, Gilmer Co., IF:
PAPILIONIDAE: *Papilio appalachiensis*, April 25 (COUNTY).

Dick's Creek, Lake Burton Area, Rabun Co., Sept. 25, David Ellis:
EREBIDAE: *Catocala neogama.*

Atlanta, Fulton Co., IF:
NOCTUIDAE: *Ozarba aerea*, Sept. 27; *Callopistria floridensis*, month of Sept. (at least a dozen).

Port Wentworth, marshy area (pickerelweed) Chatham Co., Lance Durden:
HESPERIIDAE: *Problema bulenta*, Sept. 5 (13), Sept. 25 (1); *Poanes viator*, Sept. 25 (2).

A follow up trip to Chickasawhatchee Wildlife Management Area (WA) in Dougherty Co. (SW of Albany) yielded some decent diversity. Many of the records are likely County records, but those of special interest are indicated with a "*." *Schinia tuberculum* was found in the area (few locations in state), as was a far south record for *Papaipema arctivorens*.

Chickasawhatchee WMA, Along Mud Creek road, 0.6 mi. S of hwy. 62, 14 mi. SW of Albany, Dougherty Co., Oct. 7-8, open habitat:
EREBIDAE: *Argyrostrotis flavistriaria, Mocis marcida.* **GEOMETRIDAE**: *Nemoria catachloa**.

Chickasawhatchee WMA, Along Pine Island road, 1 mi. S of hwy. 62, 17-18 mi. SW of Albany, Dougherty Co., Oct. 7-9, open habitat:
EREBIDAE: *Cisthene tenuifascia** (few locations in STATE), *Mocis marcida.* **NOCTUIDAE**: *Schinia arcigera, Anicla lubricans.* **GEOMETRIDAE**: *Scopula compensata**. **PYRALIDAE**: *Dioryctria merkeli.* **TORTRICIDAE**: *Eucosma quinquemaculana**.

Chickasawhatchee WMA, Seven Bridges Road, 0.5 mi. WSW of intersection with Pine Island rd., 2.5 mi. S of Hwy. 62, 18.5 mi. SW of Albany, Dougherty Co., JA & IF, Oct. 7-9, 2011, open cypress swamp:
SPHINGIDAE: *Enyo lugubris.* **NOTODONTIDAE**: *Lochmaeus manteo.* **EREBIDAE**: *Crambidia pallida, Cisthene packardii, Virbia laeta, Apantesis phalerata, Idia americalis, I. rotundalis, I. lubricalis, Renia flavipunctata, Lascoria ambigualis, Palthis angulalis, Anticarsia gemmatilis, Argyrostrotis flavistriaria, Drasteria grandirena, Mocis marcida, Gondysia smithii.* **NOCTUIDAE**: *Acronicta laetifica, A. brumosa, Schinia tuberculum*, S. trifasica, S. arcigera, Iodopepla u-album, Phospila miseloides, Athetis tarda, Leucania adjuta, L. inermis, Anicla lubricans.* **GEOMETRIDAE**: *Macaria aequiferaria, M. bicolorata, M. transitaria, Glenoides texanaria, Protoboarmia porcellaria, Iridopsis pergracilis*, Hypagyrtis unipunctata, Euchlaena amoenaria, Nemoria elfa*, Synchlora frondaria, Idaea tacturata, Lophosis labeculata, Scopula lautaria*.* **CRAMBIDAE**: *Lineodes integra*, Argyria critica, A. lacteela, Urola nivalis, Peoria sp.* **PYRALIDAE**: *Dioryctria amatella, D. taedivorella, D. clarioralis, Peoria sp.* **URODIDAE**: *Urodus parvula.* **OECOPHORIDAE**: *Antaeotricha leucilliana.* **TORTRICIDAE**: *Eucosma quinquemaculana, Carollela sartana.*

Chickasawhatchee WMA, East Pine Island Rd, 0.5 mi. N of intersection with Seven Bridges Rd., Oct. 8-9:
LASIOCAMPIDAE: *Tolype minta**. **EREBIDAE**: *Dasychira dorsipennata, Cisthene packardii, Virbia laeta, Idia americalis, I. aemula, I. rotundata, I. lubricalis, Renia fraternalis, Phytometra rhodarialis, Plusiodonta compressipalpis, Phyprosopus callitrichoides, Mocis marcida, Caenurgia chloropha, Lesmone detrahens, L. hinna, Argyrotstrotis flavistriaria, Ptichoidis herbarum, Zale lunata, Catocala carissima**. **NOCTUIDAE**: *Acronicta brumosa, Schinia tuberculum*, S. sordida, S. trifascia, Oligia fractilinea, Phospila miseloides, Galgula partita, Elaphria festivoides, Spodoptera dolichos, S. frugiperda, S. latifascia*, Athetis tarda, Mythimna unipuncta, Leucania incognita, Anicla infecta, Agrotis ipsilon.* **GEOMETRIDAE**: *Macaria aequiferaria, M. bicolorata, Iridopsis cypressaria*, Protoboarmia porcellaria, Anavitrinella pampinaria, Euchlaena amoenaria, Lychnosea intermicata, Leptostales laevitaria, L. pannaria, Scopula limboundata, Costaconvexa centrostrigaria, Orthonama obstipata.* **CRAMBIDAE:** *Argyria lacteella.* **PYRALIDAE**: *Tallula atrifascialis, Diorytria merkeli.* **TORTRICIDAE**: *Eucosma quinquemaculana.* **OECOPHORIDAE**: *Inga cretacea.* **GELECHIIDAE**: *Aroga* nr. *compositella.*

Chickasawhatchee WMA, Seven Bridges Road, 0.75 m E of intersection with E Pine Island rd., 17 mi. SW of Albany, Dougherty Co., JA & IF, Oct. 7-9, Cypress/Cane swamp, with Jeff Slotten:
SATURNIIDAE: *Actias luna.* **BOMBYCIDAE**: *Tolype notialis.* **SPHINGIDAE**: *Xylophanes tersa.* **NOTODONTIDAE**: *Peridea angulosa, Lochmaeus manteo.* **EREBIDAE**: *Dasychira meriodionalis, D. basiflava, Orgyia leucostigma, O. detrita ?, Clemensia albata, Cisthene plumbea, C. packardii, C. subjecta, Virbia laeta, Apantesis phalerata, Idia americalis, I. rotundalis, I. julia, I. lubricalis, Zanclognatha minualis, Z. cruralis, Chytolita petrealis, Renia discoloralis, R. sobrialis, Tetanolita floridana, T. mynesalis, Hormoshista latipalpis*, Lascoria ambigualis, Redectis pygmaea, Metalectra discalis, Palthis angulalis, Arugisa lutea, Hypena scabra, H. baltimoralis, Scolecocampa liburna, Phytometra ernestinana, Hemeroplanis obliqua, Ledaea perditalis, Lesmone hinna, Metallata absumens, Ptichoidis herbarum, Argyrostrotis flavistriaria, Anticarsia*

gemmatilis, Gondysia smithii, Allotria elonympha. **EUTELLIIDAE**: *Marathyssa inficita, Paectes abrostoloides.* **NOCTUIDAE**: *Argyrogramma verrucae, Heliothis virescens, Schinia arcigera, S. trifascia, Condica videns, C. mobilis, Amphipyra pyramidoides, Papaipema arctivorens*, Iodopepla u-album, Dipterygia patina*, Phosphila miselioides, Elaphria grata, E. versicolor, E. chalcedonia, E. nucicolora, Spodoptera dolichos, S. ornithogalli, S. latifascia* (few in state)**, S. eridania, Sunira bicolorago, Lacinipolia implicata, Mythimna unipuncta, Leucania adjuta, L. incognita, Orhodes majuscula, Athetis tarda, Anicla infecta, Agrotis ipsilon.* **GEOMETRIDAE**: *Macaria aemulataria, M. aequiferaria, M. bicolorata, Glenoides texanaria, Iridopsis pergracilis*, I. cypressaria*, Protoboarmia porcellaria, Melanolophia canadaria, M. signataria, Hypagyrtis unipuncatata, H. esther, Euchlaena amoenaria, Lychnosea intermicata*, Patalene olyzonaria, Besma quercivoraria, Eusarca confusaria, E. fundaria*, Nemoria lixaria, N. bistriaria, Synchlora frondaria, Leptostales pannaria, Lophosis labeculata, Idaea violacearia, I. tacturata, Scopula limboundata, S. compensata, Eulithis diversilineata, Eubaphe mendica.* **CRAMBIDAE**: *Perispasta caeculalis, Ategumia ebulealis, Diacme elealis, Fumibotys futilalis, Pyrausta bicoloralis, Agriphila ruricollelus, Urola nivalis.* **PYRALIDAE**: *Clydonepteron tecomae, Dioryctria merkeli.* **LIMACODIDAE**: *Isa textula.* **ATTEVIDAE**: *Atteva aurea.* **SESSIIDAE**: *Synanthedon acerni "tepperi".*

Big Lazer Creek WMA, Talbot County, Sept. 20, Terry Johnson:
HESPERIIDAE: *Problema byssus* (LATE).

Edison, Calhoun Co., Sept. 16, Rome Ethredge
SPHINGIDAE: *Manduca rustica.*

Camden and Glynn Couties, Sept. 10-11, Dan Vickers and Pierre Howard:
PAPILIONIDAE: *Battus philenor, Papilio glaucus, P. troilus, P. polyxenes, P. cresphontes, P. palamedes.* **PIERIDAE**: *Ascia monuste, Phoebis sennae, Eurema nicippe, E. lisa.* **LYCAENIDAE**: *Callophrys gryneus sweadneri, Strymon melinus, Calycopis cecrops, Brephidium isophthalma, Hemiargus ceraunus.* **NYMPHALIDAE**: *Agraulis vanillae, Phyciodes phaon, Vanessa atalanta, Junonia coenia, Limenitis arthemis astyanax, L. archippus, Asterocampa clyton, Cercyonis pegala, Danaus plexippus.* **HESPERIIDAE**: *Urbanus proteus, Epargyreus clarus, Thorybes bathyllus, Erynnis horatius, Pyrgus communis/albescens, Nastra lherminier, Lerema accius, Copaeodes minimus, Atalopedes campestris, Hylephila phyleus, Polites vibex, P. origenes, Pompeius verna, Wallengrenia otho, Anatrytone logan, Problema byssus, Poanes viator, Euphyes dion, E. arpa, E. pilatka, E. vestris, Oligoria maculata, Calpodes ethlius* (caterpillar), *Panoquina ocola, Panoquina panoquin.*

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Steve sends in the following report for North Carolina:

The following selected butterfly records from July through November 2011 were submitted by Harry LeGrand. Place names refer to counties unless otherwise stated, and records are not new county reports unless indicated.

PAPILIONIDAE:
Papilio cresphontes, the first record for Wake in several decades was one seen by Will Cook at Raulston Arboretum in Raleigh on September 21. Though this record was certainly of a stray or migrant, one photographed in Ashe by an unreported observer on August 11 may well have been a local resident.

PIERIDAE:
Pontia protodice, this scarce and declining species was found at many locales, with an excellent count of 43 made by Harry LeGrand south of Raleigh (Wake) on September 10. A most unusual record, of a stray, was one photographed at Newfound Gap in Great Smoky Mountains National Park (Swain) on July 31 by Irvin Pitts. Other records during the period were singles at Yancey on August 19 (Sue Smith), Caldwell **(COUNTY)** and

Watauga **(COUNTY)** on August 20 (Derb Carter), Buncombe on August 21 (Janie Owens), and Mecklenburg on October 27 (Lenny Lampel).

Pyrisitia lisa, this species appeared to be very rare in the state in 2011, and one was seen quite late in Durham on November 20 (Jeff Pippen).

LYCAENIDAE:

Atlides halesus, always a good find in the Piedmont, one seen by Richard Stickney in Durham on October 27 was the latest ever for the province.

Callophrys gryneus, Doug Johnston had records of this species in Buncombe **(COUNTY)**, on July 8 and 17, at different sites. This is a very rare species in the mountains, where it has been recorded in just one other county (Jackson) in the province.

NYMPHALIDAE:

Speyeria diana, a record state one-day count, though made by several parties, was the 32 tallied on the Transylvania count on August 19 (*fide* Ruth Young).

Phyciodes phaon, Jeff Pippen and Harry LeGrand found remarkable numbers of this *"coastal"* species about 2-3 miles from tidal water, in residential areas of south Wilmington (New Hanover), on October 16. Most of the 90 individuals were along roadsides next to wooded tracts, but some were in yards; patches of the host plant *Lippia nodiflora* were present nearby.

HESPERIIDAE:

Erynnis martialis, this rarity was found at two sites in Buncombe: one on July 13 and two on August 2 at one site (Gail Lankford, Jeff Pippen) and two on July 28 at a second site (Sparrel Wood).

Copaeodes minima, one seen on October 8 by Harry LeGrand just south of Raleigh (Wake), at a site where present a year earlier, is strong evidence of a small local colony at the northern edge of the range.

Problema byssus, this skipper is one of the few butterflies in the state that is clearly expanding its range, moving northward in the Sandhills and lower Piedmont. Notable records were made in Wake **(COUNTY)** at Yates Mill County Park on August 30 (Bud Webster – photo), Moore **(COUNTY)** near Weymouth Woods preserve on September 12 (Richard Stickney), and Hoke **(COUNTY)** at Fort Bragg on September 26 (Stickney).

Poanes yehl, an excellent count was 15 seen and photographed by Richard Stickney at the Sandhills Community College Gardens (Moore) on September 12.

Poanes viator, the spread of *Zizaniopsis miliacea* to several lakes and ponds in Wake has provided rare Piedmont habitat for this skipper, which is primarily limited to brackish coastal marshes in the state. Small numbers were seen by Mike Turner and Richard Stickney on several occasions between August 2 and September 28 at both Yates Mill County Park and Harris Lake County Park, where seen in the past few years.

Amblyscirtes vialis, not often reported in the second or third broods, one second-brood individual was seen at Pilot Mountain State Park (Surry) on July 24 by Gene Schepker. He had a record state count of 10 there in spring 2011.

Panoquina panoquin, one photographed by Mike Turner on September 25 near Maple Hill in Pender **(COUNTY)** was about 10 miles inland from any salt marsh habitat.

The following selected moth records were submitted by Steve Hall and Bo Sullivan from a survey they are conducting in the Uwharrie Mountains region in the south-central Piedmont. All represent **COUNTY** records unless otherwise stated.

LIMACODIDAE:

Heterogenea shurtleffi, collected August 2 from a ridge-top in Randolph County. Previous records from the state indicate that this species is associated with riparian habitats and its presence on this ridge may be due to a series

of vernal pools that support willow oaks, wetland sedges, and other species normally found in floodplains.

NOCTUIDAE:

Bleptina sangamonia, collected on August 31 from two sites in Montgomery County. We have been puzzling over the distribution and habitat associations of this species since the first specimens were found in the state by Richard Broadwell in 1994. Despite dissecting a fairly large number of *Bleptinas* over the years – previously the only definitive way to distinguish them – only a couple of other specimen have turned up, with the rest turning out to be the fairly common and widespread *B. inferior*. This time, however, nine specimens that appeared to match the wing pattern of *sangamonia* – darker and with a more contrasting subterminal -- were submitted for DNA bar-coding and showed a good match to specimens of *sangamonia* from Texas and Tennessee. The habitats where these specimens were collected consist of open rocky glades or dry-xeric oak-hickory forests. Given that our previous specimens came from sand-ridges associated with Carolina bays or blackwater rivers, we suspect that *sangamonia* is associated primarily with xeric sites, but including a fairly wide range of dry plant communities. In that regard, they show the same pattern as *B. inferior*, which we also obtained in the same samples – again segregated by bar-coding. Why *sangamonia* is so much rarer remains a mystery.

Catocala spp. Several species of hickory-feeding *Catocalas* were collected that had previously been unrecorded in the Piedmont, although several have also been recently collected by Paul Sharf from Lake Gaston in the northeastern Piedmont near the Virginia state line. These include *C. retecta* (Randolph County, Aug. 2), *C. flebilis* (Randolph County, Aug. 2; Sept. 1), *C. subnata* (Randolph County, Sept. 1), and *C. angusi* (Randolph County, Sept. 1). All were collected from sites where southern shagbark hickory (*Carya carolinae-septentrionalis*) was a dominant species.

Papaipema inquaesita, collected September 27 in Montgomery County. This appears to be the first Piedmont record for this species in North Carolina, which has previously been recorded only in our mountains. The maps newly presented by the Moth Photographers Website, however, indicate that it has been collected in the Piedmont and Coastal Plain of South Carolina. Given the wide distribution of its reported host plant, sensitive fern (*Onoclea sensibilis*), it will probably turn out to be widely distributed across North Carolina as well.

Papaipema polymniae, collected August 9 in Randolph County. Although again recorded in North Carolina previously from the mountains, the MPG map for this species indicates other recent observations from the Piedmont. Again, given the wide distribution of its host plant, hairy leafcup (*Smallanthus uvedalius*), it should turn out to have a wide distribution across the state.

Tripudia rectangula, collected on June 28 and August 2 from a mafic site in Randolph County. This species has been recorded at other mafic sites in the Piedmont, where it may be associated with basophilic species of wild petunia.

NOTODONTIDAE:

New Genus, New Species, collected August 2 in Randolph County. This undescribed species has been recorded at several sites in the Sandhills and Outer Coastal Plain in association with riparian habitats; this appears to be the first time it has been collected in the Piedmont. As suggested for *Heterogenea* above, its presence on the same ridge-top in the Uwharries may be due to the presence of extensive vernal pools, suggesting that one of its main host plants may be willow oak.

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