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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

HELVIBOTYS SUBCOSTALIS (DYAR, 1912) AND HELVIBOTYS PUCILLA (DRUCE, 1895) IN LOUISIANA BY VERNON ANTOINE BROU JR.

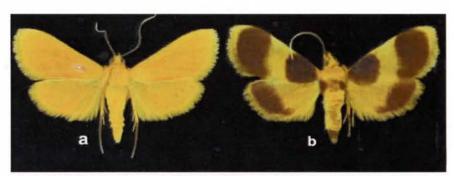


Fig 1. Helvibotys subcostalis (Dyar, 1912) a. male and Helvibotys pucilla (Druce, 1895) b. female.

The small bright orange pyralid species *Helvibotys subcostalis* (Dyar) (Fig. 1a) is known in Louisiana from a series of 14 male specimens captured by myself between 1972 and 1983 in the southeast Louisiana parishes: Iberville, St. John the Baptist, and Lafourche (Fig. 3). The orange and black species *Helvibotys pucilla* (Druce) (Fig. 1b) is known in Louisiana from a series of five female specimens captured by myself

between 1972 and 1992 in the southeast Louisiana parishes: Iberville, St. John the Baptist, and West Feliciana (Fig. 3).

Munroe (1976) created the new genus *Helvibotys* Munroe, listing four species in this genus: *Helvibotys helvialis* (Walker), new combination, *Helvibotys pseudohelvialis* (Capps), new combination, *Helvibotys freemani* Munroe, new species, and *Helvibotys subcostalis* (Dyar), new combination.

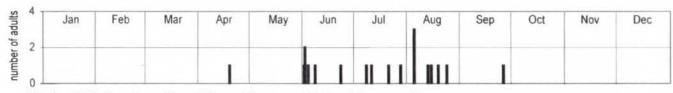


Fig. 2. Adult *H. subcostalis* and *H. pucilla* captured in Louisiana. n = 19.



Fig. 3. Parish records by this author.

Interestingly, under the discussion of the genus *Helvibotys* (Munroe, 1976) states "*Helvibotys sinaloensis* (Capps) is identical with *H. subcostalis* in structure,..." Also, under the discussion for *subcostalis*, Munroe (1976), states "the Mexican species *H. sinaloensis* (Capps) is doubtfully distinct" and "both ... species *H. subcostalis* and *H. freemani*, are known only from males. It is possible that the females will prove to be different in appearance".

In Dyar's description of *subcostalis* (1912), there were eight male specimens from Veracruz, Mexico, Guatemala, Costa Rica, and the United States, with dates of flight May to August, and females were unknown. In the latest checklist of moths of North America (Hodges, *et al.*, 1983), the Pyralidae section (except for Crambinae) was refereed by Eugene Munroe. Under the genus *Helvibotys* Munroe, 1976, there are five species listed. Two of these species are *H. subcostalis* (Dyar, 1912) and *H. pucilla* (Druce, 1895), n. comb.

Subsequently in 1984, I sent Louisiana specimens of these two species to Eugene Munroe for confirmation. The specimens pictured in Fig. 1a and 1b bear Munroe's labels confirming these determinations. On the label for the male in (Fig.1a), *H. subcostalis*, Munroe writes "probably = male of *H. pucilla* (Druce)". Munroe (1984, per. comm.) states regarding *Helvibotys subcostalis* (Dyar) "I think this is the male of *Helvibotys pucilla* (Druce), as they have the same geographical range (down to southern Mexico) and turn up in the same collections, but it would be nice to take a pair in copulation". Regarding *Helvibotys pucilla* (Druce), Munroe (1984, per. comm.) states "This name has priority over subcostalis, if the two are really the same".

Neither *subcostalis* nor *pucilla* are listed for Florida by Heppner (2003). Knudson and Bordelon (1999) listed all five species of *Helvibotys* for the state of Texas that were listed by Munroe (Hodges, *et al.*, 1983). At least one other species of the genus, *Helvibotys helvialis* (Walker) occurs in Louisiana, but is not addressed in this investigation.

Since Druce described *pucilla* 18 years prior to Dyar's description for *subcostalis*, the name *pucilla* has priority. I am confident these two names represent the same species. Based on the dates of capture of this small series of 19 specimens, *pucilla* (Druce, 1895) may have at least four annual broods in Louisiana (Fig. 2).

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

"But I also intend to collect butterflies in Peru or Iran before I pupate...." Vladimir Nabokov

Source: Nabokov's Butterflies, New Translations from the Russian by Dmitri Nabokov, Edited and Annotated by Brian Boyd and Robert Midhael Pyle, Beacon Press, Boston, pg. 643.

The Southern Lepidopterists' Society

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The Southern Lepidopterists' Society is open to anyone with an interest in the Lepidoptera of the southern region of the United States. 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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THE 12TH ANNUAL BUTTERFLY (AND MOTH) FESTIVAL, MISSION, TEXAS

ED KNUDSON & CHARLES BORDELON

The festival was held, as usual, in the Mission Civic Center, October 17-21, 2007, with over 200 participants and about 12 group leaders for various field trips, demonstrations, and lectures. The keynote speaker this year was Jeff Glassberg, who gave a talk on his experiences in Mexico. David and Jan Dauphin were the local coordinators for the event, which went off with few, if any significant problems. Prior to the event, several specimens of the rare hairstreak, Chlorostrymon telea were found in the new butterfly garden at Falcon State Park. This species had not been seen in Texas, since H.A. Freeman collected it in 1935 [specimen(s) in AMNH]. This generated media coverage and increased attendance for the festival, but apparently these were gone, by the time the first official trips to Falcon State Park took place. The weather was hot and humid, and took a toll on the attendees (and us), only to be replaced by beautiful, cool, sunny weather immediately afterwards.

For those readers unfamiliar with this event, it is strongly biased towards the watcher/photographer community and so collecting is not permitted during any of the events, or in any of the gardens, although, with permits, limited collecting may be allowed in some places, as long as it does not coincide with the event trips. Fortunately, there are many other areas to collect, which are not usually visited by most festival participants. Our part in the festival is to host blacklighting trips, which are usually held at La Lomita Mission Park. This year we were assisted by Mike Quinn, John & Gloria Tveten, Dale Clark, Dave Wagner, and Charlie Sassine. But the hot weather and abundant mosquitoes kept attendance lower than usual.

One hundred forty nine butterfly species were officially recorded during the festival, all from Hidalgo and Starr Counties (Cameron Co., barely visited). Outstanding localities were Falcon State Park, Estero Llano Grande State Park (Weslaco/Progresso), and the Mission area, especially Madero, La Lomita, Penitas. The large butterfly garden at Bentsen State Park was not in bloom for the festival, due to watering problems, and apparently the butterfly garden at Santa Ana Refuge was also not in very good condition.

Outstanding species found included:

Phocides polybius lilea

Polygonus leo Chioides zilpa

Polythrix octomaculata Astraptes fulgerator

Urbanus teleus

Spathilepia clonius

Cogia hippalus

Arteurotia tractipennis (several)

Pellicia arina Gorgythion begga Grais stigmaticus

Timochares ruptifasciatus (common)

Heliopyrgus domicella

Heliopyrgus sublinea (several, esp. after the

festival) Vidius perigenes Monca crispinus

Panoquina evansi (several) Nyctelius nyctelius (common) Papilio anchisiades idaeus

Papilio ornythion

Ganvra josephina (common)

Allosmaitia strophius

Rekoa marius

Chlorostrymon simaethis

Strymon rufofusca Strymon bebrycia Strymon alea

Strymon albata Strymon yojoa

Strvmon bazochii Ministrymon clytie

Electrostrymon hugon

Zizula cvna Lasaia sula Melanis pixe Emesis emesia Chlosyne janais Chlosvne endeis Anthanassa tulcis

Anartia fatima Siproeta stelenes Adelpha fessonia

Myscelia ethusa Biblis hyperia

Hamadryas guatamalena Doxocopa pavon Doxocopa laure (fairly common)

Interesting moths found during our blacklight trips and during the day at other places, included:

Urania fulgens (1st recent US voucher, CWB)

Epimecis detexta (1st recent record, CWB)

Molybdogompha polymygmata

Purius superpulvurea (3rd US, CWB)

Agaraea semivitrea

Pseudosphex leovasquezae (1st recent voucher,

CWB, DXC)

Condica pyromphalus (3rd US, ECK)

Acontia jaliscana (2rd US voucher, CWB)

Bagisara pacifica Thysania zenobia

Syllepsis hortalis (1st recent record, ECK)

Sysracera subulalis

Hydriris ornatalis (2nd TX, ECK)

Carmenta armasata

(Ed Knudson, E-Mail: eknudson@earthlilnk.net; Charles Bordelon, E-Mail: legitintellexit@earthlink.net)

FIELD REPORT ASSOCIATED WITH THE GENERAL SLS MEETING HELD IN GAINESVILLE, FLORIDA

BY JEFF SLOTTEN

I arrived at the McGuire Center entrance at 8:40 a.m. (Friday, October 5, 2007) and one person, Terry Arbogast, was waiting there. We stayed until 9:10 a.m. and drove to Williston Highlands off state road 121, southwest of Williston. Goethe State Forest owns a nice parcel of turkey oak/pine sandhill habitat with gopher tortoise burrows and lots of native composites. The weather was partly cloudy from 10:00 a.m. until 12:30 p.m. The clouds obscured most of the sky after that. Don Stillwaugh joined us shortly after we arrived at the property which has been recently burned in areas. We saw the following species of lepidoptera:

Eurema lisa Urbanus proteus Anaea andria Agraulis vanillae Polites vibex Eurema daira Precis coenia Ervnnis zarucco Eurema nicippe Phoebis sennae Strymon melinus Ervnnis horatius Papilio troilus Hemiargus ceraunus Schinia fulleri Phyciodes phaon Nastra neamathla Schinia trifascia Vanessa atalanta Hesperia attalus

Moth collecting was rained out! We would have had Jeff Slotten, Irving Finkelstein and James Adams. We rested at my house instead.

NEW MEMBERS

The Society welcomes the following five new members:

John R. Mangold 5957 Seabird Dr. S. Gulfport, FL 33707 Kathy Malone 14572 N.W. 232nd Street High Springs, FL 32643 Alan Chin-Lee 929 SW 5th Street Boca Raton, FL 33486 Bob Fine 2890 Sierra Dr. Rockford, IL 61109

Vitaly Charny 101 Old Rocky Ridge Lane Birmingham, AL 35216 *******************************

John Heppner (Sustaining)

DONATIONS 2007 - MANY, MANY THANKS TO THE FOLLOWING CONTRIBUTORS WHO ARE VERY GENEROUSLY KEEPING OUR SOCIETY SOLVENT

Vernon A. Brou Jr. (Sustaining)

James Adams Eleanor Adams William H. Houtz Ricky Patterson (Sustaining) Nell Ahl (Sustaining) Linda and Byrum (Buck) Cooper (Sustaining) Kilian Roever (Sustaining) Joann Kargas (Contributor) John Vernon (Sustaining) Floyd and June Preston (Sustaining)

John Snyder (Sustaining)

Bill Lindeman (Sustaining)

Mark DeGrove (Sustaining)

James Popelka (Sustaining)

Jimmy Jackson (Sustaining) Jim Vargo (Contributor) Mack Shotts (Benefactor) Ken Hansen (Sustaining) Jan Dauphin (Sustaining) Bo Sullivan (Sustaining) Frances Welden (Contributor) Amy Watts (Sustaining) Josh Aries Tom Neal (Contributor) Jeffrey Belth (Sustaining) Steve Hall Scott Wehrly (Sustaining)

Maria Plonczyneski and Drew Hildebrandt (Sustaining) **Bruce Dixon Hugh Wyatt (Sustaining)** John Peacock (Sustaining) Dale Habeck (Contributor) Bob Belmont (Benefactor) Joel Johnson (Sustaining) Lawrence Gall (Benefactor) Mike Quinn (Sustaining) Jon Turner (Benefactor) Ben Williams (Contributor) John Rawlins (Sustaining) R.G. Petree (Sustaining) Steve Stedman

SLS 2007 ANNUAL MEETING MINUTES

Leroy Koehn (Benefactor)

Jean Evov

Chairman Marc Minno called the SLS Business Meeting to order at 11:33 AM on Sunday October 8, 2007, at the McGuire Center for Lepidoptera and Biodiversity in Gainesville. Members who signed in at the Business Meeting were:

> James & Eleanor Adams Irving L. Finkelstein Floyd & Jane Preston Deborah Matthews Lott Joe Riddlebarger Andy Anderson Terry Arbogast Kathy Malone Jeff Slotten Julieta Brambila Jackie Miller Don Stillwaugh Charlie Covell Marc Minno J.D. Turner Thomas C. Emmel Tom Neal Andrew Warren

The minutes (Report) of the previous meeting were approved as corrected in SL NEWS Volume 28 Nos. 2 & 3. Next, Jeff Slotten gave the Treasurer's Report. He indicated the organization is solvent, largely due to donations. Jeff reported a balance of \$4,394 as of September 30th. Production and mailing of NEWS, as usual, constituted the bulk of the expenses. Paid memberships remain about even at approximately 150 active members.

Under Old Business, Marc gave a PowerPoint review of recent SLS activities. These included the 2006 Spring and Fall Field Meetings in Osceola National Forest (see NEWS Volume 28 No. 2 & Volume 29 No. 1, respectively) and a March 2007 Field Meeting for moth collecting in Goethe State Forest which unfortunately coincided with an unseasonable cold snap and therefore yielded very few sightings. He next mentioned the joint meeting of The Lepidopterists' Society, Association for Tropical Lepidoptera, and Southern Lepidopterists' Society in Gainesville, Florida, during June 2006, and brought us to the current ATL/SLS 2007 meeting, again at the McGuire Center in Gainesville.

Other items addressed under Old Business included the fact that SLS has eleven State Coordinators who compile and report Lepidoptera records in each issue of the NEWS. The major point made here is that the submission of records by the general membership is highly encouraged in order to expand this important aspect of the SLS.

Next, an acknowledgement of thanks was given to Debbie Matthews Lott for her efforts at design of SLS apparel and subsequent availability (see NEWS Volume 28 No. 3). These include T-shirts and polo shirts with the Tiger Swallowtail logo. Currently, items can be purchased through the Café Press website and it was proposed that we have a link to this vendor's website from the SLS website.

The next item was a short discussion of the SLS NEWS. J. Barry Lombardini was praised for his efforts as Editor of this publication. A motion was made to have the Secretary compose a letter of appreciation to Barry. It was quickly seconded and passed unanimously.

Old Business was concluded with a state by state breakdown of the membership with Florida, Texas, Louisiana and Georgia ranking at the top. Approximately, 70% of SLS members reside in the eleven "member states."

Under New Business, Marc mentioned the meeting of the SLS Board of Directors on the previous day. The first topic of discussion was the annual John Abbott Award nominations. Three candidates were nominated at the Board meeting. Upon acceptance of the nomination, brief bios will be published along with a ballot to be inserted into an upcoming issue of the NEWS. James Adams brought up a significant point of order in that the SLS constitution states that previous nominees who did not receive the award on the last ballot shall be carried over to the next ballot.

A motion was made for the Board to consider the general case of a partial travel stipend, which might be provided to an Abbott Award winner or a featured speaker on an individual basis. The motion was never seconded.

The next new item was a discussion of membership and how to communicate to members that their dues have expired. A significant problem involves keeping E-addresses current.

The dates and location of the 2008 Meeting were next on the agenda. A motion was made to have the next SLS meeting coincide with 59th Annual Meeting of The Lepidopterists' Society to be held June 23 through 27 at Mississippi State University in Starkville, MS. The motion was seconded and passed with no dissenting votes.

Next came a discussion of future Field Meetings. J.D. Turner offered access to sites in Mississippi and Alabama. Charlie Covell suggested that descriptions of the habitats and a list of target species at these sites be publicized.

Other New Business involved a discussion of historic Newsletter access. Debbie Matthews Lott agreed to scan old Newsletters and make them available as pdfs in an archive on the SLS Website. James Adams suggested that a running log be kept from current issues.

A regional "Database Initiative" was brought up for discussion by Charlie Covell as a regional project of this nature is underway in Kentucky. Tom Emmel mentioned that the McGuire Center is looking into such a project on a larger scale. It was generally agreed that this would be a very labor intensive effort and that the SLS would be supportive and willing to contribute data to such a project, but is not ready to initiate such a project at this time.

The final item on the Meeting's Agenda was the election of new officers. As in the past, several current officers have indicated their desire to have their terms end. In particular, the current Treasurer and NEWS Editor request able and willing replacements. Thus, the following slate of seven officers which comprises the SLS Board of Directors was submitted to the attending membership:

Chairman – Joe Riddlebarger NEWS editor – J. Barry Lombardini Website Manager – Dave Morgan Member-at-Large – Tom Neal Secretary – Don Stillwaugh Treasurer – Jeff Slotten Membership Coordinator – Marc Minno

A motion to approve the slate was made and seconded. The motion passed with no descending votes.

Marc Minno was thanked for his leadership over the past two years which was subsequently celebrated with a round of applause. Thanks and applause also went to Jackie Miller, Debbie Mathews Lott and Lorraine Duerdin for the planning and orchestration of the meeting.

The meeting was adjourned at 12:43.

Respectfully submitted,

Don Stillwaugh, Secretary

[Note: Photographs of the 2007 joint SLS-ATL Meeting are on page 151 and 152.]

[Note: I wish to thank the Members of the SL Society for the letter of appreciation. I will continue to strive to make the NEWS a quality newsletter - Barry Lombardini, The Editor]

AN ACCOUNT WITH EUNICA MONIMA (STOLL, 1782) BY ALAN CHIN-LEE AND DAVID FINE

There has been a theme in many articles in recent years, describing the increasing difficulties involved in collecting butterflies in the United States, especially in certain areas (like South Florida). When you add in the elusive nature of many species like *Eunica monima* to the equation, doing anything with these species other than taking pictures is almost impossible. The species of the hammocks of Southernmost Florida have been a theme of profound interest for me in recent in parking right everyweight in sout in sou

Eunica monima used to be somewhat abundant in Dade and Monroe counties frequenting the edges of hardwood hammocks. The old avocado and mango groves of Southern Dade County were a good place to look for this species coming to the fallen fruit. They had been taken in many places in the Keys from Key Largo all the way south to Key West. The larval host of Eunica monima is a common tree called gumbo limbo (Bursera simaruba) which is a beautiful tree commonly used as ornamentals in people yards, in

years and an untold number of

hours have been spent rummaging

through these fragmented habitats

hoping to catch a glimpse

(preferably more than a glimpse)

of a number of rarities like both

Eunica species.

parking lots, on road sides and right of ways and just about everywhere else you could imagine in south Florida. There is certainly no shortage of purple wing food!

We have hung bait traps baited with rotting fruit in the unprotected hammocks of Dade and Monroe counties for months at a time in search of these elusive species making the bi-weekly drive from Palm Beach County to the Keys to check the traps and freshen the bait and have not turned up a single *Eunica* specimen, nor have we seen any on the wing outside of park boundaries.

At this point in time, the only places where I have ever seen Eunica tatila have been in Crocodile Lake National Wild Life Refuge in North Key Largo and Lignumvitae Key (which is also protected habitat). Colonies also exist on Old Rhodes Key and Elliot Key which are both protected. In all of our adventures, this species has not turned up in any of the other hammocks where they were formerly taken from Key Largo south to Key West. This species remains elusive to me, however, a beautiful crabwood tree (Gymnanthes lucida), the Florida Purple Wing's native host plant, resides in my father's back yard, patiently awaiting a willing female for a clutch of eggs.

Eunica monima on the other hand has disappeared from the Keys and now can only be found in a select few county parks in Dade County. Costello Hammock, Bauer Hammock, and the Deering Estate all have healthy colonies. However, many attempts to locate this bug outside of these sites has proven futile. It seems odd to me that they do not hold any stronghold in Monroe County for there are lots of what seem like suitable habitats for them. believe that I saw a single specimen of Eunica monima on the edge of a hammock in Crocodile Lake National Wildlife Refuge in North Key Largo in Late February of this year but I cannot confirm the sighting for I was obviously unable to collect it and it was flying in the line of sight with the sun and 20 or so feet up in the canopy.

It has been a recent goal to locate, rear, photograph and learn as much as possible about all of South Florida's butterflies and their life cycles in the last few years. Most of these species have not given much of a problem. However, *Eunica monima* seemed like one of those bugs that we might have to settle without. It is my firm belief that handling a species, observing

it in all 4 stages of its life, witnessing its most intimate of habits and hidden secrets cannot be accomplished in the field without taking specimens. It has been my absolute joy to become confident in my ability to obtain ova and care for the larvae of just about any butterfly or moth species. It is during these few weeks that you learn more about that species than you would in a lifetime of watching and taking pictures in the wild. It has been said that there is no need for collecting any more. We know all we need to know about the butterflies of the US and photography can accomplish everything that science needs from this point on. Well, I couldn't disagree more strongly. I believe that we could learn more about MOST of our species that fly right in front of our faces every day, not to mention elusive species like the violet gems that I am describing now. I have gotten more from handling the butterfly in all stages of its life cycle than I can even begin to describe, and whether you are a collector or not, by leaving this easy and rewarding past-time to collectors and breeders, you are cheating yourself out of TRULY understanding a species. Most of what we read in books about a given species is regurgitated information, passed on from book to book, from lepidopterist to lepidopterist, leaving even the author without having actually experienced the species about which he or she is writing about to the fullest degree. Eunica monima is the perfect example. Having reared them would have corrected any misunderstandings about this species.

On June 22nd, 2007, Alan Chin-Lee and I ventured to the Deering Estate to hopefully get a chance to photograph the adults and perhaps look for larval clusters. I would like to give a special thanks to

Paulette Haywood and Sara Bright for suggesting the Deering estate as a place to search for them as well as sending a picture of a larval cluster so we would have an idea of what we were looking for. Larvae are highly gregarious, existing in incredibly obvious clusters of over 100 individuals. Younger larvae skeletonize the new leaves, working their way down a stalk leaving behind a large mess of silk and frass. Larval clusters are very easy to locate and can easily be seen from the ground even when they are in the tallest of trees. I would have never guessed that they would be so obvious.

While in the parking lot of the estate, we saw a single adult Eunica monima floating around a gumbo limbo tree in the parking lot. It was at least 20 feet up and had no plans on coming down. We watched it for 15 minutes or so hoping that it would give us a chance to take pictures of it but it never did. We spent a good 2 hours walking around hammock on various trails and paths carefully looking at every gumbo limbo tree we saw. That was the only Eunica we saw at the park. We were impressed with the variety of butterfly species there, however. Eurema dina was everywhere we went in great numbers. We also saw Eurema lisa, Eurema nicippe, Phoebis philea, Phoebis sennae, Phoebis agarithe, Aphrissa statira, Appias drusilla, Ascia monuste, Papilio cresphontes, Battus polydamas, Leptotes cassius, Eumaeus atala, Agraulis vanillae, Dryas julia, Heliconius charithonia, Marpesia petreus, Phocides pigmalion, Polygonus leo and Wallengrenia otho.

However, despite the variety of leps to look at, we were somewhat disappointed that the *Eunicas* didn't make more of a showing.

So we left the park to visit other nearby areas. Before going to far we stopped at a nearby shopping center for a drink. Only a minute or so out of the car. Alan called me over with a very excited and inquisitive voice inquiring about some damage to foliage of a gumbo limbo tree in the parking lot. He said, "Is that what I think it is?" As my heart skipped a few beats I remember thinking, 'I think that is a Eunica monima larval cluster but it couldn't possibly be that obvious.' I am not actually sure what I said. In fact I wouldn't be surprised if I didn't say anything a t all communicating with a series of primitive grunts and groans. I am not sure, all I know is that when we pulled the branch down to take a closer look and saw 100+ little brown larvae my heart skipped a few more beats to say the least.

These very non-descript brown larvae looked much like moth larvae. Having reared many tropical Nymphalids, they didn't strike me as Nymphalid larvae lacking spines and horns on the head capsule. The larvae were in 4th instar and many were pre-molt with the final instar head capsule showing behind the exposed capsule. What was interesting was that when disturbed, even slightly, all of the larvae would immediately 'jump' off of the leaf they were resting on and would be dangling by a small strand of silk. It made for a very difficult time handling them. This odd behavior even made us doubt further that these larvae were indeed butterflies for this type of behavior is typical with many moth species.

If you have ever heard the expression four eyes are better than two' it is the truth especially when the other two eyes belong to Alan Chin-Lee. While I was on the pavement, picking up the

'lemmings', Alan called my attention again. There was another larval cluster of the same size of the same age on the very next tree over in the same parking lot. This baffled us as to why we had not seen any larval clusters in the estate where there were hundreds of trees and in a nearby parking lot with only a few trees, we quickly find two large clusters of larvae.

This discovery cut our day in half. We headed back for the house so that our lucky little find wouldn't perish in the back seat of my car in the 92 degree summer heat. We got them home and into respective containers with cuttings of gumbo limbo as soon as possible. By the next day, almost all of the larvae had molted into the final instar. Now they appear to look more so like a butterfly larva but still lacked significant markings and head capsule scoli typical of most Nymphalid species.

We reared out 192 specimens between the two larval clusters. Alan took about half and reared them on a living, potted gumbo limbo tree in his screened in patio. I reared my group on cuttings inside our townhouse. I do not believe that we experienced one larval casualty. No parasites came along with the wild collected larvae. I had no virus even in very tight conditions for my 120+ larvae. If only all species were so resilient. We did find that rearing larvae in an air conditioned environment significantly slowed the larval development. patio was constantly in the lower 90's during the day and we keep our A/C at about 74 degree's. Larvae reared outside in the hot. humid climate became pre-pupal within only 4 days and we had a significant number of pupae on the 6th day. Adults emerged within 6 pupal days some seemed to actually emerge in less than 6

days, coming out hours before the six day mark.

Pre-pupal larvae become a lighter green. Larvae reared on cuttings inside did not reach pre-pupal stage until 9 days and remained pupae for over 2 weeks. In fact the last few pupae emerged on July 19th, almost 1 month after finding the pre-molt 4th instar larvae on June 22nd. This was quite different than what Alan experienced on his patio. He had all of his pupae emerge within 8 days.

Pupae are green or brown with two small horns on the head. Pupae on smooth surfaces, like a leaf, wound up being green. Pupae on a rough surface, such as bark, wound up being brown. Although this type of color camouflage in pupae is common, we found it noteworthy. Individuals will pupate in small groups of 2 or 3 on a single leaf or walk a small distance and pupate solo. We did not find pupae more than 10 feet or so from the original feeding site. Pupae do not hang freely like most Nymphalids. They situate themselves at a 45 degree angle from the leaf leaning forward and upward in a very uncomfortable looking position. Other pupae will pupate on vertical surfaces like branches and stick straight out as if a thorn on the branch.

Anxious to get photographs and specimens of both male and female adults, as they began to emerge, we began looking at them carefully to determine how many males and females there were for we also wished to attempt rearing them again by getting adults to copulate in Alan's patio. According to available literature, there are two opinions as to how one can differentiate the sex of adults. Some books read that sexes are similar in appearance (Minno and Emmel, 1993, page 143). Others

say that sexes are dimorphic having brown females and males with a blue iridescence. One of the first adults to emerge appeared have absolutely no blue whatsoever and that was confirmed when we applied the flash in some digital photography. It was a female that had a very mat brown dorsal side with three very distinct white spots on the forewing. The next adult to emerge clearly had a good deal of blue iridescence on the dorsal side. Males seemed to be quite variable both in the amount of blue iridescence and in the size and brightness of the white forewing spots. We then supposedly had our male shots. As adults kept emerging we began to realize that our male to female ratio was extremely lopsided. Out of 100 adults that I had emerge out of my group, I only got 11 females. Alan had a similar number out of his cluster. This got us to question our accuracy in identifying the sexes.

I had kept most of what emerged at my place as specimens both for a series in my personal collection, some specimens to donate in the future as well as some gifts for some of my friends. Eunica monima are not the easiest bug to come by. So I got out all 122 specimens and 1 by 1 began to look closely at the genitalia. Although the difference is subtle between male and female, if you look carefully at the abdomen of a female, you can see an ovipositor. After sexing them by the correct method, I found that I had an exact 50/50 split between male and female. I then opened the wings to look more carefully at the wing patterns and found that males are actually very uniform in wing markings. The biggest difference between males and females is the size and color of the forewing spots. Males have slightly smaller spots and spots have a brownish

over scaling.

What we learned after close observation is that it was not that the male to female ratio was completely lopsided. The female actually has two very distinct color forms. Of the 61 females that emerged from my group, I had 11 of them that were mat brown and void of blue iridescence. other 50 females actually displayed a more intense blue iridescence than the males. The common denominator for both female forms is the three white forewing spots. The spots are larger than the males and are pure white with no brown over scaling. Other than the blue iridescence there is no visible difference between the two female forms. Adult specimens were sent to Dr. James Adams to confirm our suspicions on the sex of these adults. Differentiation between the sexes by examining the subtle differences in the exterior genitalia require a very close look, perhaps with a magnifying glass or loop, which is why we wanted to have a knowledgeable veteran of Lepidoptera have a look as well.

Alan had kept 36 specimens of his group. After examining them carefully we found that he had 18 males and 18 females. There were 7 brown females and 11 blue females. I can also see how there would be confusion identifying the sexes in the field and why publications would read differently

regarding the color of the female. This type of blue iridescence quickly dissipates in nature after the adult has begun flying making males and females of both forms look pretty darn similar. iridescent blue is also not a very obvious one. It only displays in certain angles of light or when photographed with a flash. If we had not reared this butterfly, we would perhaps never have seen fresh enough specimens to make such a determination. A possible presupposition that might bring an author to error on the thought that females lack color is that many Eunica species of the tropics have very spectacularly iridescent males that are accompanied by a highly dimorphic and drab female. The iridescence in this species is not dramatic in natural light, especially in worn specimens. The sexual dimorphism is equally as subtle, so it would be reasonable to assume that if you have a blue adult that is a male and a brown adult that is female that this would be the norm for this species making it easy to overlook the blue female form mistaking them for males.

We never got adults to mate in captivity. We had 50 or so flying in Alan's patio for almost 3 weeks. They seemed to not be very content with their quarters resting on the screen almost the entire day.

We placed rotting fruit in trays for them to eat as well as an 'elixir' of

(David Fine, E-Mail: vladnuts@aol.com)

beer and fruit juice in sand. After a few days they seemed to actually prefer the beer/juice mix over the rotting bananas and mangos. Some individuals began to show some signs of comfort by flying slowly in a very repetitive nature over a specific area close to the floor. We never witnessed any signs of courtship behavior however, and certainly no copulation.

Our encounter with Eunica monima was extremely enlightening. Larval clusters may be very large, consisting of approximately 100 individuals per cluster and of the two separate 4th instar clusters found, not one individual was parasitized. Pupae emerge rapidly in warm conditions or may take considerably longer to develop in cooler (and less humid) conditions and the ratio of males and females is about equal. One of the biggest surprises, however, was that the blue female form has a more intense blue than the males and may be therefore perceived as 'more stunning!'

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[Photographs that accompany David Fine's article "An Account with Eunica monima (Stoll, 1782)" are on page 132 -134]

WANT AD:

Would like to purchase some "Faithful Beauty moth cocoons" (Composia fidelissima).

Please contact: Daniel Waxman, 1016 Durham A, Deerfield Beach FL 33442



Gregarious nature of 4th instar *Eunica* monima larvae (photograph by Alan Chin-Lee)



Fourth instar E. monima 'lemming' hanging from a strand of silk (photograph by Alan Chin-Lee)



Cluster of final instar *E. monima* larvae (photograph by Alan Chin-Lee)



Fourth instar E. monima larval 'nest' as found in nature (photograph by Alan Chin-Lee)



Different ventral head capsule colors of final instar *E. monima* larva (photograph by Alan Chin-Lee)



Final instar E. monima larva (photograph by Alan Chin-Lee)



Different dorsal head capsule colors of final instar E. monima larva (photograph by Alan Chin-Lee)



Green 'pre-pupal' coloration of E. monima larva (photograph by David Fine)



E. monima green pupa form in an erect position from a vertical stem (photograph by David Fine)



E. monima in the 'J-position' (photograph by Alan Chin-Lee)



Blue female form of *E. monima* under flash photography (photograph by Alan Chin-Lee)



E. monima brown pupa form showing 45 degree angle from horizontal pupation surface (photograph by Alan Chin-Lee)



Shows lack of intense iridescence of blue female under natural light (photograph by Alan Chin-Lee)



Two E. monima pupae in natural position on location (photograph by Alan Chin-Lee)



Shows intense iridescence of blue female under flash photography (photograph by David Fine)



Brown female form of *E. monima* sipping from beer/Gatorade '*elixir*' (photograph by Alan Chin-Lee)



Pair of *E. monima* feeding happily (photograph by Alan Chin-Lee)



Freshly emerged *E. monima* (photograph by Alan Chin-Lee)



Top (L) = male dorsal, top (R) = male ventral, bottom (L) = brown female dorsal, botton (R) = blue female dorsal (photograph by Alan Chin-Lee)



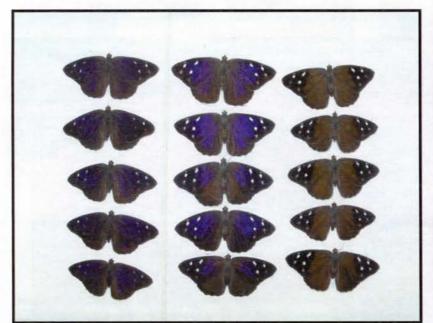
Blue female right forewing (notice bigger, whiter spots compared to male)(photograph by A. Chin-Lee)



Brown female right forewing (notice bigger, whiter spots compared to male) (photograph by A. Chin-Lee)



Male right forewing (notice smaller white spots with darker over scaling) (photograph by Alan Chin-Lee)



Males - left column; blue females - center column; brown females -right column (shows little variability within form)(photograph by David Fine)



New growth of gumbo limbo (Bursera simaruba) with E. monima larval cluster (photograph by David Fine)



Red, papery bark of a gumbo-limbo tree in a Monroe Co. tropical hardwood hammock, both *Eunica* species native habitat (photograph by David Fine)

LIFE HISTORY OF *PSEUDOCHARIS MINIMA* (GROTE, 1867) BY DAVID FINE

I first encountered the "Lesser Wasp Moth" (Pseudocharis minima) in February of 1998 in the



Fig. 1. Pseudocharis minima (female)



Fig. 2. Pseudocharis minima (male)



Fig. 3. Polka-Dot wasp Moth - Syntomeida epilais (Broward Co.)

pine woods of the Miami Metro Zoo Parking lot. This remarkable wasp mimic is a day flying Syntomine wasp moth in the family Arctiidae. Pinned specimens are easily identified by their small size (usually less than an inch) and the unique black body and wings with small white polka dots. The antennae are all orange on the female (Fig. 1) and with varying amounts of orange and

black on the male (Fig. 2). The most distinctive physical attribute to this species, however, are the long tufted hind legs that hang behind the moth while in flight exaggerating the appearance of a wasp. The "Polka-Dotted Wasp Moth" (Syntomeida epilais) (Fig. 3) is the closest relative in appearance, however, it is a good half a size larger (Fig. 4), has a good amount of iridescent blue sheen on the wings and body and a bright red tip on the abdomen. These creatures do thrive in the same habitat but are not confused in the field.

I can't help but wonder how many of these moths flew right at my feet unnoticed before I actually recognized them to be a moth rather than a wasp. Their low, slow, bobbing flight in and through the grass and small shrubs remarkably resembles that of a number of South Floridian wasp species as they forage for their prey. This case of mimicry is ingenious with even the antennae appearing to be the same color as a few of the wasp species from down here. I remember realizing what it was for the first time and the awe that overcame me as I followed the slow flying creature to see this remarkable mimic example unfold before me. I wasn't truly convinced until I finally caught it and looked at it up close. I later saw 7 individuals on that day. I found it frustrating while the adults appeared to have a lazy flight and seemed to be fairly easy to catch, they are actually extremely aware of the net and are able to react quickly to an oncoming swing. Adults then quickly get "lost" in the brush as they maneuver in and amongst the shrubs. Despite their

drastic color difference to their dry habitat, a quickly moving adult can be hard to follow.

I have encountered this species in January, February, March, June, July, August, November and December. I have seen them every time that I have ever been in the Metro-Zoo pine area. I am fairly confident that they continuously throughout the year and can probably be found in every month. The moth is definitely a diurnal creature being quite active at all times throughout the day, however, they do appear in light traps. I have taken 1 specimen in Big Pine Key using a bucket black light trap. interesting though that in all the time I have been in Big Pine Key looking for butterflies in the same

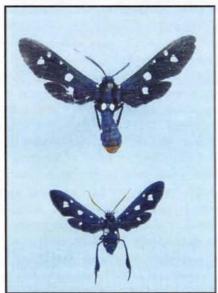


Fig. 4. Top - Syntomeida epilais (Dade Co.); bottom - Pseudocharis minima (Dade Co.)

habitat, I have never seen an adult *Pseudocharis minima* flying there. Leroy Koehn reports to have collected them on North Key Largo in light traps in the 70's as



Fig. 5. Pseudocharis Minima eggs on Crossopetalum rhacoma



Fig. 6. David Fine with 'Quailberry' in Miami Metro-Zoo pine habitat



Fig. 7. 'Quailberry' - Crossopetalum ilicifolium

well as in the Navy Wells area. I have seen them in a few of the pine areas associated with the Miami Metro-Zoo pine area. They can be quite common in this habitat. Alan Chin-Lee and I had witnessed over 20 individuals on three different occasions in July and August of this year and Jeff Slotten and I saw 15 in the end of August this year.

The larval host plant is listed as 'Christmas berry' (Covell). I looked up 'Christmas berry' in Google and found a great variety of different plants that exist in South Florida that have that common name including 'Brazilian Pepper' so pin-pointing

the host in this environment would take some trial and error. On July 27th, 2007, I witnessed a female paying very close attention to a plant in the pine habitat. I never witnessed wild oviposition but figured that she wanted to lay eggs. I caught the female and placed her in a small container with some cuttings of this mystery plant. Before leaving, however, I noticed a ground cover type of plant with a serrated, waxy, hollylike leaf that had bright red berries. It seemed like a 'Christmas berry' to me so I put a stem of it in the container with the female as well. By the next morning, she had laid upwards of 30 round, metallic-gold eggs in clusters of 5 to 8 on the undersides of both plants. In the week that she lived, she laid 87 eggs.

Eggs (Fig. 5) took 4 days to hatch and a small orange larva began to eat the leaves of the holy-like plant with the red berries. Larvae ignored the leaves of the plant that I saw the female paying attention It turned out to be an 'Alamanda' and not the host plant. Her interest in the plant was incidental. I now needed to see if there was somewhere closer that I could get this plant for the zoo is over an hour drive from my place. I do not remember seeing this plant anywhere north of Kendal, however, and if I was to have an easy time with getting food, I was going to need help.



Fig. 8. Larva of Pseudocharis minima

The first step was identifying the plant. I called Roger Hammer of Costellow Hammock in the Redlands to see if he knew what it was. As soon as I told him where I found it and about the little red berry, he instantly identified it as 'quailberry' Crossopetalum ilicifolium (Fig. 6 and 7). He told me that it could be purchased at a local nursery. Sure enough, I went to the place where he had told me and they had all the quailberry that I needed. One of the employees there told me that this plant needs



Fig. 9. Larva of Pseudocharis minima

a dry, alkaline soil or the leaves will yellow and the plant will eventually die. It makes sense. The substrate of the South Florida rocky pine-land habitats is a very alkaline skeleton limestone coral reef that was under water some hundreds or thousands of years ago. Now exposed a thin layer of dirt and sand are present making plant growth possible. Trying to dig a plant out of this habitat is almost impossible for the roots often grow into cracks and crevasses of the remnant reef. It also makes for somewhat dangerous exploration for there are lots of holes and cracks in this substrate that are only covered by a thin layer of pine needles. This fellow also told me that they had not sprayed the plants with pesticide in some time now.

I placed 5 young larvae on some cuttings of these new plants and

found that they were dead within I day. It was one of two things: 1) this was not the correct host plant or 2) the plant had some sort of pesticide sprayed on it. Luckily, I had taken cuttings of the plants that I found in the wild in Miami. The rest of the larvae happily ate this food and grew at a healthy rate. In about a week's time, I begun to run out of cuttings that I was keeping in the refrigerator. I called Donna and Carl Terwilliger



Fig. 10. Pseudocharis minima pupa

at Meadow Beauty Nursery in Lake Worth to see if he had any. Carl and Donna focus only on native plants and have a most impressive display of Florida's native plants for sale in their nursery. They have a special focus on butterfly and hummingbird nectar and host plants. The density of native butterflies in this nursery parallels that of most (screened in) butterfly houses that I have been to. It is truly a sight to see that many free-flying Leps in a given property by their own free will!

Carl had stopped selling the Crossopetalum for not many people bought them but he did have a hedge of it growing along his screened in pool area from which he let me take all the cuttings I needed to finish the larvae through. Carl also suggested trying cuttings from another native Crossopetalum species that he had on site (Crossopetalum rhacoma). Larvae introduced to it ate it happily and pupated along with those kept on C. ilicifolium. It actually makes for a very attractive, low-growing ground cover! A special thanks to Carl and Donna for helping me with feeding 'the kids'!

Larvae are very similar in color to that of Syntomeida epilais. They are orange with black hairs throughout the body with a thick concentration of hairs down the dorsum (Fig. 8 and 9). Larvae fed happily on cuttings and pupated within 14 days of hatching from the egg. They use the hairs from the larval skin to cover the pupa with and form a small compact, grey 'fuzzy' looking pupa (Fig. 10). Many pupated right on the stems of the plant in the rearing container. Pupae took 12 - 13 days to emerge and adults emerged (Fig. 11) with a good, healthy looking size even though reared on cuttings. No virus or sickness was experienced other than with the

sprayed plant.

In conclusion, *Pseudocharis* minima is a very small and local bug but can be quite common where it flies. Adults fly throughout the year in low-lying shrubs of the Miami-Dade slash pine forests and can be very 'secretive' in behavior. This species is an incredible wasp mimic making it very easily overlooked in the field. Once a



Fig. 11. Pseudocharis minima (female)

female is collected and the host plant is located, *Pseudocharis minima* is very easy to obtain eggs from and rear with little difficulty.

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(David Fine, E-Mail: vladnuts@aol.com)

Many strange concepts have been fostered concerning the relationship or non-relationship between caterpillars and butterflies. For instance in the Middle Ages the monk **Albertus Magnus (Albert the Great)** believed that caterpillars had no relationship to the butterflies. He thought that caterpillars laid eggs and propagated in this manner.

Albertus Magnus (born: 1193/1206 - died: 1280) advocated the peaceful coexistence of science and religion which throughout history, both prior to his arrival on the scene and after his departure, has had a rocky road.

Source: http://library.thinkquest.org/27968/legends myths symbols.html

AN EXPLOSION OF JULIAS BY RO WAUER

I've never approved of describing a sudden population increase of any animals, whether mammals, herps or bugs, as an "explosion." It doesn't seem appropriate. But now, with the unbelievable numbers of Julias (Heliconian iulia) that have suddenly "invaded" our Mission Valley, Texas yard, the term explosion seems most appropriate. During the second and third weeks of November, Betty and I have counted more that 200 individual Julias at one time in our yard. High estimates have reached 300. They were attracted to the numerous blooming crucitas and white bonesets (Eupatorium odoratum & E. wrightii), apparently finding these two shrub species to their liking. Fresh individual Julias seemed to appear daily, perhaps replacing those that died or wandered away.

Although the peak boneset blooms lasted only about two weeks, most of the two dozen or so crucita shrubs remained in flower for an additional five to six weeks. As the bonesets faded, the crucitas received even greater attention from Julias. And when some of the crucitas began to fade, the constantly flowering sky-flowers (*Duranta erecta*) and lantanas (*Lantana* sp.) attracted their attention.

This year (2007) is not the first time we have recorded Julias in our yard, although never before have the numbers been so great. Since keeping almost daily (except when away from home) records of our butterfly observations, starting in 1996, our first Julia sighting was on May 21, 1999. Since then Julia sightings have been sporadic and

widely scattered. Our records included only one or two individuals during May, June and July, a slight increase in August, more numbers after mid-September through most of November, and none after December 12. But daily numbers never exceeded seven individuals. Until this year!

What has triggered this 2007 explosion of Julias? It must relate to the record rainfall in Victoria County. Our yard does not contain an abundance of passion vines (Passiflora sp.), Julia's larval foodplants, although the adjacent private (nonaccessible) woodland (approx. 2 x 4 mile) undoubtedly does possess scattered Passiflora species; P. foetida, P. incarnata, P. lutea, and P. tenuiloba are all possible. The majority of Julias, because of their abundance, assumedly emerged from nearby sites. Probably our fall population also included strays from the south.

Although Julias were our lepidopteran centerpiece this fall, much greater than normal numbers of Zebra Heliconians (Heliconius charithonia) and Sickle-winged Skippers (Eantis tamenund) also were present throughout the same period. Other species recorded in larger than normal numbers included Long-tailed Skippers and Dorantes Longtail (Urbanus proteus & U. dorantes) and Ocola Skippers (Panoquina ocola). But at least three species that usually occur in good numbers during October and November, were seldom seen or did not put in an appearance at all: Lyside Sulphur (Kricogonia lyside), American Snout (Libytheana carinenta), White Peacock (Anartia jatrophae), and Common Mestra (Mestra amymone).

The amazing number of Julias provided some unusual observations. Early morning walks around the yard, before Julias became active, revealed many individuals perched alone where they apparently had been the previous evening, on various shrubs and even on the ground. The closely-related Heliconians typically gather at colonial roosts each night. We found Julias to be some of the earliest active butterflies, along with Zebras and Monarchs (Danaus plexippus). We also found that Julias seek moisture more than most species. We often found several individuals scattered on the lawn or ground after each watering, not puddling in groups, but individuals scattered about. And by mid-November, mating pairs increased significantly.

Also by mid-November, many of the "old-timers" showed their age by their fading colors. Instead of showing deep orange, their changing wings revealed a variety of patterns. Some of these were fascinating and truly unusual. Especially females, with their more mottled undersides, changed from orange to vellow. Our vard of Julias has offered a new and unexpected mosiac of patterns and But then, like other colors. indicators of the end of summer, our circus of Julias rapidly declined.

[Photographs that accompany this article by Ro Wauer are on page 139.]







Julia (Helionian iulia)

A wet lawn attracts Julias

Worn Julia (Heliconian iulia)



A small portion of the Wauer garden



Julias mating



Worn Julia nectaring on crucitas



There are 15 Julias at this sky-flower shrub; can you find them all? (photograph by Betty Wauer)

THE BUTTERFLIES OF ACADIANA BY CRAIG W. MARKS

Since childhood, a strong love of nature has dominated my life. I grew up listening to my father's stories of hunting and fishing, through which he taught my brother and I to respect our environment and its non-human inhabitants. Simply stated, in my family hunting outings were, and remain, a given. However, unlike my father, brother and son, all expert hunters, my hunting has almost been exclusively with a net.

The purpose of this article, the first of three, is to present that love of nature, and in particular, butterflies, through my observations of the butterflies and skippers I've seen in the area of central/south-central Louisiana where I reside. This effort is dedicated to my father and son, both of whom have not just tolerated my passion, but have actually joined with me at times (to an understandably less fanatical extent), swung a net and provided me with some cool butterflies.

I will start with the butterflies of Acadiana. Acadiana is the name given to the French Louisiana region that is also called Cajun Country. Acadiana, as defined by the Louisiana legislature, refers to the area that stretches from just west of New Orleans to the Texas border along the Gulf of Mexico coast, and about 100 miles inland to Marksville. The total land area is around 37,700 km² (14,600 sq mi) and encompasses 22 parishes.

Despite the frequent association of Cajuns with swamplands, Acadiana actually consists mainly of low gentle hills in the north section and dry land prairies, with marshes and bayous in the south closer to the coast, increasing in frequency in and around the Atchafalaya and Mississippi basins. The area also is filled with fields of rice and sugarcane.

The scope of this article will be limited to four parishes on the eastern side of Acadiana: St. Landry, St. Martin, Lafayette and Iberia Parishes. Specifically, my comments derive from 15 years of monitoring butterflies at three locations: Thistlethwaite WMA (T), Indian Bayou WMA (IB), and Avery Island's Jungle Gardens (AI), including annual NABA 4th of July counts since 2005 and 2001 for T and IB, respectively, initiated by and conducted under the direction of Gary Ross, to whom I am indebted for all of his help over the years. To those records are added my observations at numerous spots around Lafayette Parish, to include my own "butterfly gardens."

Thistlethwaite Wildlife Management Area is located in north central St. Landry Parish, northeast of Washington and accessible off of Interstate 49. Seventeen miles of all-weather shell roads are maintained within the area, allowing convenient access to virtually the entire tract. Approximately eleven miles of woods trails are also maintained. The area is 11,000 acres in size. The terrain is generally flat bottomland. Forest cover is predominantly various kinds of oak. Other species present are pecan, hickory, hackberry, sweetgum, ash, elm maple, cypress and tupelo gum.

Indian Bayou is located in the heart of the Atchafalaya Basin, a scenic semi-wilderness area of hardwood forests, cypress stands, marshes and bayous. It is one of the last great river swamps left in the nation. This wildlife management area (WMA) was established in 1995 to provide public access and environmental protection in the Atchafalaya Basin. The area encompasses 28,500 acres located in St. Landry and St. Martin parishes and is located between Baton Rouge and Lafayette, north of Interstate 10 and south of U.S. Highway 190, west of the Atchafalaya River.

There are 25 miles of hunting trails throughout Indian Bayou. Of these, 13 miles of trails are designated specifically for hiking. The area contains levees, forested wetlands, bayous and shallow lakes that provide excellent feeding and resting areas for birds like mallards wood ducks, the great blue heron and great egret. Numerous species of reptiles and amphibians are common, including alligators (a couple of which are large enough to convince me to look for butterflies elsewhere). This past June, I walked into a small clearing where two young bucks (with velvet antlers) and 10 wild turkeys were feeding. I never saw so many objects moving in different directions at one time.

Besides being the home of McIlhenny's Tabasco Sauce, Avery Island has a fascinating natural history. The

"island" is really a little hill in the deltaic wetlands of Iberia parish that was created by the upwelling of ancient salt deposits that exist beneath the Mississippi delta region. At its highest point, it is only 152 feet above sea level.

Ned McIlhenney traveled the world gathering greenery from every continent for the exotic "Jungle Garden" he created on a 250-acre section of Avery Island. Roads meander through the Jungle Gardens as well as footpaths for a better view of shallow water plants such as Louisiana irises or flowering shrubs such as hydrangeas, azaleas and camellias. Hikers can also inspect a glass temple that shelters an 800-year-old statue of Buddha located in a secluded Chinese garden ringed by thick stands of bamboo. Alligators and thousands of herons and egrets are among the wildlife you will see in the Jungle Gardens.

Approximately at the center of these three locations is Lafayette (Laf). Thistlethwaite is north of Lafayette on I-49, Indian Bayou east via I-10, and Avery Island south on LA Highway 90.

With this long background out of the way, let's talk butterflies. Please note this is not intended as a list of everything that is, should or might be here. Rather, it is what I've seen or what has been reported directly to me by others.

My list will be by family with an indication of where each particular bug has been seen. Flight times will be indicated, numerically, by month and in parentheses. I will attempt, based solely on my experiences, to indicate the frequency of which I have seen each species. I will use my own scale of:

Abundant (A) Common (C) Uncommon (U) Rare (R) Vagrant (V) Local Colonies (LC)

When we have a mild winter, butterflies can be on the wing all twelve months, with Cloudless Sulphurs, Sleepy Oranges, Gulf Fritillaries, Monarchs and some others flying in December and January. Even when we have freezes, by March temperatures have warmed enough for many species to start flying. The best months are April, May, early June, late September and October. In July, August and early September, temperatures and humidity are so high that activity slows significantly, particularly when we have a dry summer.

As with most of the more recent reference books, I'll start with the swallowtails:

Pipevine Swallowtails: T, IB, Laf (4-10) C;

Zebra Swallowtail: AI, Laf represented by a persistent colony at a boat ramp along the Vermilion River (5-6, 9) LC;

Black Swallowtail: T, IB, Laf (4-9) C;

Giant Swallowtail: all (2-10) C; Tiger Swallowtail: all (3-10) C; Spicebush Swallowtail: all (4-9) U;

Palamedes Swallowtail: all (5-9) U.

Next are the whites and sulphurs. I'll start by noting the complete lack of any Cabbage White or Falcate Orangetip sightings all these years. To that I add only three sightings of Checkered Whites during the same time frame. I once considered whether this absence might be due to the lack of any food plants, but I believe that theory must be wrong as several crucifers grow in this region such as peppergrass, bittercress and flowering kale. My brother, an avid and expert hunter, has long suggested the absence of ticks in this immediate region may be due to our significant numbers of fire ants. With that thought in mind, I next considered whether these butterfly absences might be related to those fire ants, but they don't seem to impact other "grass" butterflies like Pearl Crescents, Carolina Satyrs or Little Yellows. As a result, I've concluded, "I don't know!"

Anyway, back to whites and sulfurs:

Florida White: Laf (one, a female, in 5/2001, the day after a severe weather front had moved through the area) V;

Checkered White: IB, Laf (5-6, 10) V;

Great Southern White: T, IB, Laf (4-9) mostly R, one year U;

Clouded Sulphur: T, IB, Laf (3) R;

Orange Sulphur: T, IB, Laf (2-12) C, at times A;

Southern Dogface: T, IB (5-6, 8-10) R; Cloudless Sulphur: all (1-12) C, at times A;

Orange-Barred Sulphur (Fig. 1, page 145): Laf (8-11) C during fall of 2007, otherwise absent;

Large Orange Sulphur: IB (9) V; Little Yellow: T, IB, Laf (4-12) C to U;

Sleepy Orange: T, IB, Laf (1-12) U, sometimes very C in the fall;

Dainty Sulphur: Laf (only one ever seen, 9) V.

Coppers, hairstreaks and blues - Alas, there are no coppers or elfins in this area, very few hairstreaks and only two blues:

Great Purple Hairstreak: T, (4, 8-9) R;

Banded Hairstreak: T, (4-6) LC;

"Southern" Oak Hairstreak (Fig. 2, page 145): AI, (this colony numbers in the hundreds in late 4 and early 5, present on rows of flowering ligustrum along the bayou, and has the most extensive patches of red extending up the ventral hindwing as I have ever seen in the field. See the Fig. 2 photograph) LC;

"Northern" Oak HS: T, (4-5) LC;

White M Hairstreak (Fig. 3, page 145): T, Laf (5-9) R with multiple bugs consistently seen each summer since 2003 at one location in Laf;

Gray Hairstreak: all (4-10) U;

Red-banded Hairstreak: all, (2-11) C;

"Summer" Spring Azure: T, IB, Laf (5-7, 9) R;

Eastern Tailed-Blue: Laf (4, 10 with only four seen over the years) V.

During a chance meeting with Dr. Michael Israel at Asphodel Plantation near St. Francisville, LA, I recall him telling me about a colony of "Olive" Juniper HS he had discovered at Avery Island. I haven't been able to discover the location of that colony, or even a significant stand of juniper, but I intend to keep searching.

Moving on to the brushfoots:

American Snout: all (1,3-9,11) C, at times A;

Gulf Fritillary: all (1-12) C;

Zebra Heliconian: Laf (I saw two on consecutive weekends in late 11 and early 12/2005 and wonder if they were not present through human aid such as a wedding release) V?;

Variegated Fritillary: T, IB, Laf (4-10) U, sometimes C along the levee road at IB;

Silvery Checkerspot (Fig. 4, page 145): T, IB, Laf (4-10) U although at times there are hundreds on the wing at T with some of the largest females I've ever seen;

"Seminole" Texan Crescent (Fig. 5, page 146): T, IB, Laf - the colony in Laf is gone, lost to a housing development (4-5, 9-10) R;

Phaon Crescent: T, IB, Laf (4-10) C;

Pearl Crescent: all (3-10) A;

Question Mark: all (4-9) C;

Eastern Comma: IB (7, 9) R;

Mourning Cloak: T, AI (4, 5) V? - one seen at each location;

American Lady: all (3-6) U, at times C; Painted Lady: all (4-11) U, at times C;

Red Admiral: all (3-11) R, usually no more than 1 or 2 seen at a time although in Oct. of 1993, good numbers were seen on blooming boneset at IB;

Common Buckeye: all (2-12) C;

Red-spotted Purple: all (4-10) C. On one NABA count at IB, Gary Ross and I caught a hybrid between this bug and a Viceroy, see *News Lepid. Soc.* 44(4): 112-114.

Viceroys can be seen in all locations and are common (4-9). Of course, this bug mimics the Monarch. I've seen the darker subspecies in extreme south Florida which is said to mimic the Queen. At T and IB, about 50% seen possess extremely dark dorsal and ventral forewings, much like the type in S. Florida (Fig. 7 and 8, page 146). These will be flying along side the lighter colored version. As I've only seen one Queen in this region, I'm not sure what environmental or genetic conditions cause the darker type to exist here.

Goatweed Leafwing: T, IB, Laf (3-5) U;

Hackberry Emperor: all (4-9) C, at times A. An interesting phenomenon occurs with this butterfly during the summer. Their coloring becomes a very light gray, causing them to appear almost ghost-like as they flit through the shadows, resembling Gray Crackers I've seen in Mexico. This "bleaching," almost certainly from extended exposure to sunlight while basking/perching, is significantly more prevalent at IB than elsewhere:

Tawny Emperor: all (5-9) U. This summer at IB, I noted a flight of this bug that closely resembles the "flora" subspecies of western Florida (Fig. 6, page 145);

Southern Pearly-eye: T, AI (4-9) C. The population at AI is more blond color with more yellow than those to the north (Fig. 9, page 146);

Appalachian Brown (Fig. 10, page 146): IB (8) R, more on this bug below;

Gemmed Satyr: T (6-9) R;

Carolina Satyr: all (3-12) A;

Little Wood-Satyr: T, Laf (3-5) C when flying;

Monarch: all (1-12) U, but C in most falls as they move toward the Gulf during migration;

Queen: Laf (one seen in November) V.

When addressing those darned "little brown skippers" (as my father has so eloquently described them), I profess none of the familiarity I have with true butterflies as I've only really been counting them for about three years. With that qualification given:

Silver-spotted Skipper: all (4-10) C;

Long-tailed Skipper: IB, Laf (4-9) mostly in the fall, C;

Hoary Edge: T (4) V? – only one seen;

Southern Cloudywing: T, IB (7-8) U;

Northern Cloudywing: T (4) U;

Confused Cloudywing: IB (7) R;

Hayhurst's Scallopwing: IB (7) U;

Horace's Duskywing: T, IB, Laf (6-9) C;

Zarrucco Duskywing: IB (7) U;

Funeral Duskywing: Laf (9) R;

Common Checkered-Skipper: T, IB (6-9) C;

Tropical Checkered-Skipper: T, IB, Laf (6-9) C, at times A;

Common Sootywing: IB (6-9) C;

Clouded Skipper: T, IB (4-9) A;

Least Skipper: T, IB, Laf (6-9) C;

Southern Skipperling: T, IB (7-8) U;

Fiery Skipper: T, IB, Laf (4-9) C;

Whirlabout: IB (8) U;

Northern Broken-Dash: T, Laf (7-8) C;

Little Glassywing: T (6-8) U;

Delaware Skipper (Fig. 11, page 146): T (first one seen 9/07) U;

Yehl Skipper: T (6, 9) R:

Broad-winged Skipper: T, Laf (8) R;

Duke's Skipper (Fig. 12, page 146): T, IB (6-9) U;

Dun Skipper: T, IB, Laf (6-8) C;

Lace-winged Roadside Skipper: T (6-9) C, in 2005 A;

Twin-spotted Skipper: T, IB (6, 9) U; Ocola Skipper: T, Laf (8-9) C;

Even after all these years, new surprises still occur. In June of 2007, I located 2 Duke's Skippers during the NABA count at T in an area of cypress swamp and tall grass, a new species for that WMA. In August, while scouting a new spot at IB, I found a similar looking area. As I had never seen Duke's Skippers at IB, I went in to investigate. Within five minutes I had seen several Duke's and was walking out when I saw an obvious satyr-like butterfly flying among the tall grass. At first I thought it was a Southern Pearly-eye (another bug I've not seen at IB), but there was no cane anywhere in sight. Once in my net, I recognized it was an Appalachian Brown (which I've seen in TN and NC). I later caught another in the same immediate area. I've found no records of this species in LA west of the Mississippi River. I have learned from Gary Ross and Vernon Brou of a few records from the Florida Parishes of eastern LA. The species is not one that is known to migrate or show up in odd places as a vagrant so I assume there is a small colony at IB. I intend to continue to monitor this particular spot.

I still hope to find other new species. I expect eventually to see Harvesters at either T or IB. Polydamas Swallowtails are showing up in the Houston area regularly. Falcate Orangetips, Striped Hairstreaks and King's Hairstreaks are a possibility at T as all have been seen less than one hour's drive north of Lafayette. There are no significant pine stands in the area which make Little Metalmarks or Common Wood Nymphs doubtful, but both have also been seen within an hour (east and north respectively). And, of course, there is no telling how many of those "little brown skippers" I see each trip in the field which are species I simply do not yet recognize (such as the Delaware Skipper I saw for the first time at T in 9/07).

There are still plenty of areas at both T and IB that need exploring. Even if no new rarities turn up, it is always fun to see what is flying when and where. Besides, once I've finally figured out those skippers, there is a whole host of moths to start counting, some of which I've already started recording (mostly of the day-flying type). I'm sure my wife will be so excited about even more bugs in her house.

[Note: photographs that accompany this article by Craig W. Marks are on page 145 and 146.]

CHALLENGE TO ALL SLS MEMBERS BY JAMES K. ADAMS

I have written a couple of articles in the last couple of years in which I have suggested that other members certainly have experiences along the same lines that they could share with the readership. The first of these was on "First Encounters", in which I described my first (rather unusual) encounter in my life with the Great Purple Hairstreak, Atlides halesus. I will likely do more of these in the future. The second, more recent article, was on the "Dangers of Lepping".

I decided, with the approval of our editor, to "up the ante". To give potential authors out there a bit more incentive, I will give ten dollars to the SLS for every "First Encounter" or "Dangers of Lepping" article that appears in upcoming issues of the SLS Newsletter. I know this isn't a direct financial benefit to the authors, but I'm hoping that financial gain for the society will be enough incentive. On the off chance that more than ten such articles appear in the newsletter within a single year, I reserve the right to limit my obligation to ten a year *(\$100.00)*.

How's that sound?

(James K Adams, School of Natural Science and Math, Dalton State College, Dalton, GA 30720; E-Mail: jadams@daltonstate.edu)



Fig. 1. Orange-Barred Sulphur, female (dorsal), 5-XI-2006, Lafayette, Lafayette Parish, LA



Fig. 2. "Southern" Oak Hairstreak, female (ventral), 28-IV-2007, Avery Island, Iberia Parish, LA



Fig. 3. White M Hairstreak, male (ventral), 10-VIII-2007, Lafayette, Lafayette Parish, LA

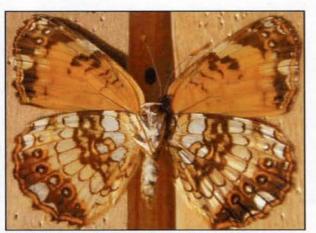


Fig. 4. Silvery Crescent, female (ventral), 3-IV-2006, Thistlethwaite WMA, St. Landry Parish, LA



Fig. 5. Texas "Seminole" Crescent, male (dorsal), 23-IV-2006, Thistlethwaite WMA, St. Landry Parish, LA



Fig. 6. Tawny Emperor, male (ventral), 21-VII-2007, Indian Bayou WMA, St. Martin Parish, LA



Fig. 7. Viceroy, male (dorsal), 3-V-2005, Thistlethwaite WMA, St. Landry Parish, LA



Fig. 8. Viceroy, male (ventral), 30-V-2005, Thistlethwaite WMA, St. Landry Parish, LA

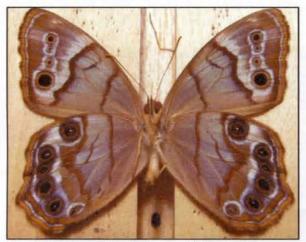


Fig. 9. Southern Pearly Eye, male (ventral), 29-IV-2005, Avery Island, Iberia Parish, LA



Fig. 10. Appalachian Brown, male (ventral), 25-VIII-2007, Indian Bayou WMA, St. Martin Parish, LA



Fig. 11. Delaware Skipper, male (ventral), 8-IX-2007, Thistlethwaite WMA, St. Landry Parish, LA



Fig. 12. Duke's Skipper, male (ventral), 5-VIII-2007, Indian Bayou WMA, St. Martin Parish, LA

AZENIA OBTUSA (H. S., 1854) IN LOUISIANA BY VERNON ANTOINE BROU JR.

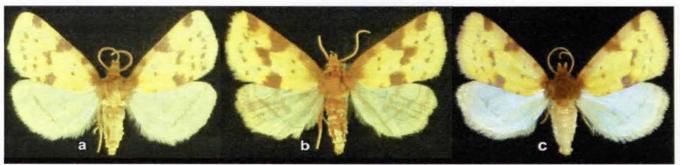


Fig 1. Adult Azenia obtusa: a. male, b. male, c. female.

In Louisiana, adults of the small yellow noctuid moth *Azenia obtusa* (H. S.) (Fig.1) have been captured March through October (Fig. 2) at ultraviolet light. This species was previously listed under the genus *Stiriodes* Hampson, 1908, but has currently been transferred to the genus *Azenia* Grote, 1883. Heppner (2003) lists the range of *obtusa* to be eastern United States: New York to Florida and Illinois to Texas and dates March through

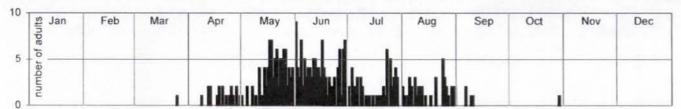


Fig. 1. Adult Azenia obtusa captured in Louisiana. n = 322.

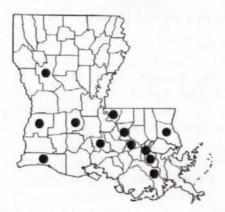


Fig. 3. Parish records for A. obtusa by this author.

October. *A. obtusa* was not included in the Texas checklist (Knudson and Bordelon, 1999). These data that the species is widespread throughout a sizable portion of the State were omitted from that edition (E. Knudson, per. commun.). The host plant appears to be unknown. Covell (2005) reported *obtusa* to be common and occurring June through August. In Louisiana, it appears there are five annual broods (Fig. 2) peaking at approximately 30-day intervals beginning late April. The parish records are illustrated in Fig. 3.

Acknowledgments

I thank Edward C. Knudson and Charles Bordelon for clarifying the Texas information stated here. I thank John B. Heppner for locating and providing label data for numerous specimens in the Florida State Collection of Arthropods which I had previously donated over the past 35 years.

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Heppner, **J.B.** 2003. Arthropods of Florida and Neighboring Land Areas, vol. 17: Lepidoptera of Florida, Div. Plant Industry, Fla. Dept. Agr. & Consum. Serv., Gainesville. x + 670 pp., 55 plates.

Knudson, E. and C. Bordelon 1999. Texas Lepidoptera Survey, Checklist of the Lepidoptera of Texas 2000 edit.

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

GLENOIDES TEXANARIA (HULST, 1888) IN LOUISIANA BY VERNON ANTOINE BROU JR.



Fig. 1. Glenoides texanaria: a. male, b. female.



Fig 2. Parish records by this author.

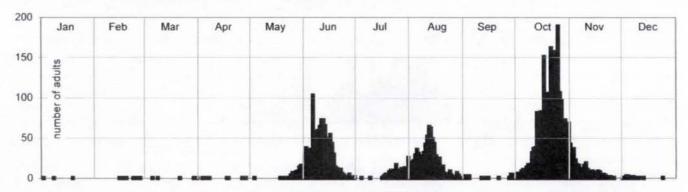


Fig. 3. Glenoides texanaria captured as sec.24T6SR12E, 4.2 mi NE Abita Springs, Louisiana. n = 4484.

The small geometrid moth *Glenoides texanaria* (Hulst) (Fig. 1) is a fairly common species in Louisiana. Adults have been captured in all twelve months in Louisiana, though there are three primary broods separated by approximate two month intervals occurring June, August and October (Fig. 3). Hulst (1888) described *Tephrosia texanaria* from a series of 14 specimens. Later in 1896, Hulst moved *texanaria* to the genus Glena. McDunnough (1920) moved *texanaria* to the newly created monotypic genus *Glenoides*. Rindge (1973) designated the lectotype, a male from the type series. Rindge (1973) stated *texanaria* occurs in the southeastern United States including: Texas, Louisiana, Mississippi, Arkansas, Missouri, Kentucky, and South Carolina. I have records before me for *texanaria* from eight Louisiana parishes (Fig. 2). Heppner (2003) lists the currently known expanded range for *texanaria* to include: Virginia to Florida and Missouri to Texas.

Also in 1973, Blanchard described a second and smaller in size species, *Glenoides lenticuligera* from Texas (TL: Hildago County).

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SCHINIA GRACILENTA HÜBNER IN LOUISIANA BY VERNON ANTOINE BROU JR.

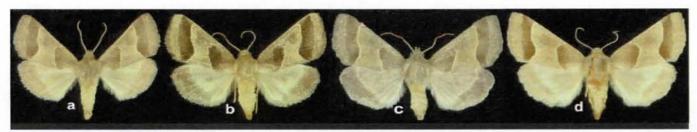


Fig 1. Schinia gracilenta: a. male, b, c, d. females.

The flower moth *Schinia gracilenta* Hübner (Fig. 1) is a common early fall species (Fig. 2) occurring over much the state (Fig. 3). *S. gracilenta* was described in 1818 by Hübner who described *Schinia bifascia* Hübner also in 1818. Lepidopterists of recent times often have used a third species name *Heliothis imperspicua* Strecker (1876) to identify this same species. Hardwick (1996) indicates the location of the types for all three of these described species is unknown. Further, Hardwick synonymized these three names along with two other lesser known described species *Anthophila divergens* Walker (1858) and *Schinia digitalis* Smith (1891) under *gracilenta*. I

adults Pau	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
number of								الألا	di.		

Fig. 2. Adult Schinia gracilenta captured in Louisiana. n = 162.

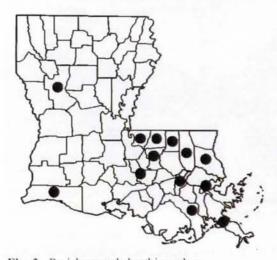


Fig. 3. Parish records by this author.

suspect the reason for confusion by earlier authors is that this species occurs in varying shades of gray and olive green. I have provided a few of these color variations in Fig. 1. Forbes (1954) lists both species *gracilenta* and *bifascia* as separate species, but also discusses the various name synonymies mentioned earlier. Hardwick (1996) states *gracilenta* occurs from New York to Nebraska and Georgia to Texas. Heppner (2003) states a wider range for *gracilenta*: New York to Florida and Nebraska to Arizona.

The western species *Schinia oleagina* Morrison, originally described as *Schinia gracilenta* var. *oleagina* (Morrison, 1875) is most similar in appearance to *gracilenta*.

This species was previously reported in Louisiana (Chapin and Callahan, 1967). This species is not covered by Covell (2005).

Literature Cited

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2007: A GREAT YEAR FOR STRAYS IN ARKANSAS BY DAVID RUPE

Late summer and fall 2007 turned out to be a great year for strays, especially in western Arkansas. The following three species were collected: *Danaus gilippus*, *Melanochroia chephise*, and *Mestra amymone*. Below is a summary of collection data and notes regarding these three species.

Danaus gilippus (Queen):

Danaus gilippus (Fig. 1) is a rare stray in the state; however, there are collection records for this species in Arkansas. The specimen collected September 11, 2007, in Fort Smith, Sebastian County, Arkansas, was the first individual I have seen in Arkansas. This specimen was collected along Massard Road in south Fort Smith within a brushy early-mid successional abandoned field. I successfully collected the specimen after chasing it around for an hour, and eventually hitting it onto the ground using a baseball cap (no net handy). I feel fairly certain that the specimen collected was newly eclosed, and therefore likely a member of a temporary colony established within the area.

Melanchroia chephise (white-tipped black):

This unique, day flying Geometrid (Fig. 2) was collected in Greenwood, Sebastian County, Arkansas, on September 14, 2007. This specimen was lazily flying about in a hayfield. On October 27, 2007, I also collected an additional specimen in my backyard in Mayflower, Faulkner County, Arkansas. Several specimens,







Fig. 2. Melanchroia chephise

approximately 10-12, were observed flying just above ground level that same date. In addition, on November 7, 2007, a coworker brought me an individual he collected from our office building in Little Rock, Pulaski County, Arkansas. I have never observed this species previously in Arkansas, and the number of individuals observed during October was completely unexpected. As far as I know, these are the first records of this species in Arkansas.

Mestra amymone (common mestra):

Two individuals of *Mestra amymone* (Fig. 3) were collected near Foreman, Little River County, Arkansas on October 26, 2007. There is one historical record of *Mestra amymone* in Miller County, which lies immediately southeast of Little River County. These specimens were collected along forest edges within a large pasture just south of Foreman. They were also collected by employing the use of a baseball cap to stun them, as I was again



Fig. 3. Mestra amymone

in the field with no net (working not collecting). This species utilizes noseburn (*Tragia* spp.) as host plants, and *Tragia* betonicifolia was observed nearby. The presence of noseburn and the fresh appearance of the specimens suggest that these individuals may possibly be members of a temporary colony in southwest Arkansas.

(David Rupe, E-Mail: dmrupe@att.net)



Addrew Warren's Adelpha Presentation

Bob Belmont, Rick Gillmore, Marc Thomas Emmel Minno



Executive Com. Meeting: l. to r. - Don Stillwaugh, Irving Finkelstein, Marc Minno, Joe Riddlebarger, Jeff Slotten

Dinner

J. D. Turner presiding over joint SLS-ATL Meeting



Registration at SLS-ATL Joint Meeting June & Floyd Preston with Andy Warren

Marc Minno, Don Stillwaugh, and Kathy Malone



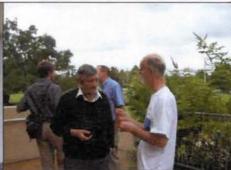
McGuire Center display

McGuire Center Grounds

Rick Gillmore and John Heppner



Tom and Ada Neal



Special Speaker Dr. Torben Larsen with Ulf Eitshberger



Meeting Room with Debbie Mathews Lott and Ulf Eitshberger

[Photographs from the SLS-ATL joint meting in Gainesville, Florida (2007), page 151 and 152.]

LEPIDOPTERISTS' SOCIETY HAS A NEW WEBSITE BY JOHN SNYDER



Many members of The Southern Lepidopterists' Society are also members of the international organization whose name is simply The Lepidopterists' Society. For you who are dual members, and for you who are not but who like to see as many resources on Lepidoptera as possible, the good news is that The Lepidopterists Society has totally revamped its website.

With significant help from a commercial web developing firm, the Society has tried to make its new website both attractive and rich with information. The opening screen features a prominent rotating slide show of butterflies and moths from around the world. The menu is simple to navigate, beginning from

three main topics: About the Society, Membership Advantages, and Lepidoptera Information. From these, branches lead to a large array of useful pages. Just as a sampler, from the Lepidoptera Information portion, one can find pages on identifying moths and butterflies, a very extensive Frequently Asked Questions area, hundreds of links to worldwide websites on Lepidoptera, a link to the Society's annual Season Summary, and sections on Lepidoptera conservation concerns and using Lepidoptera in children's educational settings.

Our own Southern Lepidopterists' Society website is excellent; now perhaps The Lepidopterists' Society website can come close to matching it in artistic appeal and content. Give it a try at www.lepsoc.org.

(John Snyder, Dept. of Biology, Furman University, Greenville, SC; E-Mail: John.Snyder@furman.edu)

EPITAUSA PRONA (MÖSCHLER, 1880) IN LOUISIANA BY VERNON ANTOINE BROU JR.



Fig. 1: Epitausa prona (Möschler) a. male (Texas), b. female (Louisiana). Anticarsia irrorata Fabricius (Sierra Leone, Africa) c. male. Anticarsia gemmatalis Hübner (Louisiana) d. male, e. female, f. female.

In the latest checklist of moths (Hodges, et al, 1983), one species of the genus **Epitausa** Walker is listed: **Epitausa prona** (Möschler, 1880) (Fig. 1a and b). Apparently, the first record of this species in the United States was made by Andre Blanchard (1973) who captured one male in Welder Wildlife Refuge, San Patricio County, near Sinton, Texas on November 14, 1968.

The purpose of this long overdue article is to correct a previously published record (Brou, 1993), in which I incorrectly reported the species *Anticarsia irrorata* Fabricius as a new continental record. This specimen is now illustrated in this article Fig. 1b, under its true identity *Epitausa prona* (Möschler). After publication in 1993, I received correspondence from Edward C. Knudson of Houston Texas that the determination was incorrect. I take complete responsibility for this error, though, I give this explanation. I collected this female specimen of *prona* (Fig. 1b) on February 7, 1990, in an ultraviolet light trap at sec.24T6SR12E, 4.2 mi NE of Abita Springs, St. Tammany Parish, Louisiana. Over the next several years I sent good quality color photographs of this specimen to several noted lepidoptera (Noctuidae specialist) researchers at the United States National Museum (USNM), U.S. Department of Agriculture, and elsewhere. All respondents agreed that this specimen appeared to be "Anticarsia irrorata" which would be a new species record for North America. So, I proceeded, publishing that brief note. Later, after being notified of the mistake by Knudson, I feverishly tried to find out how so many

persons erred in this matter. What became evident after questioning the various persons who most graciously helped me with that determination was that despite the species *Epitausa prona* being on our checklist, there apparently was not a single locatable specimen of *prona* in the USNM, nor could I locate any specimen at the several other major US museums with lepidoptera collections. Furthermore, these various researchers were not familiar with this quite rarely taken in the United States tropical species. I am aware that Andre Blanchard's collection of Texas insects went to the National Museum of Natural History (USNM) upon his death in 1986, with sizeable earlier donations to The American Museum of Natural History (AMNH) and smaller amounts to other institutions. Hayes (1975) mentions specimens in the United States collections of The California Academy of Sciences, San Francisco, and AMNH, presumably from his Galapagos investigation. There is scant literature about *prona*, and the few hard to acquire articles mentioning it are quite old. Möschler (1880) described *Thermesia prona* with type material from Panama, Venezuela and Surinam. Hayes (1975) stated (*Anticarsia*) *prona* is sexually dimorphic and a widespread Neotropical species occurring in the Galapagos Islands with dates there from January through August. Hayes pictured male and female *prona*.

Poole (1989) included *Epitausa* in the subfamily Ophiderinae, treated as Calpinae by Kitching and Rawlins, in Kristensen (1999). Poole (1989) included *Epitausa* Walker, 1857, as the subjective replacement name of *Orthogramma* Guenée, 1852. Poole (1989) included 27 species in the genus *Epitausa*.

It seems the only other United States records for *prona* besides Blanchard's 1973 article are the Texas records by (Knudson and Bordelon, 1999, 2004). Knudson and Bordelon (1999) state regarding *prona* "Another tropical insect, collected occasionally in southern Texas". These authors (1999) also list for the first time a new single specimen United States record for another member of the genus, *Epitausa coppryi* (Guenée). Excellent images of both these *Epitausa* species are provided by Knudson and Bordelon (2004) on plate 8. The few males of *prona* pictured in literature illustrate the unique excavated outer margin of the forewing above the anal angle and are darker in color than the females. Knudson and Bordelon (per. comm.) give the following details for their three Texas *prona* captures: one male at banana/beer bait, Hidalgo Co., Santa Ana National Wildliife Refuge, November 22, 1987, one male at light, Cameron Co., Audubon Sabal Palm Sanctuary, December 5, 1994, and one female, at banana/beer bait Starr Co., Fronton, November 7, 1997. Knudson and Bordelon kindly provided a color image of one of the Texas males of *prona* (Fig. 1a).

Regarding A. irrorata, an article by Hayward (1941) mentions the soybean pest in Argentina. There are two small articles about soybean crop pests and various insecticides useful in controlling irrorata in Argentina (Memoria Anual, 1977, 1979). Most moth collectors in the southeast United States are quite familiar with the variably colored and marked similar looking pest species Anticarsia gemmatalis Hübner, a legume feeder and serious pest on cultivated soybeans. Similarly looking to both gemmatalis and prona is Anticarsia irrorata Fabricius, a pest of soybeans and cotton in Africa, Asia, Malaysia, Australia and Argentina, which has a forewing shape somewhat more pointed than that on gemmatalis approaching prona which exhibits more pronounced pointed forewings. This attribute and the lack of adequate reference material during my initial report contributed to me being led astray. I am pleased to finally document this correction for this rarely encountered in the United States, noctuid moth Epitausa prona (Möschler). I thank the following individuals who graciously assisted with helpful information and literature references in this matter: Charles Bordelon, Julian Donahue, Edward C. Knudson, Steven Passoa. A special thank you to Knudson and Bordelon for providing the image of male prona.

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

TREASURER'S REPORT BY JEFF SLOTTEN

Treasurer's Report for 2007 as of Nov. 30, 2007:

There are 159 paid members.

Beginning Balance as of 1/01/2007: \$2856.35 from Suntrust Bank Statement. Ending Balance of 11/30/2007: \$3818.79 from Suntrust Bank Statement

Deposits and Credits: \$4075.00 = membership dues and donations.

Withdrawals and Debits: \$3112.56 (includes a \$6 correction fee for incorrect deposit):

- a) Newsletter Expenses: Vol. 28: No.4, Postage: \$252.60, Printing: \$455.68 = \$708.28
- b) Newsletter Expenses: Vol. 29: No.1, Postage: \$277.22, Printing: \$495.16 = \$772.38
- c) Deposit Correction Fee: \$6.00
- d) Newsletter Expenses: Vol. 29: No.2, Postage: \$210.83, Printing: \$480.31 = \$691.14
- e) Newsletter Expenses: Vol. 29: No.3, Postage: \$281.01, Printing: \$628.05 = \$909.06
- f) Donuts for combined ATL and SLS meeting in early October in Gainesville, FL: \$42.00

We collected \$4075.00 in annual dues and contributions so far this year.

We spent \$3112.56 for postage and printing of 4 newsletters.

The cost of each newsletter averages \$771.70.

If we collect 160 dues at \$20 (bring in \$3200) and we print out and send these to 160 members four times a year (spend \$3084 for printing and postage), this will leave profit of \$116. Therefore, we are grateful for members who have contributed money over the regular membership cost, as well as any other source of revenue.

Respectfully submitted, Jeff Slotten 2007 Treasurer

REFERENCE TO THE "BUTTERFLY" IN CLASSICAL LITERATURE

"The Caterpillar and Alice looked at each other for some time in silence: at last the Caterpillar took the hookah out of its mouth, and addressed her in a languid, sleepy voice.

'Who are YOU?' said the Caterpillar.

This was not an encouraging opening for a conversation. Alice replied, rather shyly, 'I--I hardly know, sir, just at present-- at least I know who I WAS when I got up this morning, but I think I must have been changed several times since then.'

'What do you mean by that?' said the Caterpillar sternly. 'Explain yourself!'

'I can't explain MYSELF, I'm afraid, sir' said Alice, 'because I'm not myself, you see.'

'I don't see,' said the Caterpillar.

'I'm afraid I can't put it more clearly,' Alice replied very politely, 'for I can't understand it myself to begin with; and being so many different sizes in a day is very confusing.'

'It isn't,' said the Caterpillar.

'Well, perhaps you haven't found it so yet,' said Alice; 'but when you have to turn into a chrysalis – you will some day, you know – and then after that into a butterfly, I should think you'll feel it a little queer, won't you?'

'Not a bit,' said the Caterpillar."

Source

Lewis Carroll, Alice's Adventures in Wonderland, Chapter V: Advice From A Caterpillar

NEW MOON DATES FOR 2008

January 8	May 5	September 29
February 7	June 3	October 28
March 7	July 3	November 27
April 6	August 1 and 30	December 27

Best time for collecting moths at black lights is considered to be one week before the new moon and one week after the new moon. Happy collecting.

SLS MEMBERS please consider as one of your New Years's resolutions to write an article for your Society Newsletter. James Adams has challenged you and will give a donation of ten dollars to the Society for each article on "First Encounter" and "Dangers of Lepping". There are also many other topics that one could write an article on: field trip experiences, aberrations, blacklighting, photography, equipment, butterfly gardens, rearing larvae, collecting with pheromones, and the list goes on..... And don't forget that a photograph enhances your article immensely.

2008 DUES

Fellow members of the SL Society it is that time of the year again when <u>DUES</u> are <u>DUE</u>. Please send your checks to:

Jeff Slotten, Treasurer 5421 NW 69th Lane Gainesville, FL 322653

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

David Rupe sends in the following report:

- 11-September-07 Massard road & Highway 255, Fort Smith, Sebastian Co, Arkansas: *Danaus gilippus* (female).
- 14-September-07 Coker Street, Greenwood, Sebastian Co., Arkansas: *Melanchroia chephise* (Geometridae).
- 26-October-07 Foreman, Little River County, Arkansas: Mestra amymone (2 individuals).

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

Charlie Covell added a 28th species for his home garden on Nov. 5 - a Queen (*Danaus gilippus berenice*). His total for the year exceeded those for last year (25 species), but was less than in 2005 (31).

Records for Gainesville, Alachua Co., from October 1 to mid-December are as follows: *Epargyreus clarus* - Dec. 2 Urbanus proteus - Oct. 10, 12, 19, 22, Nov. 1 - 5, 8, 10-13, 20, 24, Dec. 1, 12

Urbanus dorantes - Oct. 12, Nov. 10, 25,30

Wallengrenia otho - Oct. 11

Hylephila phyleus - Oct. 11, 17

Atalopedes campestris - Nov. 16

Calpodes ethlius - Oct. 18, Nov. 22

Lerema accius - Oct. 12

Panoquina ocola - Oct. 12, 17, Nov. 6

Battus polydamas - Oct. 23, Nov. 26, Dec. 8, 11

Heraclides cresphontes - Oct. 7, 17, 21, Dec. 10

Papilio troilus - Oct. 7, 20

Phoebus sennae - Oct 7 - Dec. 12 (almost daily)

Phoebus philea - Oct. 10, 15, 17, 20, 22, 23, 30, Nov. 21, Dec. 10, 11

Eurema lisa - Oct. 12, Dec. 10

Eurema daira - Oct. 12

Eurema nicippe - Oct. 8, 9 Nov. 26, 30, Dec. 1

Leptotes cassius - Oct. 30, Nov. 19, 20, 26, Dec. 1, 4, 6, 8, 9, 11

Hemiargus ceraunus - Oct. 8

Phyciodes phaon - Oct. 12

Polygonia interrogationis - Nov. 26

Vanessa atalanta - Nov. 30, Dec. 3, 4, 10, 11

Junonia coenia - Oct. 10 - 12, 16, 17, Dec. 11

Agraulis vanillae - Oct. 7 - Dec. 12 (almost daily)

Heliconius charithonia - Oct. 7, 10, 15, Nov. 21, Dec. 2,10, 11

Danaus plexippus - Oct. 10, 17, 31, Nov. 9, 24, Dec. 1, 6, 8, 10, 11

Danaus gilippus berenice - Oct. 9, Nov. 6

Also: Syntomeida epilais (Arctiidae), Nov. 6, 9, Dec. 1, 8 - 10 (on Lantana)

Along La Chua Trail, Payne's Prairie State Park, Alachua Co., Oct. 16:

Urbanus proteus, Pyrgus oileus, Pyrgus communis (complex), Polites vibex, Panoquina ocola, Phoebus sennae, Eurema daira, Eurema nicippe, Leptotes cassius, Vanessa atalanta, Junonia coenia, Agraulis vanillae, Hermeuptychia sosybius and Danaus gilippus berenice.

Some additional sightings by Charlie:

Dec. 13. More sunny, warm weather. Near our house I saw *H. charithonia* and *A. vanillae*. Behind McGuire Hall I saw *H. phyleus*, *P. philea*, possible *P. agarithe*, *E. lisa*, *P. phaon*, *J. coenia*, *A. vanillae*, *H. charithonia*, and *D. plexippus*.

Dec. 14. Same weather. At home I saw P. sennae, L. cassius, A. vanillae, H. charithonia and 2 D. plexippus in the yard.

Dec. 15. Got the Christmas tree today. Cost \$55. Wow. Clouding over, with rain expected. I saw *U. proteus*, *L. cassius*, *A. vanillae* and a *D. plexippus* around the milkweed in the back. Got good rain at night.

Dec. 16 and 17. Nightly temperatures got down into the thirties. Our plants were not injured by either cold night.

Dec. 19. Sunny and warming; high of 71 expected. In our yard today I saw a fresh *H. cresphontes*, a fresh female *P. philea*, 2 *P. sennae*, and 2 *A. vanillae*. All visiting Pentas. Also in the yard, *H. charithonia*.

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

This report is shorter than it should have been due to an unfortunate computer accident that wiped the nearly completed report from my hard drive. I have been able to regenerate a significant portion of the report, but be aware that there are some specimens now buried in my collection, other's collections, e-mail reports *etc.* that I will have missed. I sincerely apologize to anyone whose records I have lost. As I uncover other specimens in my collection from fall of 2007, I will add them into future reports. Abbreviations are as follows: James Adams (JA or no notation), Eleaner Adams (ERA), Irving Finkelstein (IF). Other contributors names 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 records for newly investigated areas and/or new times of the year. Known County and State records are indicated. All dates listed below are 2007 unless otherwise specified. One species worth mentioning is the European *Noctua pronuba*, for which there were several previously scattered records in the state, but never more than one in a year (that I know of). There were three *N. pronuba* specimens collected this fall, which may indicate the expected increase in abundance this moth has shown as it continues to spread across the country. We may get very tired of this moth in the near future! Another moth that had a great flight in south GA was the beautiful Heiroglyphic Moth (*Diphthera festiva*), which appeared to be common in several towns (Valdosta, Hazelhurst, Lyons, and presumably others in between) this October.

Calhoun, Gordon Co. (my house and cattail habitat):

NOCTUIDAE: Catocala lacrymosa, Nov. 1 (LATE). **GEOMETRIDAE**: Cyclophora nanaria, Oct. 23 (second in COUNTY and STATE).

Calhoun, Gordon Co., end of Tate Bend Rd.; cane habitat along Oostanaula River, Oct. 12-13:

NOCTUIDAE: Papaipema sp. #4 (sensu Quinter; cane feeder in larval stages; latest data by one day for this species); Noctua pronuba (second in COUNTY). GEOMETRIDAE: Eusarca packardaria (still present very LATE).

Carbondale, Whitfield Co.:

SPHINGIDAE: Sphinx kalmiae, Sept. 25. **NOCTUIDAE**: Metaxaglaea semitaria, early to mid Nov.; M. australis, Nov. 23 (COUNTY, third in STATE); Noctua pronuba, Oct. 12 (second in COUNTY); Agnorisma bollii, Oct. 23.

Crest of Rocky Face Ridgeline along Dug Gap Battle Rd., just SW of Dalton, Whitfield Co., Sept. 17: NOCTUIDAE: Characoma nilotica, Oct. 12, 2006 (STATE?); Metaxaglaea semitaria, early Nov.

Taylor's Ridge, Walker Co., 5 mi W of Villanow, with IF:

NYMPHALIDAE: Libytheana carinenta, Nov. 21 (ridiculously late for a Snout Butterfly!). **SATURNIDAE**: Hemileuca maia, Nov. 18 and 21. This species, which had a banner year at this location last year, was not present during the second weekend in November (11th), the usual strongest flight. The specimens seen on the 18th and again on the 21st were not only very fresh but very wary, suggesting very recent emergence. With the drought, we expected early leaf drop, but the opposite occurred. Late leaf drop, with minimal sun reaching the soil where this species pupates, may have contributed to the delayed emergence.

5 miles ESE of Fairmount, NE corner of Bartow Co., Salacoa Rd. at Salacoa Creek:

Sept. 21, with Steve Johnson:

NOCTUIDAE: Noctua pronuba (COUNTY). There was also a distinct LACK of Papaipema polymniae, also true for the dates below.

Oct. 20-21, with IF:

NOCTUIDAE: Papaipema cataphracta (HUGE), Pyreferra pettiti, Agnorisma bollii.

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

<u>PYRALIDAE/CRAMBIIDAE</u>: Parpoynx obscuralis, Sept. 22 (COUNTY); Pyrausta acrionalis, Sept. 28; Samea baccatalis, Oct. 2; Argyria lacteela, Sept. 24. <u>SESIIDAE</u>: Alcathoe carolinensis (at pheromones), Sept. 21-30 (daily, LATE); Synanthedon decipiens (2), Sept. 22.

8 mi. WNW of Ellijay, Gates Chapel Rd., Gilmer Co., Sept 16-17, IF:

PAPILIONIDAE: Battus philenor (ridiculously abundant). NYMPHALIDAE: Speyeria diana (females only,

common); Speyeria cybele (females only, abundant). ARCTIIDAE: Crambidia pallida (very common), Virbia (formerly Holomelina) opella, Apantesis nais (common), Grammia parthenice intermedia (common). NOCTUIDAE: Idia julia, Zanclognatha martha, Catocala vidua, Phlogophora periculosa (common), Anathix ralla, Xestia smithii (COUNTY), X. dolosa, X. badicollis, Pseudohermanassa bicarnea. NOTODONTIDAE: Heterocampa umbrata (several). DREPANIDAE: Drepana arcuata. GEOMETRIDAE: Macaria granitata (still common, as it has been all summer), M. minorata, M. signaria, Campaea perlata (common), Caripeta aretaria, C. divisata (common, but mostly worn), Patalene olyzonaria (several). PYRALIDAE/CRAMBIIDAE: Diasemoides nigralis (several), Euzophera ostricolorella (abundant).

Ohoopee Dunes, Tract 2, 8 miles W of Swainsboro, Emanuel Co., Aug. 31/Sept. 1, with IF:

NOCTUIDAE: The species listed as "Schinia sp. (fulleri?)" in the Sept. issue of the news is indeed a VERY yellow-orange morph; we collected two individuals.

Ohoopee Dunes, Tract 4 (Covena Tract), 9 miles SW of Swainsboro, Emanuel Co., Sept. 1-2, with IF:

Under the "NOCTUIDAE" in the previous report (Sept. newlsetter), I listed "Tarachidia tortricina" among the species encountered. I should have made a much bigger deal out of this specimen, as this appears to be a STATE record.

Ohoopee Dunes habitat, Tattnall Co., 1 mile E of the Ohoopee River, 0.8 mi N of Hwy. 152 on Handy Kennedy Rd., Oct 8-9, JA and ERA:

This is BEAUTIFUL habitat, and the volume of moths trapped here was tremendous. The diversity was decent, and probably would be much more so during the summer months. Most of these records are likely COUNTY records, but several of the species are very good catches in general and are marked with "*".

ARCTIIDAE: Grammia parthenice intermedia, G. placentia (several females, which are usually difficult to come by). NOCTUIDAE: Two specimens of a dark species that appears a bit like Hormoschista latipalpis were taken, but I am pretty certain this is something new; *Hypena degasalis (4 pairs), Ptichodis vinculum, Argyrostrotis deleta, Chytonix sensilis, *Schinia sp. nov. (near saturata) – this species' larva feeds on the Woody Goldenrod (Chrysoma paucifloculosa) that grows on the dunes, and this particular moth was perhaps the most abundant moth in the traps; *Schinia petulans, S. arcigera, S. trifascia, S. nubila, *Elaphira nucicolora, *E. fuscimacula, E. exesa, *Condica confederata, Eucoptocnemis dapsilis, *Feltia (Trichosilia) geniculata/floridensis blend – these specimens appear more like floridensis than geniculata and would be the farthest north records for floridensis.

GEOMETRIDAE: Euchlaena madusaria, *Euchlaena near deplanaria.

PYRALIDAE/CRAMBIIDAE: Ategumia ebulealis, Argyria lacteela.

Lyons, Toombs Co., Oct. 9, with ERA:

NOCTUIDAE: Diphthera festiva

Horse Creek WMA, 12 mi. SSW of Lumber City, along Ocmulgee River, Telfair Co., October 7-8, JA and ERA: SPHINGIDAE: Enyo lugubris. LYMANTRIIDAE: Dasychira atrivenosa (COUNTY, and south of most other GA records). ARCTIIDAE: Grammia parthenice intermedia, G. placentia (female; COUNTY), *Syntomeida ipomoeae (COUNTY, and well inland from all other records for the state). NOCTUIDAE: *Melipotis perpendicularis (COUNTY and pretty far north), Argyrogramma verrucae, Bagisara repanda (COUNTY), Leucania incognita. GEOMETRIDAE: Cyclophora myrtaria (COUNTY), Scopula umbilicata (COUNTY). PYRALIDAE/CRAMBIIDAE: Ategumia ebulealis, Agryria lacteela, Dioryctria taedivorella.

Hazelhurst, Jeff Davis Co., Oct. 7, with ERA:

NOCTUIDAE: Diphthera festiva (COUNTY), Callopistria floridensis (COUNTY).

Valdosta, Exit 5 and I-75 welcome center, Oct. 5 and 7, with IF and ERA:

NOCTUIDAE: *Diphthera festiva*. **GEOMETRIDAE**: *Xanthotype* sp. (HEAVILY marked and very orange-yellow). **PTEROPHORIDAE**: *Hellinsia balanotes*.

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

The following sightings are reported by Jeff Trahan:

Broadmoor Terrace Shreveport, Louisiana, Caddo Parish: Urbanus dorantes October 3, 18, 2007: Staphylus hayhurtstii September 13, 2007: Phoebis agarithe September 8, 10, 2007.

Walter B. Jacobs Nature Park, Louisiana: Phoebis agarithe September 9, 2007.

Stonewall, Louisiana: Phoebis agarithe September 22, 2007.

Highland Area Shreveport, Louisiana, Caddo Parish: Mestra amymone October 19, 2007.

Kisatchee National Forest, Louisiana: Chioides catillus September 30, 2007.

Wayne Keller reported that the butterfly populations on Grand Isle, Louisiana, Jefferson Parish, were greatly diminished this year.

Michael Lockwood reported seeing male and female specimens of *Phoebis philea* on October 23, 24, 25, 26, 27 in Houma, Louisiana, Terrebonne Parish. *Phoebis philea* was widespread and common across South Louisiana during the summer of 2006.

Thank you to everyone who submitted reports during 2006. I will gather all of the reports from 2006 and submit them sometime soon. Constant travel during 2006/2007 has hampered my reporting for 2006. Thank you for your patience - Michael Lockwood.

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

The following Mississippi records are reported by Ricky Patterson:

September 8, 2007, Osborne Prairie, Oktibbeha County, Schinia thoreaui, Schinia gaurae, Schinia bimatris.

September 14, 2007, Vicksburg, Warren County, Pyrgus oileus.

September 14, 2007, Vicksburg, Warren County, Poanes yehl, Enodia portlandia missarkae, Enodia anthedon anthedon.

September 21, 2007, Vicksburg, Warren County, Poanes yehl, Panoquina ocala

October 20, 2007, Vicksburg, Warren County, Papaipema furcata

November 8, 9 & 11, 2007, Vicksburg, Warren County, Papaipema new species #5

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

South Carolina: Brian Scholtens, College of Charleston, Charleston, SC 29424, E-Mail: scholtensb@cofc.edu

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

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

Bordelon & Knudson made a return trip to the lower Rio Grande Valley November 12-16 (Bordelon alone), November 17-22 (both). Together, we found about 115 butterfly species, with an additional two records provided by Richard Boscoe, who had been in the area for more than a month. All the pertinent records were from Hidalgo Co., TX, mostly in the greater Mission area. Charlie Sassine found several additional species in Starr Co., earlier in November.

There was a rather large influx of tropical Nymphalidae, which were mostly found at bait. Two spectacular new

US records, not seen by us, were *Archaeoprepona demophon centralis* and *Memphis forreri*. The *A. demophon* was found at NABA IBP (Mission, TX) on November 20 (at bait), and well photographed by Terry Fuller and a few others. The specimen (probably a female) was in excellent condition. It was not collected and was seen again early the next day. Although this species does live in southern Tamaulipas, Mexico, it is locally uncommon there and not known to be migratory. In Costa Rica (DeVries, 1987), it is known to feed on *Annonaceae*, and also *Malphigia* sp.; the latter common in the Rio Grande Valley. It is one of two species that can live in dry (deciduous) tropical forest, the other being *A. demophoon*. These similar species (with unfortunately similar names), can be told apart by the underside pattern, which was well shown in the photos of the Texas individual. We did have some doubts, as to whether this was a natural stray or vagrant, or was accidental. However, on December 6th & 7th, two more individuals turned up at Bentsen State Park, and again at NABA IBP, so this is evidence that these ARE migrants from Mexico.

The female individual of *Memphis forreri*, was found on the same day in Falcon Heights, Starr Co., TX, at the home of Berry Nall, also at bait. This was also a very fresh individual, and was well documented by photos, but not collected. Unlike the other Texas Anaeini, *M. forreri* feeds on *Lauraceae*, possibly including Avocado, or Camphor Tree. It is not uncommon in Tamaulipas and Nuevo Leon, Mexico; and was also predicted to stray to south Texas, and was illustrated by Bordelon & Knudson (2004). Since cross-border traffic is sparse in the Falcon Heights area, we feel it is unlikely to have arrived accidentally. Therefore, we expect that it will appear again.

Other interesting Nymphalidae found included *Tenemis laothoe* (one female, in a bait trap by Boscoe, confirms Nick Grishin's earlier record, from 2004); *Epiphile adrasta*, at least half a dozen collected or photographed in Hidalgo & Starr Counties; *Hamadryas guatemalena*, over 20 collected, sighted, or photographed; *Hamadryas februa*, 4 or 5 records; *Memphis pithyusa*, 5 or 6 records; *Memphis glycerium*, one probable sighting; *Adelpha fessonia*, six or more collected or sighted; *Adelpha eulalia*, one photographed by Jan Dauphin; *Biblis hyperia*, moderately common; *Siproeta stelenes*, moderately common; *Doxocopa aure*, moderately common, *Doxocopa pavon*, over 6 records; *Smyrna blomfildia*, two records; *Myscelia ethusa*, common, as usual; *Dynamine dyonis*, several records; *Euiedes isabella*, two sightings at Bentsen State Park.

Among the Lycaenidae, the most interesting find was *Chlorostrymon telea*, which showed up in the Mission area in mid-November. At least 6 examples were collected. We did not find it, but were glad to receive a "spent" female. *Electrostrymon hugon* (formerly sangala), was also found in small numbers. *Leptotes cassius cassidula* was present in small numbers.

In the Hesperiidae, many of the more unusual species were found in Starr Co., TX, including: *Proteides mercurius, Aguna metophis, Aguna asander, Polythrix octomaculata* (early November). *Astraptes fulgerator* was fairly common. *Panoquina evansi* was found several times. *Heliopyrgus sublinea* was also found several times in late October-early November. A possible *Urbanus evona* was photographed by Berry Nall in Falcon Heights, Starr Co., on December 2. Unfortunately, it was not collected and thus will remain an unproven record, as dissection or DNA is needed to confirm this identification.

Several interesting moths were found by us including an interesting *Ctenuchine Arctiid*, at light in Mission. This is a new US record, *Psilopleura polia minax*. Two Epiplemidae were collected at bait, *Erosia incendiata*, and *Psammathia placidaria*, both second US examples collected.

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Charles Covell sent in the following report:

Oct. 3, 2007: Roanoke airport, Roanoke Co.: Colias eurytheme, Junonia coenia, and Danaus plexippus.

Oct. 4. Price's Fork, Montgomery Co.: Pieris rapae, Vanessa atalanta, Limenitis arthemis astyanax, and Danaus plexippus (all on Buddleia blossoms).

Blacksburg, Virginia Tech campus: Atalopedes campestris, Pieris rapae, Everes comyntas, Vanessa

atalanta, Speyeria cybele, Euptoieta claudia, and Danaus plexippus. Also Helicoverpa zea (Noctuidae) on Buddleia blossoms.

Oct. 5. Blacksburg, Hahn Gardens on Virginia Tech campus: Pieris rapae and Danaus plexippus.

Price's Fork (VT entomology lab complex): *Urbanus proteus* on *Buddleia* blossoms (specimen now in VT insect collection). Also *Epargyreus clarus, Pyrgus communis, Atalopedes campestris, Hylephila phyleus, Pieris rapae, Colias eurytheme* (in field), *Junonia coenia, Limenitis arthemis astyanax*, and *Danaus plexippus*.

Oct. 6.	Roanoke	airport,	Roanoke	Co.: Atteva	punctella (`	Yponomeutidae)	on window.
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SOUTHERN LEPIDOPTERISTS' SOCIETY c/o J. BARRY LOMBARDINI, THE EDITOR 3507 41st Street

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COSSULA MAGNIFICA (STRECKER, 1876) IN LOUISIANA BY VERNON ANTOINE BROU JR.

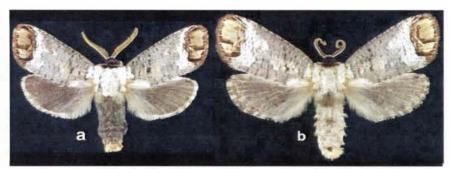


Fig. 1. Cossula magnifica: a. male, b. female

In the latest checklist of moths (Hodges, et al., 1983), one species of the genus Cossula Bailey, 1882 is listed: Cossula magnifica (Strecker) (Fig. 1). The flight period within Louisiana appears to be a single annual brood peaking in May with stragglers into July at the Abita Springs study site (Fig. 2). All of my locality records are from across the southeastern part of the state (Fig. 3).

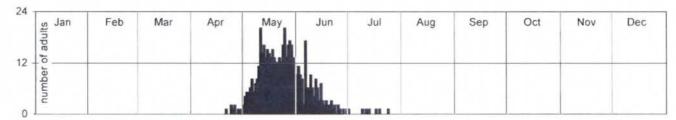


Fig. 2. Adult *Cossula magnifica* captured at sec.24T6SR12E, 4.2 mi NE of Abita Springs, Louisiana. n = 517.

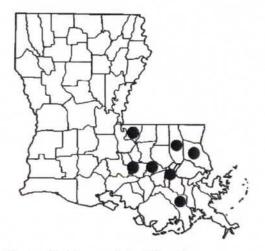


Fig. 3. Parish records by this author.

Various authors have reported the range of *magnifica* to include North Carolina and Florida west to Texas and Mexico and Guatemala. *C. magnifica* appears to also have been recently reported from Costa Rica. Solomon (1995) reports the common name for *magnifica* is "Pecan carpenter worm" and that the host include various species of pecans, hickories, and oaks. Pecans are attacked by dozens of various species of insects from several orders and families, but *magnifica* is the most commonly reported destructive pest reported in the literature. Various species of susceptible oaks include: white oak, scarlet oak, black oak, red oak, post oak, and cherry bark oak. Covell (1984) and Heppner (2003) also list persimmon as a host plant. Both sexes of adult *magnifica* are commonly encountered at ultraviolet light in heavily wooded areas.

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