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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

A NOTE FROM THE CHAIRMAN...

BY
JOHN HYATT

It seems to be customary for incoming Southern Leps chairmen to write an autobiographical note at the outset of their tenure, so here goes...

First of all, I am unabashedly and unashamedly a collector of Lepidoptera. I have been a collector for almost 60 years, and want to continue collecting for as long as I can. I love doing the field work, specimen preparation, and curation. I'm sure that everyone reading this note appreciates the value of forming and maintaining natural history collections, and many share my enthusiasm for collecting — so that's "nuff said" about that!

My early youth was spent in the farm town of Jonesville (population then and now around 700) at the extreme southwestern tip of Virginia, a few miles from both the Tennessee and Kentucky borders. My mother made my first net when I was in the 4th grade, and I still have a female *Papilio cresphontes* that came to our butterfly bush that year (it's rather a rare species in the southern Appalachians; I've seen maybe 8-10 of them hereabouts in the intervening decades).

I graduated from Wake Forest in 1970 with a degree in chemistry. I had considered studying biology and going for an advanced degree in entomology, but I figured I'd end up working for a state ag extension service and spend all day every day identifying crop pests. Chemistry, my other youthful passion, seemed more appealing as a career and entomology became an avocation.

John Hyatt looking for skippers in a coastal Georgia swamp (L. Durden photo)

I picked up a Ph.D. in organic chemistry from Ohio State in 1973 (C.A. Triplehorn was in the Ohio State Entomology Dept. in those days; I remember him proudly showing me some southeast Asian leafhoppers he'd just gotten in. I always thought that with a name like Triplehorn he should have been a coleopterist.) After Ohio State I spent a year as Research Fellow in Chemistry at Harvard (where I enjoyed several lunch hours visiting with John Burns, then at the next-door Museum of Comparative Zoology, discussing southern skippers and looking at Nabokov's Lycaenids in the MCZ collection). After Harvard I took a job with Eastman Kodak's chemical operations in Kingsport, TN, and started collecting in earnest.

In 2004 I retired from Eastman and began a 9-year shift as Research Professor of Chemistry at the nearby East Tennessee State University. I retired completely in 2013 and got down to work spreading material from the freezer-full of papered specimens that I've accumulated — a task far from complete today. Family (wife Julie, a daughter and two granddaughters, and various cousins) deserve some time, as do my other hobbies — which include gardening, salt-water fishing, growing a greenhouse full of Cattleya orchids, and playing the trombone in various bands. But at least the papered bug backlog is no longer getting much bigger!

My collecting interests are butterflies generally, but especially those of the southern Appalachians and the US southeastern coastal plain, and moths of the Georgia barrier islands. I've collected in perhaps half of the US states, plus Ecuador, Peru, Venezuela, Costa Rica, France, Switzerland, Cyprus, and Canada. The collection now fills around 500 drawers and counting. I have a strong interest in and significant holdings of palearctic butterflies and arctic/alpine species. My major current research effort is a long-term faunal study of the moths of Sapelo Island, Georgia; over the years I've published other faunal studies and contributed a number of articles and lots of data to the Lepidopterists' Society and SLS newsletters and field summaries. I'm a Research Associate at the McGuire Center and a Museum Associate of the Gillette Museum of Arthropod Biodiversity at Colorado State.

The Southern Lepidopterists' Society and I go back a long way. I'm one of the original charter members (how many remain both alive and active in entomology, I wonder?), and my wife and I hosted one of the very earliest meetings at our home in Kingsport. It was in August, 1982, and I can still picture Dave Baggett endlessly reading the society's draft by-laws for the group's approval before we broke up to go moth lighting along the Holston river. I regret not keeping a complete roster of attendance; I am pretty certain that Charlie Covell was there (he received the Abbott award), and Charles Watson, Rick Gilmore, Irving Finkelstein (Irving caught a fine *L. arthemis/astyanax* intergrade on our field outing in Hawkins Co., TN), Bob Coffman, Tom Neal, Paul Milner, Frank Hedges, Bob Cavanaugh, and probably a half-dozen others. I think maybe Floyd and June Preston were present, too, and maybe John Wilkie and John Riggenbach.

Although I didn't seek the job, I'm very proud to have been elected Chairman of our Society, and will do my best to do a good job. I look forward to seeing many of our members on field trips and at the annual meetings, about which there are articles elsewhere in this issue of the newsletter.

The Chairman pinches a *Prepona*, Costa Rica 2016.

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Cover illustration: First known drawing of a North American Butterfly from the Modern Age; Eastern Tiger Swallowtail (*Papilio glaucus*) by John White, North Carolina, 1587 (original design by J.V. Calhoun, 1996).

PRELIMINARY NOTICE: 2018 SOUTHERN LEPIDOPTERISTS' SOCIETY/ASSOCIATION FOR TROPICAL LEPIDOPTERA "COMBINED ANNUAL MEETING"

BY

JOHN HYATT AND LANCE DURDEN

The 2018 SLS/ATL combined annual meeting will be in the Biological Sciences Building at Georgia Southern University in Statesboro, Georgia, on Friday - Sunday, 14-16 September, 2018. There is no home football game that weekend and campus parking will be free after 5 pm on the Friday (14 September) and throughout the weekend. The Biological Sciences Building is new and has modern facilities; the Departmental insect collection will be available for examination during the meeting.

There will be opportunities to set up light sheets in a wooded area of the campus on the Friday night, and James Adams has agreed to lead a field trip to the Ohoopee Dunes area (about 35 miles from Statesboro, and the type locality for *Fernaldella georgiana*) one night. There will be native nectar sources around the building so there should be plenty of local butterflies. We will have a group dinner on Saturday evening after the day's meeting.

In case you're wondering, the annual meeting is not being held at the McGuire Center in Gainesville because, after many years of organizing and running the meeting, the McGuire Staff (particularly Jackie Miller and Debbie Matthews Lott, who have borne the brunt of the work over the years) deserve a break. Lance Durden of Georgia Southern has volunteered to put the meeting together in 2018. So mark the date on your calendar and plan on meeting your lepidopterist friends, and perhaps giving a paper, in Statesboro, Georgia, in September.

The June issue of the SLS News will contain more detailed information about the meeting, including campus and parking maps, and the usual registration form and call for papers will be provided well prior to the meeting.

Biological Sciences Building at Georgia Southern — Site of the 2018 Annual Meeting.

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PHOSPHILA MISELIOIDES (GUENÉE, 1852) (LEPIDOPTERA: NOCTUIDAE) IN LOUISIANA

BY

VERNON ANTOINE BROU JR.

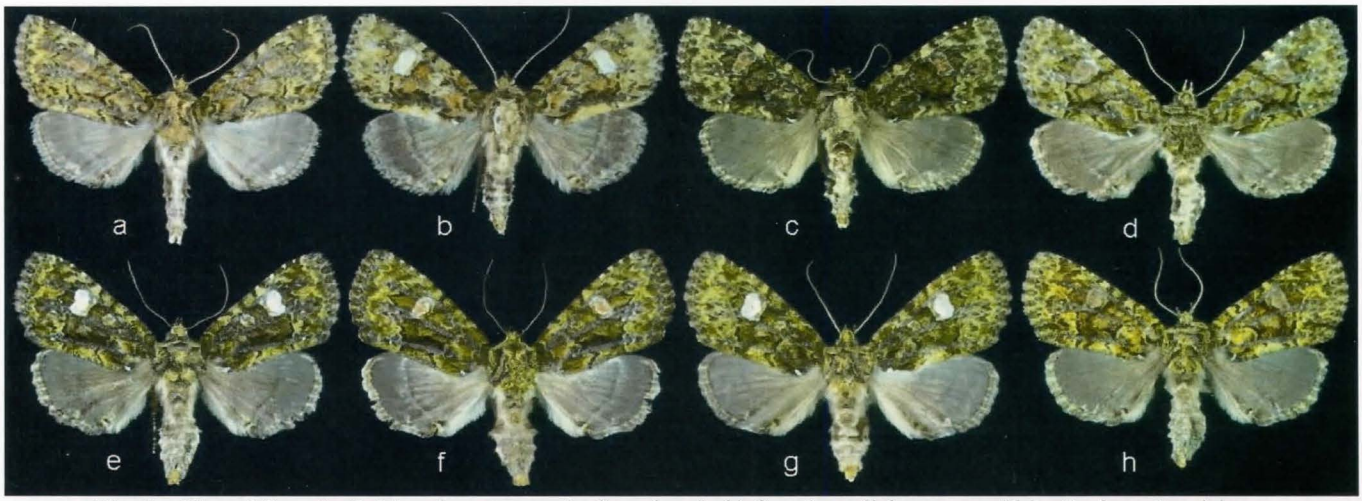


Fig. 1. ***Phosphila miselioides*** phenotypes: (a-d) males, (e-h) females, all from near Abita Springs, Louisiana.

The noctuid moth ***Phosphila miselioides*** (Guenée) (Fig.1) was described originally as ***Hadena miselioides*** Guenée, 1852. The type locality in original description is listed as: "*Carolina, Florida, New York State*". Forbes (1954) listed the range of ***miselioides*** to include "*southern Maine to Florida, west to Manitoba, South Dakota, Kansas, and New Mexico*". Forbes also stated many Texas specimens lack green color. Chapin and Callahan (1967) reported ***miselioides*** in their publication. Covell (1984) listed the geographical range of ***miselioides*** to include: South Maine to Florida, and west to Manitoba and Texas, April to August in probably two broods. Heppner (2003) reported ***miselioides*** to occur from Maine to Florida, and west to Manitoba and New Mexico. This species was not covered by Heitzman and Heitzman (1987), nor Powell and Opler (2009). Within Louisiana, ***miselioides*** has four annual broods, the initial brood peaks end of March, the second brood peaks mid-June, subsequent broods peaking at about 50-day intervals (Fig. 2). The Louisiana parish records are illustrated in Fig. 3.

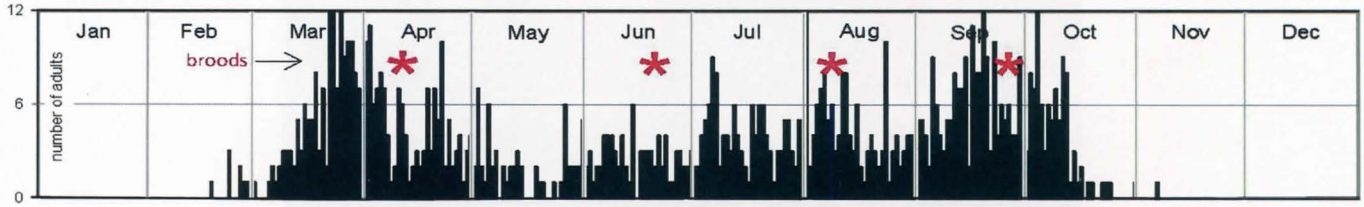


Fig. 2. Adult ***Phosphila miselioides*** captured in Louisiana. n = 996

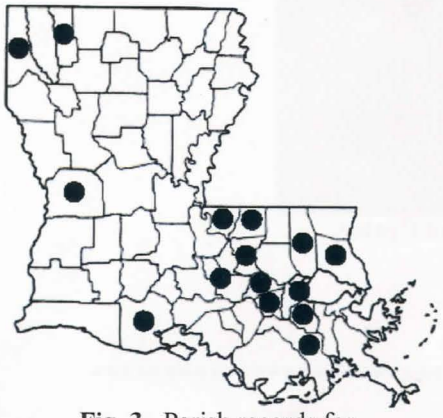


Fig. 3. Parish records for ***P. miselioides***.

Literature Cited

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

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

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

Guenée, A., 1852. *Species Général Des Lepidoptères*. Noctuelles. vol II, page 89. Paris.

Heitzman, J.R. and J.E. Heitzman, 1987. *Butterflies and Moths of Missouri.* Missouri Dept. of Conservation, 385 pp.

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.

Powell, J.A. and P.A. Opler, 2009. *Moths of Western North America*, Univ. Calif. Press xiii + 369 pp + 64 plates.

NYRIDELA XANTHOCERA (EREBIDAE: ARCTIINAE)
USA RECORD FROM TEXAS
BY
MONICA KRANCEVIC

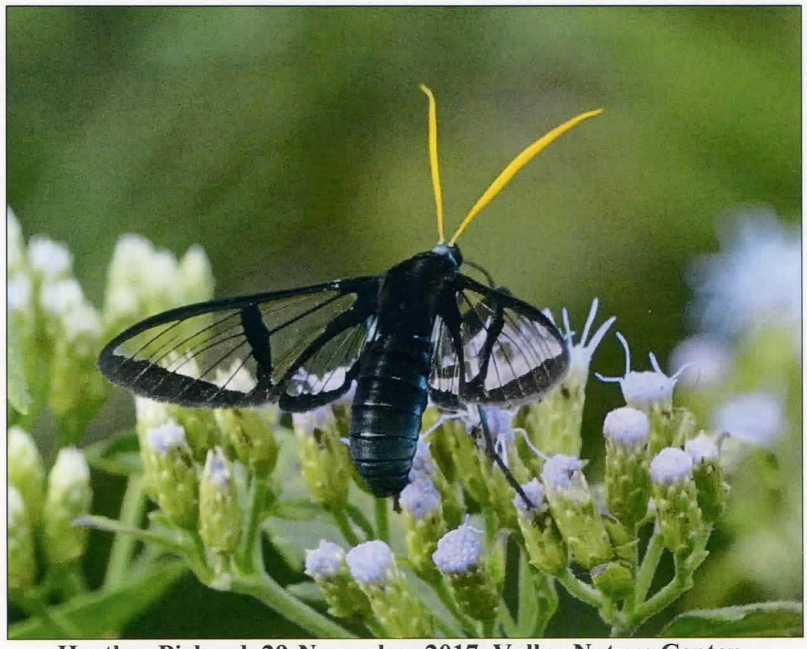
Heather Pickard, a resident of Ottawa, Ontario, Canada, and keen naturalist, escapes the cold winters in the north by taking trips to warmer climates. In late 2017, she, with her husband and friends, traveled to south Texas for the first time:

> "On the afternoon of Wednesday November 29, 2017, we decided to check out The Valley Nature Center in Weslaco Texas. It was a very warm day, and as we were leaving the attraction I noticed that the flowering shrubs between the parking lot and the Center's main entrance had a lot of insect activity. The many butterflies caught my eye and I got several good images. I scanned the flowers for something new or different and spotted what I first thought was a stick insect. After getting a couple of shots from one angle, I walked around the shrubs to get a better shot and that's when I spotted this large clear-winged insect with a lovely blue body and bright yellow antennae. I took some photos and then focused my attention back again on the big bug eating a butterfly. It wasn't until I got home and started posting images to iNaturalist that I realized this lovely Lepidopteran might be a little special."

Indeed it was special! Dr. James Adams and Edward Knudson IDed the image as *Nyridela xanthocera*, a moth well-known from Costa Rica through Mexico, but never before recorded in the United States.

Ms. Pickard added, "I'm pleased it's a first record for the US". She also hopes to return to the Lower Rio Grande Valley someday soon.

What might she discover on her next trip?



Heather Pickard, 29-November-2017, Valley Nature Center, Weslaco, Hidalgo County, Texas, USA (26.1589944N, 97.9973981W).

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PSAPHIDA RESUMENS WALKER, 1865 (LEPIDOPTERA: NOCTUIDAE) IN LOUISIANA

BY

VERNON ANTOINE BROU JR.

Fig. 1. ***Psaphida resumens*** phenotype variations: (a-h) males, (j-r) females.

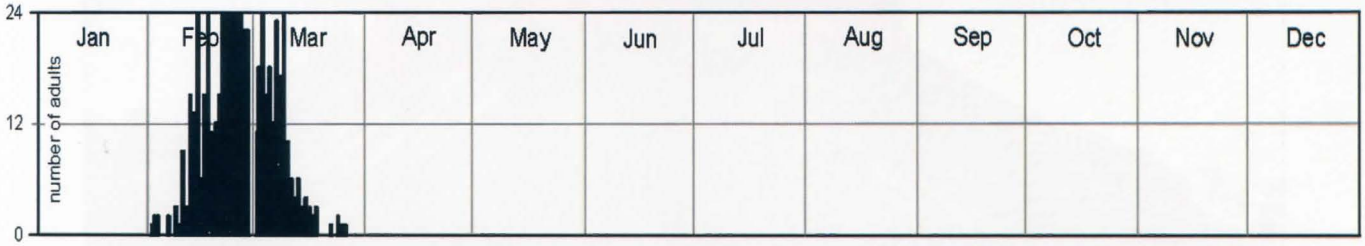

Fig. 2. Adult ***Psaphida resumens*** captured in Louisiana. n = 610

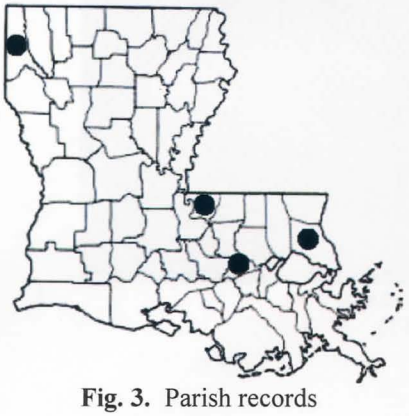

Fig. 3. Parish records for ***P. resumens.***

The medium in size winter noctuid moth ***Psaphida resumens*** Walker (Fig. 1) is one of five species of the genus in the subtribe *Psaphidina* Grote, 1896, which I have captured in Louisiana. The other species are ***Psaphida rolandi*** Grote, 1874, ***Psaphida grandis*** Smith, 1898, ***Psaphida electilis*** (Morrison, 1875), and ***Psaphida styracis*** (Guenée, 1852).

Forbes (1954) listed the geographical range of ***resumens*** to include Massachusetts west to Manitoba, south to Florida and Texas. Covell (1984) listed the geographical range to include Massachusetts and southern Ontario to Florida, west to Minnesota and Texas, in the months March to May. Heppner (2003) listed the geographical range to include Ontario to Florida and Minnesota to Texas in the months January to March.

This species was not covered by Chapin and Callahan (1967), Heitzman and Heitzman (1987), nor Powell and Opler (2009). Within Louisiana, ***resumens*** has one annual brood peaking at the end of February (Fig. 2). The parish records for ***resumens*** taken in this study are illustrated in Fig. 3.

Literature Cited

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

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

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

Heitzman, J.R. and J.E. Heitzman, 1987. *Butterflies and Moths of Missouri.* Missouri Dept. of Conservation, 385 pp.

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Powell, J.A. and P.A. Opler, 2009. *Moths of Western North America*, Univ. Calif. Press xiii + 369 pp + 64 plates.

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

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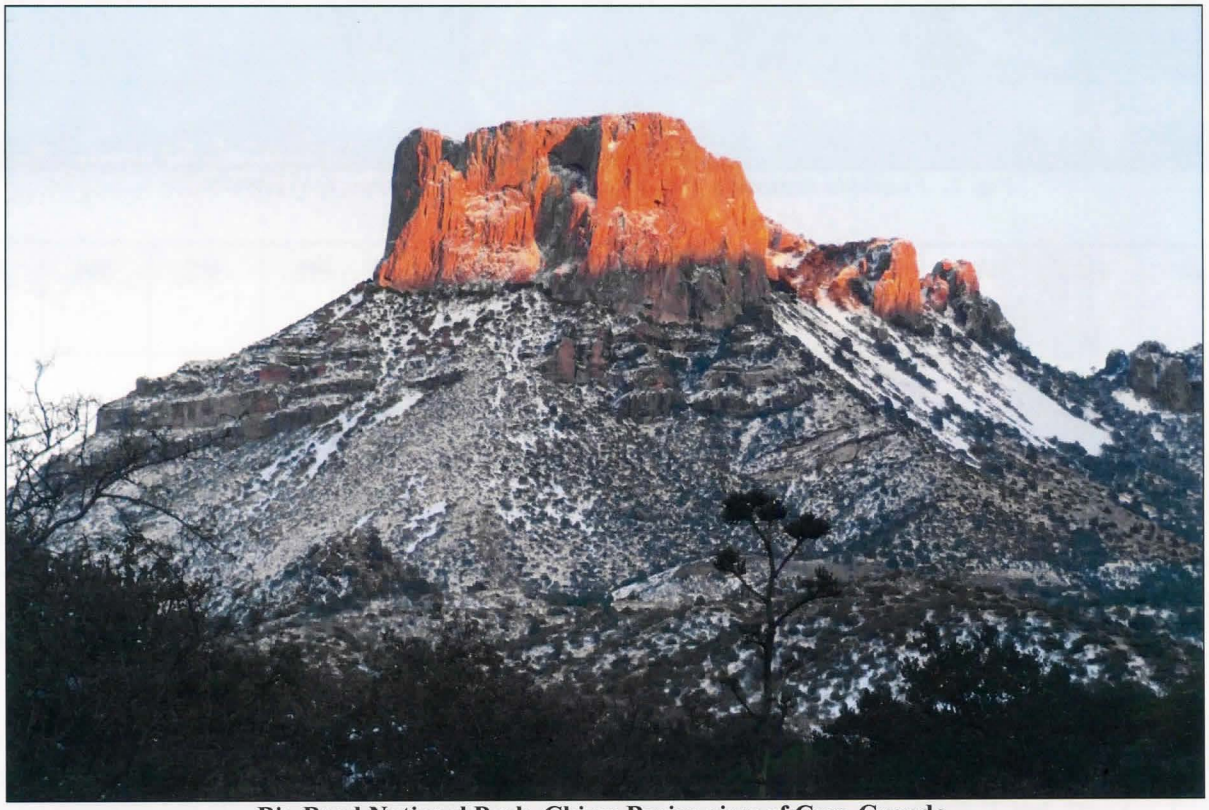

Big Bend National Park, Chisos Basin: view of Casa Grande (credit Michael P. Blanton, Ph.D., December 8, 2017).

SCHINIA SCISSOIDES (BENJAMIN, 1936) IN MISSISSIPPI

BY

RICKY PATTERSON

Fig. 1. ***Schinia scissoides*** ♂

Schinia scissoides (Benjamin, 1936) was described from two specimens collected in St. Petersburg, Florida, during October. A single male specimen of this flower moth (Fig. 1) was collected on October 6, 2016, in a UV light trap by the author and Drew Hildebrandt on a pipeline located in Jackson county near the community of Pecan, Mississippi. The habitat is longleaf pine savannah.

Despite trapping in this general area for several years, this specimen of ***Schinia scissoides*** represents the first documented record of this species within Mississippi.

There is conflicting data regarding the western extent of the range of this moth in published literature.

Heppner (2003) stated that ***Schinia scissoides*** ranges from Massachusetts to Wisconsin and to Florida and to eastern Texas. Hardwick (1996) listed the range as central Florida northward to South Carolina, which also matches the range map of the Moth Photographers Group. Covell (1984) did not address this moth.

Despite the report that ***Schinia scissoides*** occurs west through Louisiana and Texas, I could find no records for any coastal state west of Florida. Personal correspondence with Dr. Heppner indicated he did not know of any specific records for this species from Louisiana or Texas, and recommended I check with Jeff Slotten of Florida. Slotten in turn indicated he knew of no specimens from west of Florida (personal correspondence). Discussions with Vernon Brou indicate he knows of no records of this species from Louisiana, and Edward Knudson also stated he is unaware of any records from Texas. Chuck Harp also has no records of this species from Mississippi, Louisiana or Texas (personal correspondence). Wagner (2011) reported the host plant for this species to be Tall Jointweed (***Polygonella gracilis*** Meisn) (formerly in the genus ***Polygonum***). A review of the USDA NRCS Plant Database at https://plants.usda.gov/java/imageGallery indicates this host plant has not been recorded in any states west of Mississippi. Based on this lack of actual specimens from west of the Florida panhandle and the host plant not reported in Louisiana or Texas, this appears to be a westward range extension of this species.

Thanks to Chuck Harp for confirming my identification of this specimen, and to Dr. Richard Brown of the Mississippi Entomology Museum for reviewing this paper.

Literature Cited

Benjamin, F.H., 1936. Notes and new species (Lepidoptera, Phalaenidae). *Bulletin of the Southern California Academy of Sciences* 34: 196.

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

Hardwick, D. F., 1996. *A Monograph to the New World Heliothentinae (Lepidoptera Noctuidae). Centre for Land and Biological Resources Research, Agriculture Canada*, Ottawa, Canada, 1996.

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.

Wagner, David L., 2011. *Owlet Caterpillars of Eastern North America.* Princeton University Press,

(Ricky Patterson, 400 Winona Road, Vicksburg, Mississippi 39180; E-Mail: rpatte42@aol.com)

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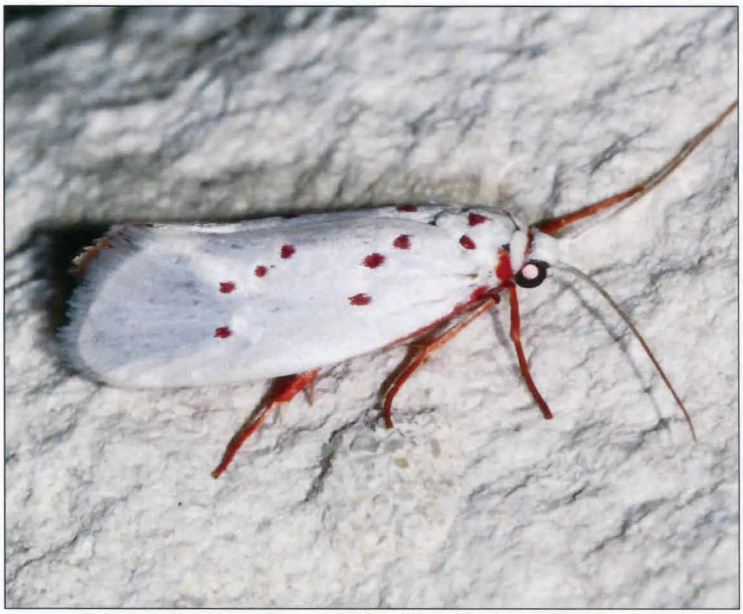
LACTURA RUBRITEGULA, MATTSON & WAGNER, 2017
A NEW *LACTURA* SPECIES FROM TEXAS
BY
TANNER MATSON



Attribution: Terry Hibbitts, 18-April-2017, Camp Woods, Edwards County, Texas. (IDed by Tanner Matson on iNaturalist.)

A new species of *Lactura* has been described from Texas: *Lactura rubritegula*, Matson and Wagner, 2017. Identity of the new species was determined by both larval and adult characters, CO1 haplotypes, and its late-spring period of flight activity.

The new taxon is found principally in limestone areas and riparian corridors of south-central Texas near San Antonio, westward through the southern Hill Country. The moth's flight at the type locality (Kendall Co., TX) begins in the second half of April and ends in the first half of May following the flights of *L. subfervens* and *L. pupula*.

Lactura rubritegula can be recognized from its closest relative, *L. basistriga*, by the presence of red tegulae. It lacks the red subcostal dash that can be found in most forms of *L. basistriga* and the scattered flecking of red or brown scales characteristic of *L. subfervens*. Larvae are can be immediately distinguished from other specialists on *Sideroxylon lanuginosum* (Sapotaceae) and Texas *Lactura* by their cinnamon-brown dorsum.

The authors of this species intend to address the historic taxonomic confusion of North American *Lactura* by revising and redescribing the species found north of Mexico. This revisionary work should be expected sometime this spring.

Literature Cited

Matson T, Wagner D.L., 2017. A New Cryptic *Lactura* from Texas (Lepidoptera, Zygaenoidea, Lacturidae). *ZooKeys* 711: 141-150.
https://zookeys.pensoft.net/article/17766/list/9/

(Tanner Matson, University of Connecticut; E-mail: tanner.matson@uconn.edu)

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FOUR NEW BUTTERFLY FETISHES FROM THE ZUNI TRIBE OF NEW MEXICO

BY

GARY NOEL ROSS

Previously, I reported on butterfly imagery in Zuni carvings called fetishes or fetish sculptures (Ross, 2015a, b). During 2017, I commissioned four new pieces. All were carved by the husband/wife team of Farlan and Paulette Quam who live in the Pueblo of Zuni in northwestern New Mexico south of Gallup. The Quam family is renowned for their carvings of bears in a variety of stones (McManis, 2010; Rodee and Ostler, 1995). Below are photographs of my recent acquisitions.

Fig. 1a: Upright Butterfly and Pueblo (front). H=7.75 inches, W=10.0 inches. Cedar with gold-plated wire; insets of turquoise, jet, red coral, mother-of-pearl.

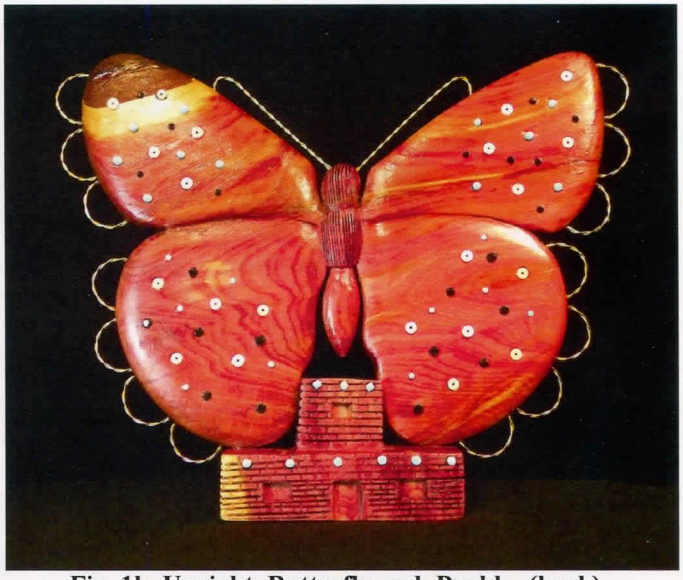

Fig. 1b. Upright Butterfly and Pueblo (back). Same as Fig. 1a.

Fig. 2. Walking Bear with Butterfly. L=3.50 inches, H=2.25 inches. Picasso marble with turquoise eyes; insets of mother-of-pearl, white marble, turquoise; gift bundle of mother-of-pearl, turquoise.

Fig. 3. Sitting Bear with Butterfly. H=2.25 inches, W=1.5 inches. Picasso marble with turquoise eyes; insets of mother-of-pearl, jet; gift bundle of mother-of-pearl, jet, red coral, turquoise.

Fig. 4. Resting Butterfly and Leaf. L/W=3.5 inches, H=0.75 inches. Mother-of-pearl, gold-plated wire; insets of turquoise, red coral, jet, Zuni stone; leaf of fossil coral.

Literature Cited

McManis, K., 2010. *Zuni Fetishes & Carvings*. Rio Nuevo Publishers, Tucson, AZ. 151 pages.

Rodee, M. and J. Ostler, 1995. *The Fetish Carvers of Zuni.* Revised edition. Maxwell Museum of Anthropology and the Pueblo of Zuni Arts and Crafts. The University of New Mexico, Albuquerque, NM. 112 pages.

Ross, G.N., 2015a. Air dancers in stone. *Natural History* magazine April (Vol. 123:3, pages 12-17, cover).

Ross, G.N., 2015b. My experiences with butterfly imagery in contemporary indigenous cultures. Part 2: Zuni Tribe of New Mexico. *Southern Lepidopterists' News* (Vol. 37:2, pages 67-79).

(Gary Noel Ross, E-mail: gnross40@yahoo.com)

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Should not attempt to water your lawn in the winter! Lubbock, Texas, had numerous days of temperatures between 3 and 15 degrees F° December and January, 2017. [Actually, I believe that the sprinkler system turned on by accident. Fortunately not my house (the Editor).]

A USEFUL TOOL FOR PREPARING MICRO LEPIDOPTERA

BY
F. MATTHEW BLAINE

One of the most important things that I have found necessary to spread micro Lepidoptera is a good light source. When on expeditions where one may be staying in a motel or dormitory, it is often difficult to find direct bright light that can be directed to where the preparer needs it.

In the past I have used LED headlamps in addition to whatever room lights are available. This type of headlamp often throws light on your subject but when you go to work on it the light is blocked by your hands. As a result, one finds that he is working in a shadow. Another problem found while working with the LED headlamp and a magnifying headset is that it is very awkward. One must first put the magnifying headset on and then try to attach the head light set so that it aims down on the area desired.

When processing micro Lepidoptera in my home "lab" I use IKEA LED gooseneck lights which operate on standard house current.

Recently while shopping with my wife at Walmart, I found a battery-operated portable gooseneck LED light that operates on three AA batteries (Fig. 1). I bought one and brought it home to try and found that it is a very useful and easy tool to use (Fig. 2). The gooseneck is 14 inches long not counting the light head. It is flexible but holds its position once set (Fig. 3). To stabilize the battery case I attached the battery pack using the provided adapter to 2.5 x 3" piece of wood using two small screws. The entire battery pack easily slides into and out of the adapter providing easy access to the batteries when needed. It has three LED lights that are reasonably bright enough.

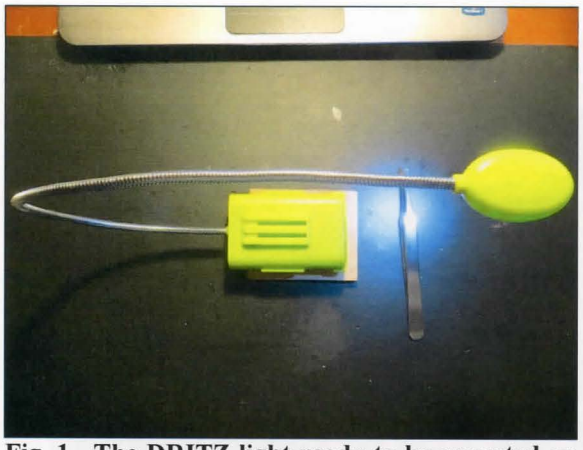

Fig. 1. The DRITZ light ready to be mounted on wooden block for added support.

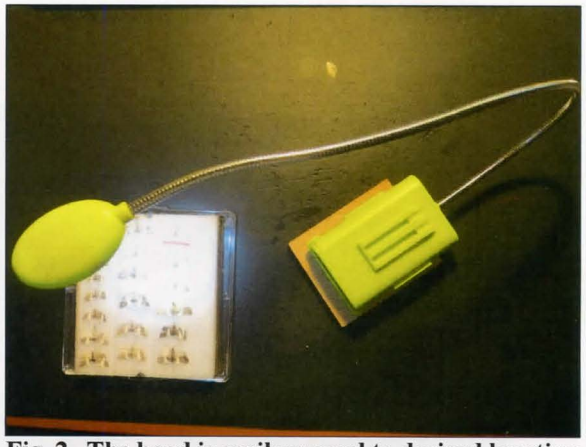

Fig. 2. The head is easily moved to desired location and holds.

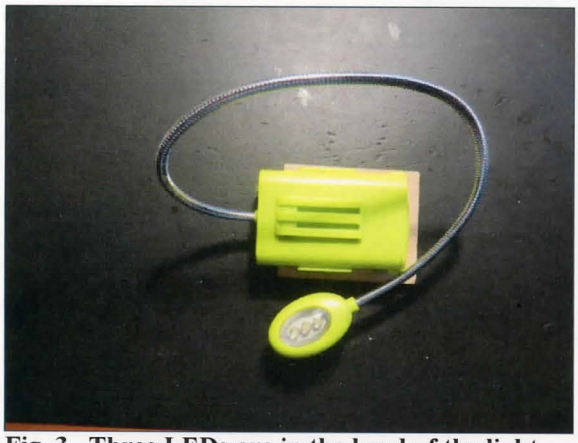

Fig. 3. Three LEDs are in the head of the light.

Fig. 4. The DRITZ contained in original package.

I have been using my original LED gooseneck continuously since I purchased it several months ago and so far the three batteries have not needed to be replaced. It is such a convenient tool that I have purchased a second one to take with me whenever I go collecting and need to spread micro Lepidoptera away from home.

The lamp is a DRITZ flexible LED light which is designed to be mounted on a sewing machine to provide extra illumination while sewing. It was around $14 (Fig. 4). I found it hanging in the sewing section with assorted packages of pins and needles at our local Walmart. I would suggest that it is a very valuable, reasonably priced tool for anyone who is interested in preparing micro Lepidoptera. Thus, I recommend it to anyone working with micro Lepidoptera.

F. Matthew Blaine
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Big Bend National Park, Chisos Basin: View from road ascending from Panther Junction (credit Michael P. Blanton, Ph.D., December 8, 2017).

BEFORE THE BOOK: A 1971 PROFILE OF LUCIEN HARRIS, JR.

BY
JOHN V. CALHOUN

Butterflies of Georgia by Lucien Harris, Jr. (1899-1983) is still considered a classic among regional butterfly books. Published in 1972, it was the first illustrated treatment of the butterflies of Georgia since 1797, when the English botanist James E. Smith published 104 colored plates of Georgia Lepidoptera by John Abbot (1751-c.1840). Harris felt a special connection to Abbot, who was responsible for introducing to science numerous species of butterflies and moths through his specimens and watercolor drawings. Both naturalists explored the fields and forests of Georgia for over 60 years. It is through this mutual interest in Abbot that I feel a sense of kinship with Harris, though I never met him in person. After Harris' death, fellow Georgia lepidopterist Irving L. Finkelstein composed a fitting tribute to Harris and his many accomplishments (Finkelstein 1983). Sadly, Irving departed our devoted group of southern lepidopterists in 2015.

Butterflies of Georgia appeared in December 1972, a few months later than expected. In anticipation of its publication, Harris was the subject of an article in the *Atlanta Journal and Constitution Magazine*, which accompanied the Sunday newspaper on 24 January 1971. I first came across this article twelve years ago, while conducting research on Abbot at the University of Georgia. I recently purchased a special copy of *Butterflies of Georgia*, which is inscribed by Harris and his wife, Louise. To my surprise, folded inside the rear cover, was an original copy of the 1971 article.

Titled "Butterfly Collector," the article is authored by Andrew H. "Andy" Sparks, Jr. (1919-1989), who wrote for the *Atlanta Journal Magazine*, and its successor, the *Atlanta Journal and Constitution Magazine*. He also worked as a journalist and editor for *Atlanta Magazine* (later called *Atlanta Weekly*). In an article announcing the opening of an exhibition about John Abbot, Sparks (1983) wrote that he had never heard of Abbot "until one day in 1951 when I interviewed Lucien Harris, Georgia's second most famous lepidopterist, for a magazine article about Harris's adventures as a butterfly collector." Although he mentioned the year 1951, Sparks was probably referring to his 1971 article. Sparks' notes relating to Abbot are preserved at the Hargrett Library, University of Georgia. His wife, Olive A. Burns, was the author of the bestselling novel *Cold Sassy Tree*, published in 1984.

Sparks' 1971 article includes a photograph of Harris with some of his butterflies (Fig. 1). A closer look at the butterflies reveals that they were used for Plate 8 of *Butterflies of Georgia*, and they were still in their camera-ready layout. Probably at the urging of the photographer, Harris holds a male gulf fritillary (*Agraulis vanillae*), which he plucked from the group. The first two plates of *Butterflies of Georgia* are also figured in the article, though they are not identified as such.

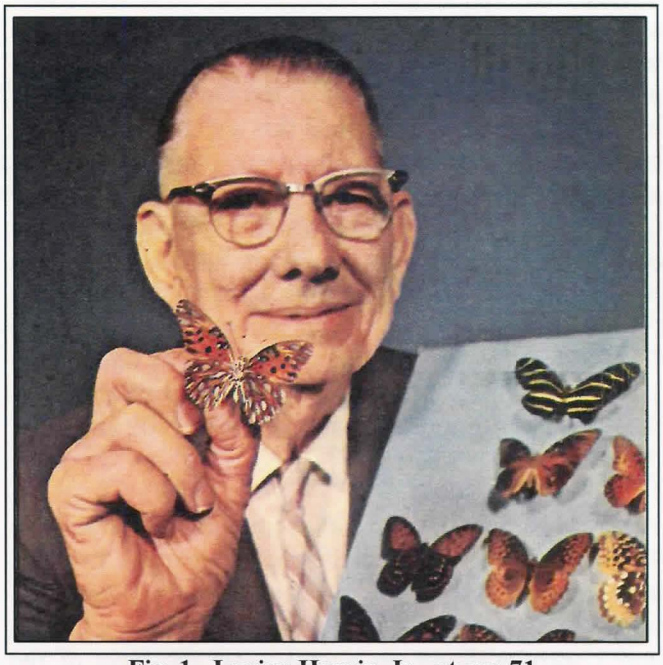

Fig. 1. Lucien Harris, Jr., at age 71 (© Atlanta Journal-Constitution).

"Most people give butterflies no more than a fleeting, sidewise, summertime glance," wrote Sparks. "Lucien Harris Jr., of Avondale Estates, Ga., has given them his dedicated attention, summer and winter, for more than 60 years. He has caught them, collected them studied them, hatched them, mounted them and now has written a book about them." Harris became interested in natural history as a boy, "when he began searching for bird's nests and bird eggs out in the West End [a neighborhood of Atlanta] where he lived on Lawton Street, around the corner from his grandfather, Joel Chandler Harris, author of the Uncle Remus tales." Coincidentally, Harris' famous grandfather had worked for many years as an associate editor of the *Atlanta Constitution* newspaper, the predecessor of the newspaper in which Sparks' article appeared. City directories indicate that Lucien's address was 236 Lawton Street. His grandfather lived

at 312 Gordon Street (now 1050 Ralph D. Abernathy Blvd.), which was about five blocks south. Harris recalled that when he was a boy "the electric lights at the corners in West End were sputtering carbon lights that attracted moths and other insects." As a result, he "got interested and started collecting."

When Harris was about 15 years old, T. Wallace Rogers (1875-1962) established a Boy Scout troop in his neighborhood, which Harris joined. Rogers served as the pastor of the Park Street Methodist Church in Atlanta from 1914-1916. During the late 1930s Harris and Rogers joined Woolford B. Baker (1892-1993), professor of biology at Emory University, in writing three volumes called *Southern Nature Stories*, which were used as elementary school textbooks. Harris related that "Dr. Rogers wrote about birds, Dr. Baker about trees and I about insects." When these volumes were first published, between 1938 and 1941, Harris was serving as the president of the Georgia Society of Naturalists. Sparks described this society as "a group of scientists with diverse interests who would meet about once a month to take field trips to places like the Okefenokee [Swamp], back when it was still privately owned by the Hubbard family of Philadelphia." In reality, it was the lumberman Charles Hebard (not "Hubbard") and his sons who purchased much of the Okefenokee Swamp in 1901. Operating as the Hebard Lumber Company, they removed 425 million board feet of timber from the swamp between 1909 and 1927 (Nelson 2005).

Harris was most proud of a discovery that he made in 1950. "My son [Lucien Harris III] caught the first specimen when we were together at Stone Mountain," he related to Sparks. "It was July 9, 1950 . . . Lucien and I were walking on a path near the base of the mountain when we saw this big skipper fly up out of the grass. It lit on a tree. I said, 'That's the biggest skipper I've ever seen at this time of the year.'" Believing they had found a new species, Harris decided to send the specimen to Hugh A. Freeman, who was an expert on skippers. Freeman (1955) recognized it as a new species and named it *Megathymus harrisi* in honor of Harris, who considered it the rarest butterfly in Georgia. A large photograph of a female "Harris Skipper" is included in Sparks' article, as a symbol of Harris' influence on the study of Lepidoptera. This specimen was later figured on Plate 10 of *Butterflies of Georgia*. Although later authors considered *M. harrisi* to be a subspecies or synonym of *M. cofaqui*, this does not diminish the significance of Harris' contributions.

Harris had never counted the butterflies in his collection, but he related a story about someone who had. "William D. Field, the man in charge of Lepidoptera at the Smithsonian Institution in Washington was at my house," Harris began. "While we talked, his 12-year-old son opened and shut every drawer in the cases where I had my butterflies stored. I thought 'My, how interested he is.' Later that day Mr. Field asked if I would consider letting the Smithsonian purchase my collection and asked how many butterflies I had. I told him I had no idea. His son quickly answered, 'Daddy, I know. He has 5,429.' He had been opening drawers to count the butterflies."

Harris did not sell his collection to the Smithsonian, but instead decided to "keep his butterflies in the South." In 1970, he donated his collection to Tall Timbers Research Station near Tallahassee, Florida. One of the people responsible for founding Tall Timbers was Harris' good friend, the southern conservationist Herbert L. Stoddard, Sr. (1889-1970), who served as the president of the research station for many years. According to Sparks (1971), Tall Timbers subsidized the publication of *Butterflies of Georgia*. Harris dedicated his book to Stoddard and included a sketch of his life along with a biography of John Abbot. Harris (1972) acknowledged these naturalists for sharing a "deep understanding and knowledge of their environment and its wildlife."

After Harris parted with his collection, he "started collecting right over again," and already had several hundred specimens by January 1971. "I'm not trying to find them all over again," Harris said, "but there are some I'm looking for, especially the rare ones."

Literature Cited

Finkelstein, I. L., 1983. Lucien Harris, Jr. (1899-1983), a tribute. *J. Lepid. Soc.* 37:322-324.

Freeman, H. A., 1955. Four new species of *Megathymus* (Lepidoptera, Rhopalocera, Megathymidae). *Amer. Mus. Nov.* 1711:1-20.

Harris, L., Jr., 1972. *Butterflies of Georgia.* Univ. Oklahoma Pr., Norman, Oklahoma. xvi+326 pp., 23 pls.

Nelson, M. K., 2005. *Trembling earth: a cultural history of the Okefenokee Swamp.* Univ. Georgia Pr., Athens, Georgia. xviii+262 pp.

Sparks, A. H., 1971. Butterfly collector. *The Atlanta J. Const. Mag.* 24 Jan. 1971:16-18, 20.

Sparks, A. H., 1983. John Abbot's new fame. *Atlantic Weekly* 34:12-14.

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SOUTHERN LEPIDOPTERISTS' SOCIETY 2018 MIDSUMMER FIELD MEETING

BY

JOHN HYATT

It's been a while since the Southern Leps held a Field Meeting in the upper south, so the author has decided to organize one for the weekend of July 8-10 on Unaka Mountain in the Cherokee National Forest of Unicoi County, Tennessee. This weekend follows the 4th of July holiday and is the weekend before the Lepidopterists' Society annual meeting in Canada.

The area chosen for our activities is near the small town of Erwin, TN. Erwin is accessible from Interstate Hwy. 26, which passes alongside the town. I-26 intersects I-81 about 25 miles away near Kingsport, TN, so road access to the area should be easy for members coming from any direction. Only a few miles from Erwin one can be on dirt roads that range well above 4000' elevation in beautiful mixed hardwood Transition Zone forests, with occasional grassland openings (called "balds" locally) of several hundred acres. We will focus our operations along the Forest Service roads known as Beauty Spot Gap road and FR 132. The photos accompanying this article will give an idea of what the terrain is like in this area. The topo map for this area is on page 63 of the Delorme Tennessee atlas. We will basically be collecting on a mountain ridge that forms the Tennessee-North Carolina border.

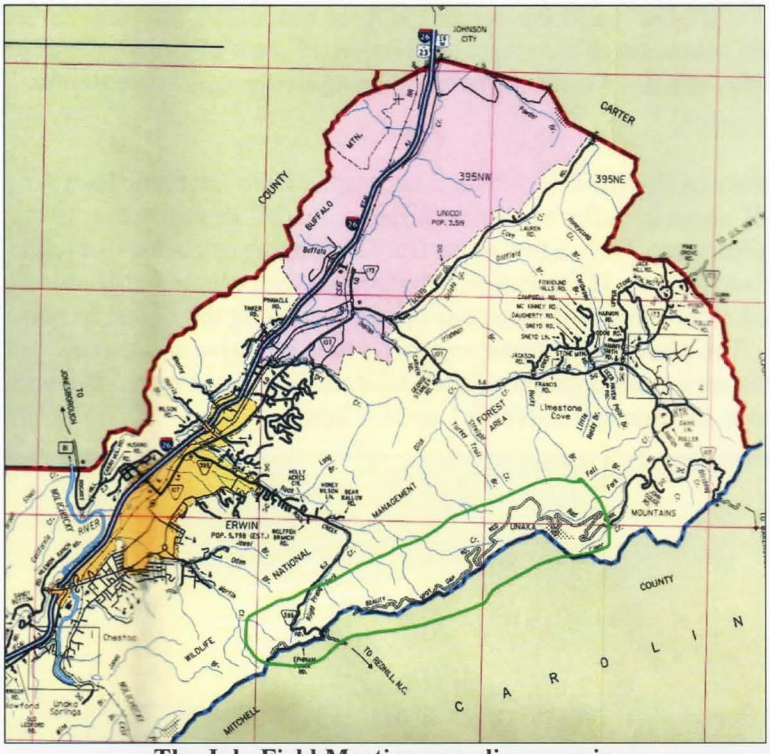
The Unaka Mountains in Unicoi County, Tennessee, seen from Beauty Spot Road - virgin territory for moth hunters (photo by C. Foster).

Butterflies known to inhabit this section of the Cherokee National Forest include *Speyeria diana, S. aphrodite*, and *S. cybele* (all of which should be flying at meeting time), the rare hairstreak *Erora laeta*, and the copper *Lycaena phleas americana* (both in season in early July). This is also known habitat for *Papilio appalachiensis*, but its flight time will be well past.

The moths of this region have been little studied. Lance Durden and I placed a couple of light traps on FR 132 in June 2017 and made a good catch. The moths were interesting enough to justify a species list in the SLS News [see *Southern Lepidopterists' News* 39(3), 267-8 (2017)]. To my knowledge this is the only moth sample ever taken in the area, so who knows what we may find in July? Certainly the fauna will be very different from what our members usually encounter in the deep South!

The Cherokee National Forest of course requires no collecting permit, but it turns out that in our area of interest, the Cherokee National Forest is contiguous with the Cherokee Wildlife Management Area of Tennessee, which does require a permit for scientific sampling. The author has already obtained the necessary permit; copies will be given to all field meeting attendees.

Collectors must be aware that the Appalachian Trail in places parallels, and occasionally crosses, Beauty Spot Gap road. The Appalachian Trail is protected federal land for which we do not have a collecting permit. The Trail is well marked with white blazes and signs, and it is important that we do not place traps or otherwise collect on or very near the Trail. Also, there is a designated Wilderness Area northwest of Beauty Spot Gap road beyond the large bald at Beauty Spot itself. This wilderness area is also off-limits for sampling — But there are many miles of beautiful habitat open to our exploration.



The July Field Meeting sampling area is circled in green on this map.

Schedule:

Friday, July 6: We will begin with a cookout at John Hyatt's house in Kingsport, TN, at 5 pm. Anyone arriving earlier in the afternoon will be welcome and can spend some time prowling through my collection. Hyatt's house is about a 40 minute drive from the Super 8 motel in Erwin.

We will leave Hyatt's house by 6:45 pm and drive about 45 minutes to the parking pull off at the top of Unaka Mtn, where any members who did not make it to the cookout should meet the group around 7:30 pm. We will then scatter along the collecting roads to set traps and rig light sheets.

Saturday, July 7: The group will meet at the parking pull off atop Unaka Mtn. at 9 am and recover light and bait traps. After processing the catch, the rest of the day is available for day collecting in the area. I recommend that we carry our own drinks and lunches to avoid a trip back into Erwin at lunchtime.

We will gather at the Maple Grove Restaurant in Erwin at 6 pm for dinner, after which we will return to Unaka Mtn. for another nights' collecting.

Sunday, July 8: We will meet to recover traps at 9 am. After sorting the catch, everyone is free to continue collecting or depart as they wish.

Locations and directions:

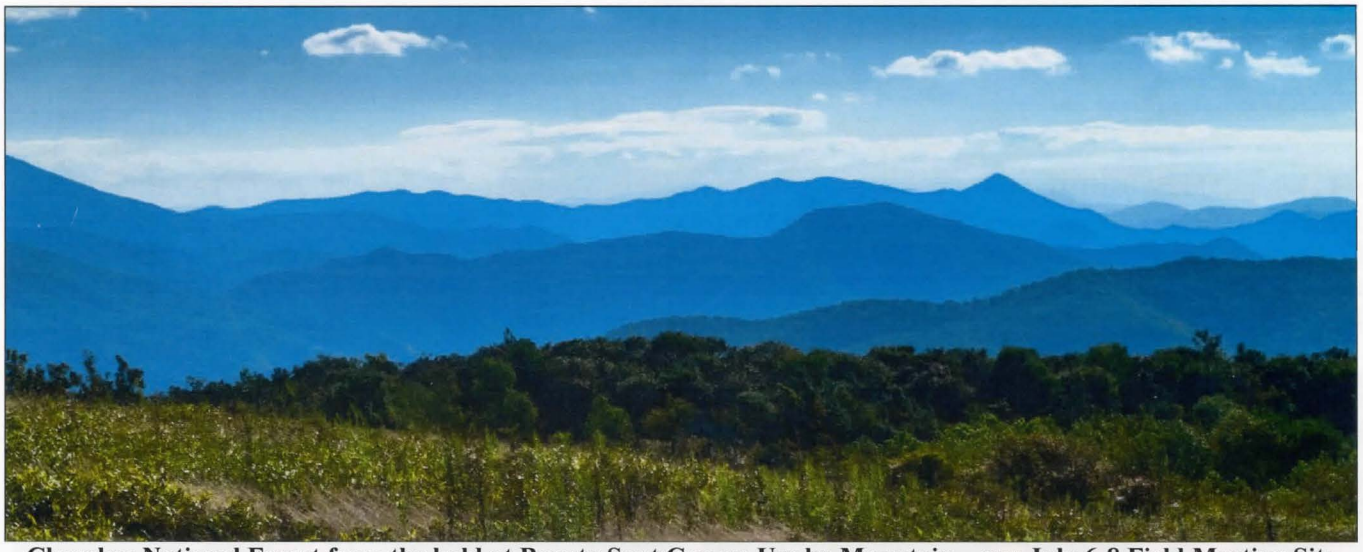
Erwin, TN motels and Restaurant: Erwin has two modest motel choices. The Super 8 Motel, Erwin, TN, is at 1101 N. Buffalo St., at Exit 37 off I-26. Phone (423) 743-0200. I recommend we use the Super 8; if our group reserves enough rooms I can arrange a discount rate.

The other choice, Mountain Inn and Suites at 2002 Temple Hill Rd., Erwin, TN, off Exit 43 on I-26, phone (423) 743-4100, is more expensive and offers no obvious improvement, and no discount is available for a group of our size.

Johnson City, TN is about 10 miles from Erwin and has many more motel and restaurant choices if you prefer to go there.

The Maple Grove Restaurant, 1207 Gouge Rd., Unicoi, TN, is off Exit 32 on I-26. The restaurant is on the right just past the Dollar General store, behind the liquor store.

Directions to J. Hyatt's house, 233 Park Ridge Court, Kingsport, TN 37664 [(423) 279-0827]: From Erwin, take I-26 west through Johnson City and about 12 miles further to Exit 8B, the intersection with I-81. Take I-81 north. Proceed 2 miles and take TN exit #59. At the exit turn west onto Ft. Henry Drive toward Kingsport. Proceed to the 3rd stop light. The road to your right will be Colonial Heights Rd. Turn right onto Colonial Heights (Zoomerz gas station is on the corner) and proceed.



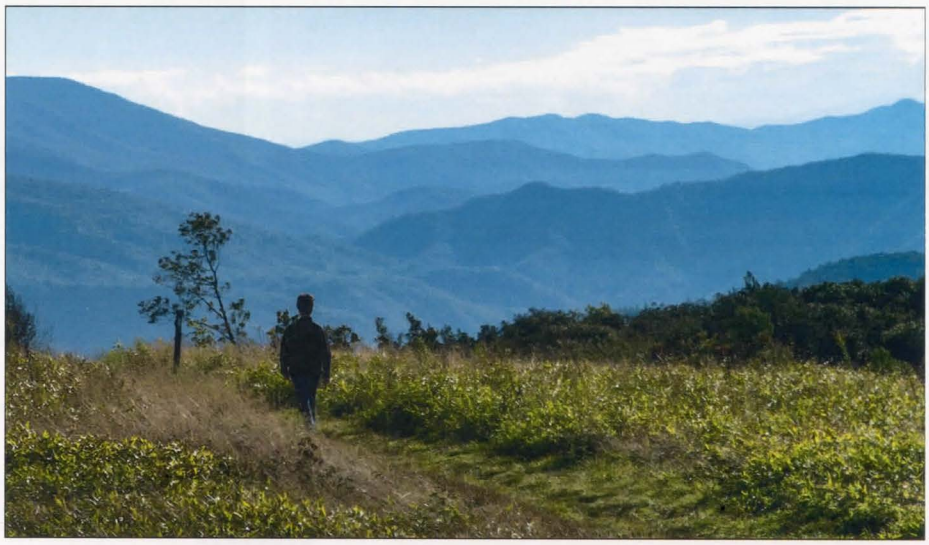
Cherokee National Forest from the bald at Beauty Spot Gap on Unaka Mountain – our July 6-8 Field Meeting Site (photo by C. Foster).

In about 1.5 miles, Colonial Heights Rd. crosses a railroad track and ends in a T intersection with Hemlock Rd. Go right on Hemlock. Within a couple of hundred yards, you will see straight ahead the main entrance into Warriors Path State Park. Do not enter the park, but bear left sharply just in front of the entrance. This will put you onto Fall Creek Road. Fall Creek will take you across a bridge over Patrick Henry Lake, and along the Warrior's Path Park golf course. The first road to the right, just at the end of the golf course, is Park Ridge Court. Turn right on Park Ridge; #233 is the 8th house on the left. Brick house, tall white columns in front. Home phone (423) 279-0827.

Beauty Spot Gap collecting area: Start in Erwin, TN, on I-26. Take Exit 36 into Erwin. At the first traffic light, turn right onto Main Street. At the first traffic light on Main, turn left onto Rock Creek Rd. Follow Rock Creek Rd. 6.1 miles, through a residential section and into the Cherokee National Forest. Mile 6.1 will place you at the top of Unaka Mountain. Just before the road pitches downhill into North Carolina, there is a pulloff/parking area on the left. We will park and meet there. Beauty Spot Gap road is the gravel road that goes steeply uphill on the left; across the road there is a less steep gravel road, FR 132. These roads will be our collecting areas.

If you plan to attend this field meeting, please let me know a few weeks ahead by e-mailing jkshyatt@centurylink.net or phoning me at (423) 279-0827. I will need an approximate head count for negotiating a motel discount and preparing food for Friday evening.

A day-hiker on the Appalachian trail, Unaka Mountain, Unicoi Co., TN. (photo by C. Foster).



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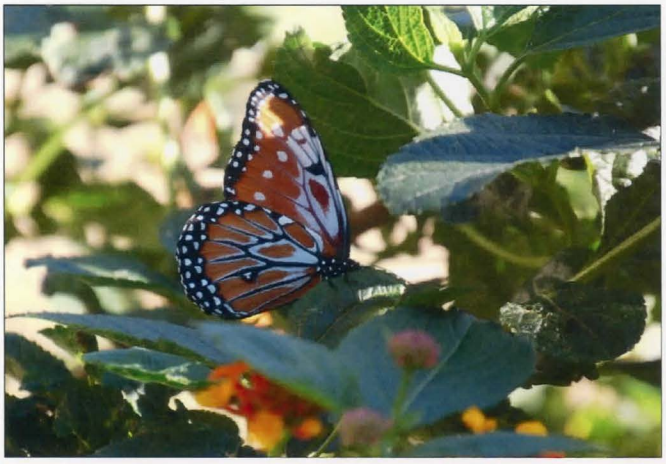
ABERRANT QUEEN IN TEXAS

BY

DELMAR CAIN

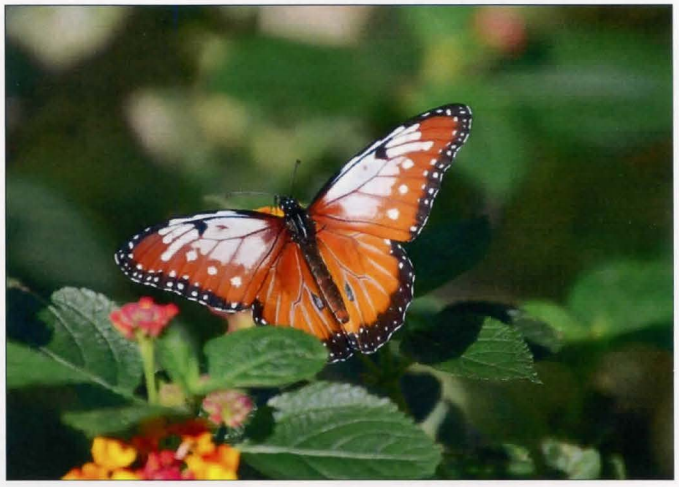
An aberrant Queen butterfly was observed at my home in Boerne, Texas, on November 18, 2017. This butterfly was feeding and/or perching on both Texas lantana (*Lantana urticoides*) and Shrubby boneset (*Ageratina havanensis*). Fortunately, this butterfly cooperated and I took the following 4 photographs. While not quite sure of what I was observing, although realizing that it was a strange looking *Danaus gilippus*, I contacted Terry Doyle, an experienced lepidopterist, who identified the butterfly as an aberrant Queen (*Danaus gilippus thersippus*).



Queen on Texas lantana (*Lantana urticoides*)

Queen on Texas lantana (*Lantana urticoides*)

Queen on Shrubby boneset (*Ageratina havanensis*)



Queen on Texas lantana (*Lantana urticoides*)

(Delmar Cain, E-mail: dic1942@gvtc.com)

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CONDICA VIDENS (GUENÉE, 1852) (LEPIDOPTERA: NOCTUIDAE) IN LOUISIANA

BY

VERNON ANTOINE BROU JR.

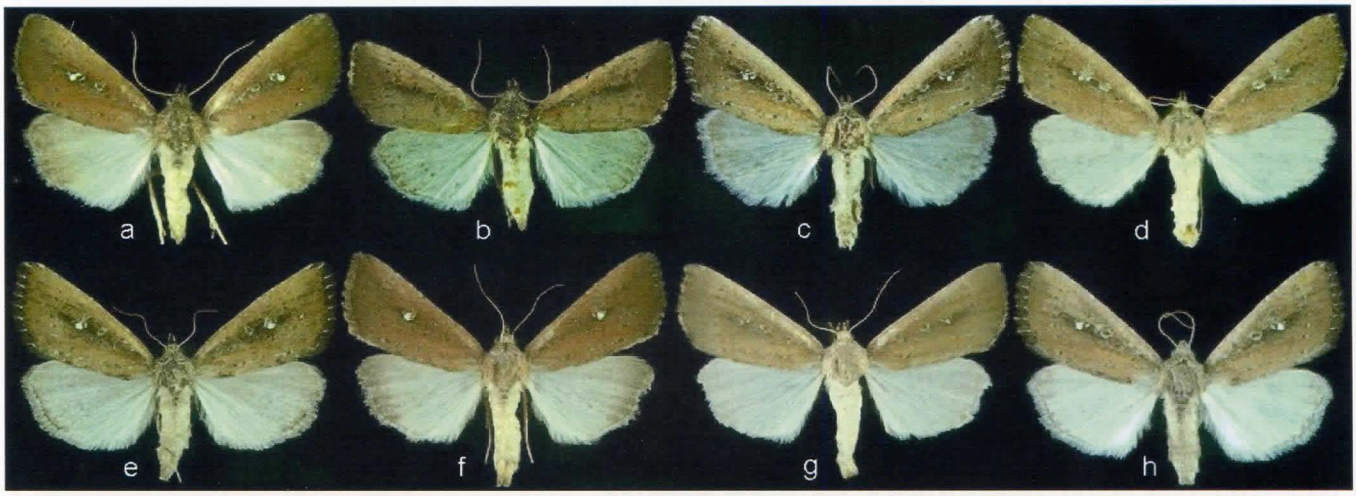

Fig. 1. ***Condica videns*** phenotype variations: (a-d) males, (e-h) females.

Fig. 2. Adult ***Condica videns*** captured in Louisiana. n = 4027

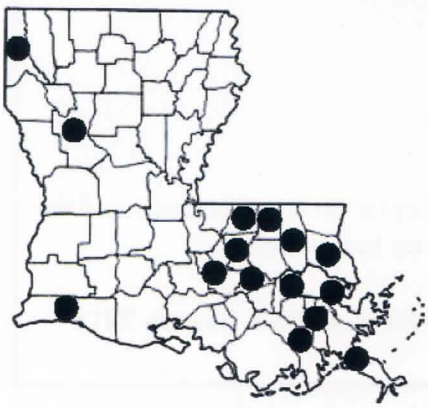

Fig. 3. Parish records for ***C. videns***.

The very abundant noctuid moth ***Condica videns*** (Guenée)(Fig. 1) was previously reported in Louisiana by Chapin and Callahan (1967) in the area around Baton Rouge, East Baton Rouge Parish during the months January to December. Forbes (1954) listed the geographical range to include Montreal, Quebec to Florida, west to Colorado and Texas. Covell (1984) listed the geographical range to include Maine and Quebec to Florida, west to Manitoba and Texas in the months May to September. Heppner (2003) listed the geographical range to include Quebec to Florida and Manitoba to Colorado and Texas in the months January to December. This species was not covered by Heitzman and Heitzman (1987), nor Powell and Opler (2009). Within Louisiana, ***videns*** has five well populated broods, the first brood peaking late February, the second brood peaks very early May and subsequent broods at about 43-day intervals (Fig. 2). In this study, the confirmed parish records for ***videns*** in Louisiana are illustrated in Fig. 3.

Literature Cited

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

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

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

Heitzman, J.R. and J.E. Heitzman, 1987. *Butterflies and Moths of Missouri.* Missouri Dept. of Conservation, 385 pp.

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.

Powell, J.A. and P.A. Opler, 2009. *Moths of Western North America*, Univ. Calif. Press xi

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

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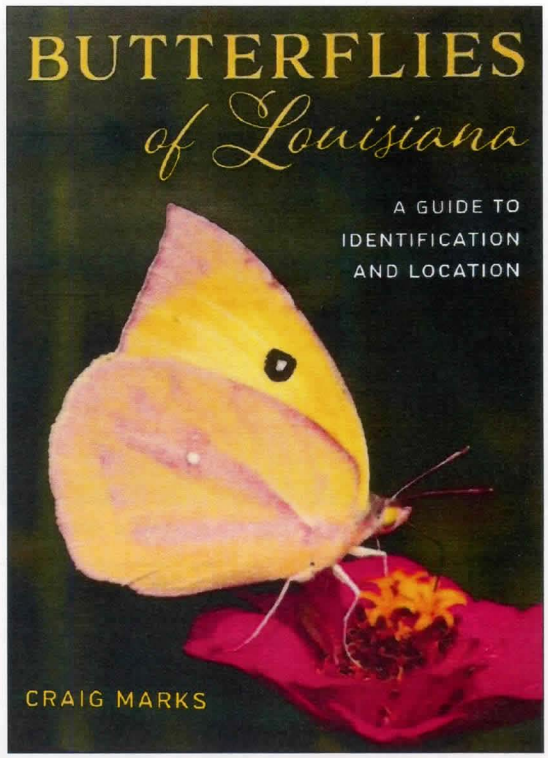

Butterflies abound in every region of the Bayou State, and with this authoritative resource in hand both the experienced and novice butterfly watcher can identify a frequent backyard visitor or pinpoint the haunts of a particular species. With a long flight season stretching from late February to early November, Louisiana offers an abundance of opportunities to observe the 154 native species of butterflies, whose habitats range from coastal prairies to swampland to northern piney woods.

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- Parish distribution map for each species
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- Tips on butterfly watching and gardening
- Life cycle basics
- Best natural areas in the state for seeing butterflies
- Explanation of official butterfly counts
- Appendix of other possible species in Louisiana
- Appendix of common and scientific names of host plants
- Glossary of scientific terms

Craig Marks is a member of The Lepidopterists' Society, the Southern Lepidopterists' Society, and the North American Butterfly Association, and the author of many articles on butterflies.

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HEMIEUXOA RUDENS (HARVEY, 1875) (LEPIDOPTERA: NOCTUIDAE) IN LOUISIANA

BY

VERNON ANTOINE BROU JR. AND RICHARD LEE BROWN

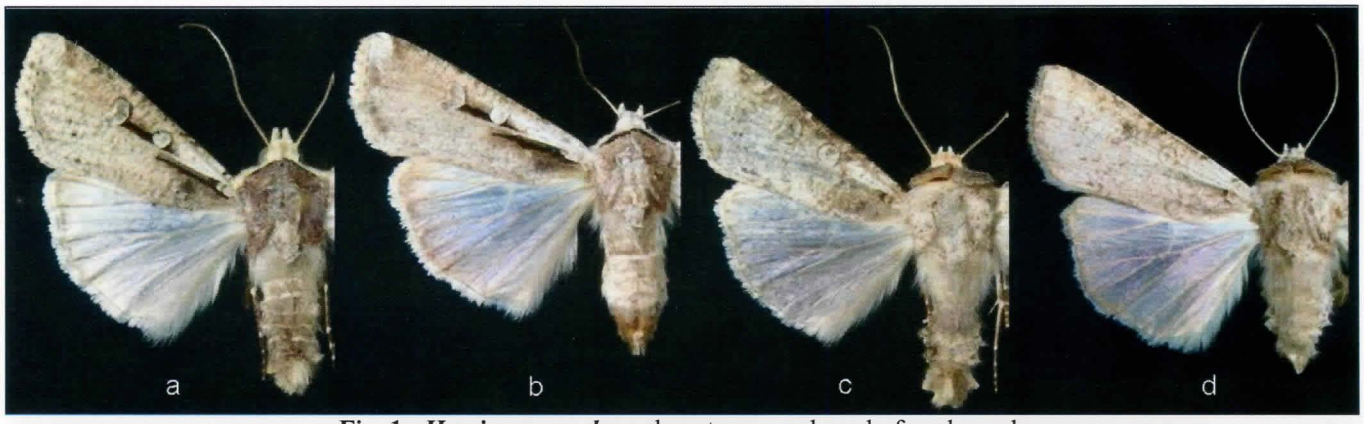

Fig. 1. ***Hemieuxoa rudens*** phenotypes: males a-b, females c-d.

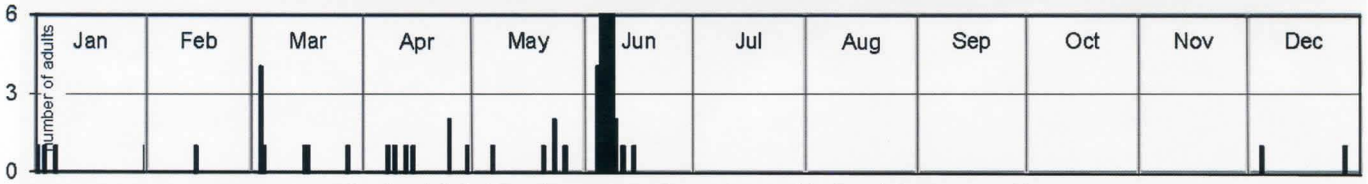

Fig. 2. Adult ***Hemieuxoa rudens*** captured in Louisiana. n = 64

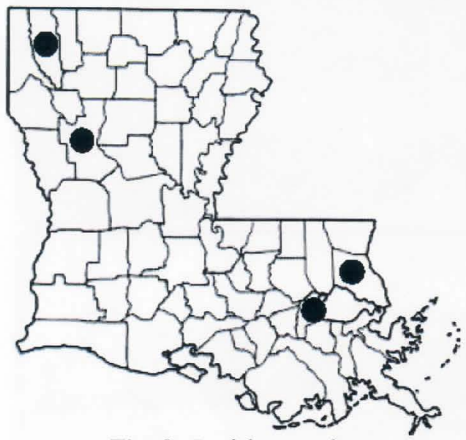

Fig. 3. Parish records for ***H. rudens***.

The distinctly western U.S. species ***Hemieuxoa rudens*** (Harvey) (Fig. 1) has been captured on several dozens of occasions over the past half century within Louisiana. Powell and Opler (2009) listed the geographical range of ***rudens*** to include *"central California, Utah, Colorado, and Nebraska south through the southwest, Mexico, Central America, and South America to Ecuador and Bolivia*". These same authors state the foodplants include "*snakeweed* ***Gutierrezia wrightii*** *A. Gray, 1853, grasses, and possibly other plants*". This is a plant in the sunflower family. These same authors state that ***rudens*** is bivoltine, flying in the spring and fall. No doubt ***rudens*** is an irregularly occurring migratory visitor to the state of Louisiana based upon the 64 adults captured from December through June (Fig. 2). One specimen was taken in a loblolly-pine mixed forest habitat, Bossier Parish, Barksdale A.F.B., 32°31'17"N 93°33'01"W, 24 Apr. 1996, David Pollock, collector. This species was not covered by Forbes (1954), Chapin and Callahan (1967), Covell (1984), Heitzman and Heitzman (1987), nor Heppner (2003). The currently known parish records within Louisiana are illustrated in Fig. 3.

Literature Cited

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

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

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Powell, J.A. and P.A. Opler, 2009. *Moths of Western North America,* Univ. Calif. Press xiii + 369 pp + 64 plates.

(Vernon Antoine Brou Jr., 74320 Jack Loyd Road, Abita Springs, Louisiana 70420 USA
Richard Lee Brown, Mississippi Entomological Museum, Mississippi State, Mississippi 39762 USA)

Reprint of Fig. 10 from Jeffrey R. Slotten's article in the December SLS NEWS, Volume 39(4), pps. 349-352.

"NOTES ON *CATOCALA* ASSOCIATED WITH *CRATAEGUS* (HAWTHORN) IN FLORIDA"

There was a strong feeling that the size of the original Fig. 10 in the article was quite small and did not do justice to the photographs of the *Catocala* larvae [The Editor].

Fig. 10. Mature larvae of Rosaceae-feeding *Catocala*. A: *Catocala aestivalia;* B: *Catocala alabamae;* C: *Catocala clintoni;* D: *Catocala grisatra;* E: *Catocala lincolnana;* F: *Catocala mira;* G: *Catocala miranda;* H: *Catocala orba;* I: *Catocala pretiosa;* J: *praeclara.*

[The author again wishes to thank Larry Gall for his expertise in the digital formatting of the slides of the various larvae.]

HOMOPHOBERIA APICOSA (HAWORTH, 1809) (LEPIDOPTERA: NOCTUIDAE) IN LOUISIANA

BY

VERNON ANTOINE BROU JR.

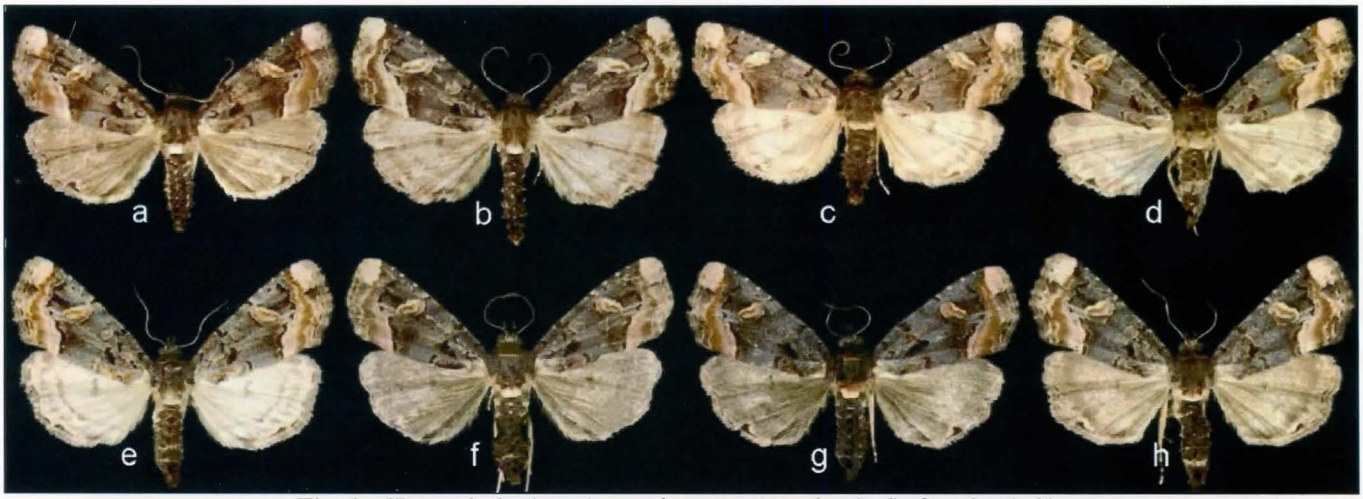

Fig. 1. ***Homophoberia apicosa*** phenotypes, males (a-d), females (e-h).

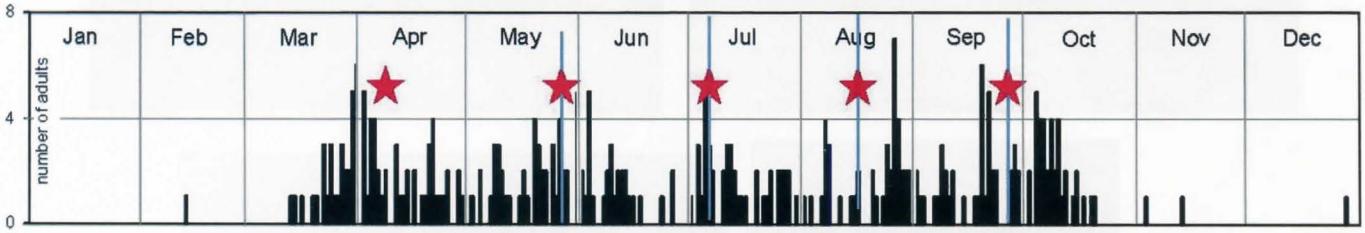

Fig. 2. Adult ***H. apicosa*** captured in Louisiana. n = 319

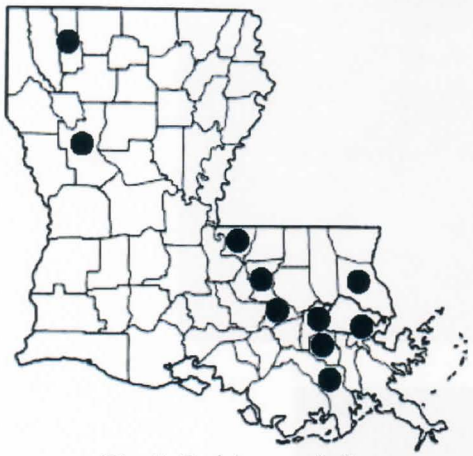

Fig. 3. Parish records for ***H. apicosa*** in Louisina.

Homophoberia apicosa (Haworth) (Fig. 1) is a noctuid moth in the genus ***Homophoberia*** Morrison, 1875. Forbes (1954) stated the geographical range of ***apicosa*** to include Nova Scotia and Quebec to Florida, west to Iowa and Texas, in the months May to September. Covell (1984) listed the range of ***apicosa*** to Include Nova Scotia to Florida west to Minnesota, Missouri, and Texas in the months March to October. Heppner (2003) listed the range of ***apicosa*** to include Nova Scotia to Florida and Minnesota and Texas in the months January to December. This same author listed ***Polygonum sp.*** to be the larval foodplant. This species was reported by Chapin and Callahan (1967) in Louisiana under the name ***Neoerastria apicosa*** (Haworth), and to occur from February to November. Within Louisiana, ***apicosa*** can be abundant in both ultraviolet light traps, and fermenting fruit bait traps. Within Louisiana, there are five annual broods (Fig. 2), the initial brood peaking the second week of April, the second brood peaking about 50 days later the last week of May, and subsequent broods peaking at 41-day intervals. This species was not covered by Heitzman and Heitzman (1987), nor Powell and Opler (2009).

Literature Cited

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

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

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

Heitzman, J.R. and J.E. Heitzman, 1987. *Butterflies and Moths of Missouri.* Missouri Dept. of Conservation, 385 pp.

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.
Powell, J.A. and P.A. Opler, 2009. *Moths of Western North America*, Univ. Calif. Press xiii + 369 pp + 64 plates.

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

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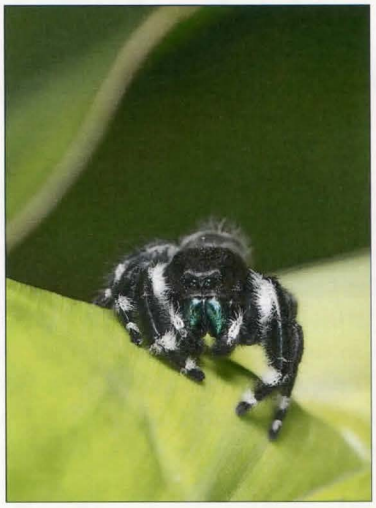
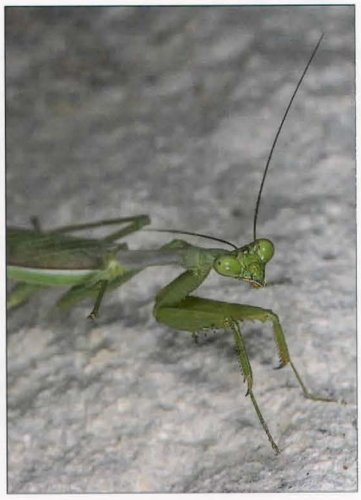
CRITTERS FOUND IN WEST TEXAS
PHOTOS SUBMITTED BY
JAMES BOWERS





CHOEPHORA FUNGORUM (GROTE & ROBINSON, 1868) (LEPIDOPTERA: NOCTUIDAE) IN LOUISIANA

BY

VERNON ANTOINE BROU, JR.

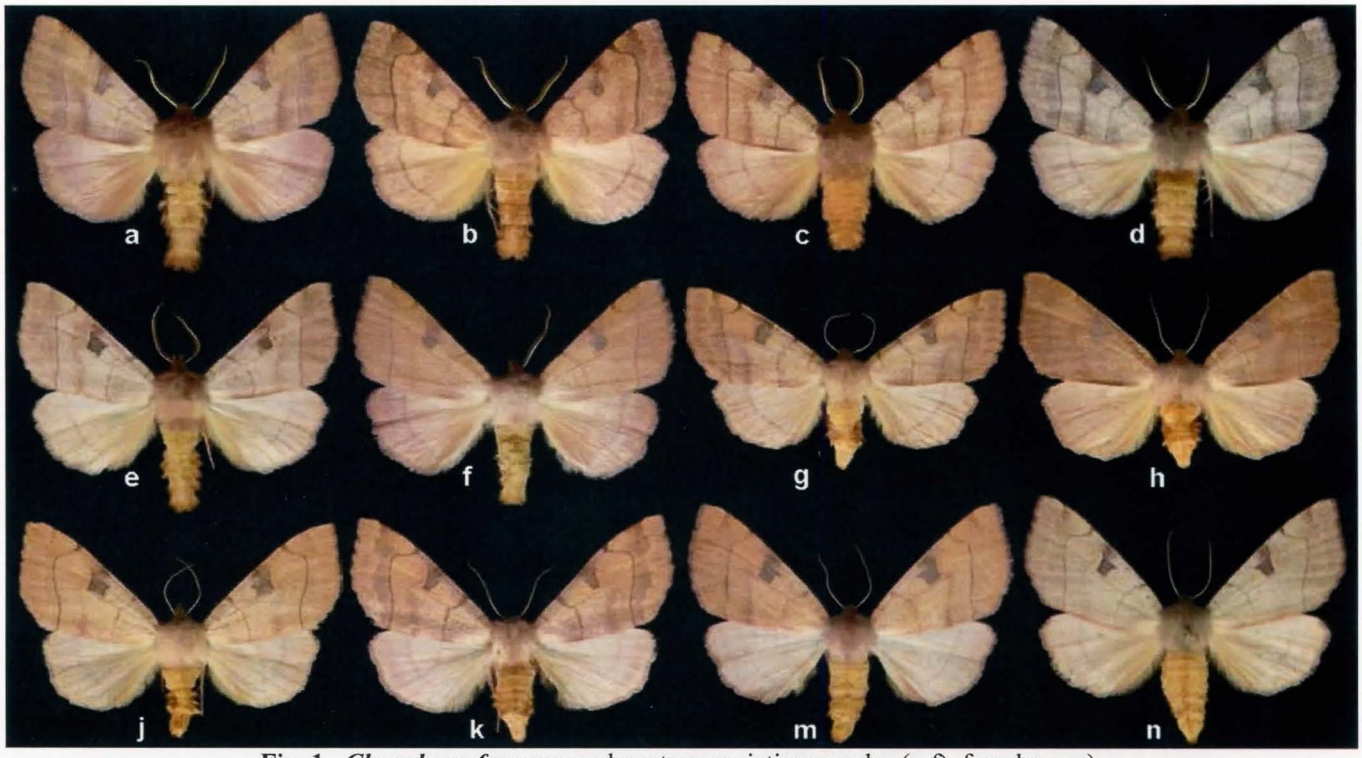


Fig. 1. ***Choephora fungorum*** phenotype variations: males (a-f), females g-n).

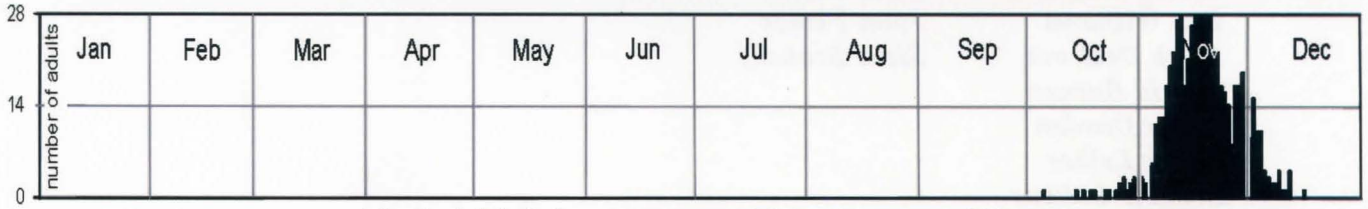


Fig. 2. Adult ***C. fungorum*** captured in Louisiana. n = 648

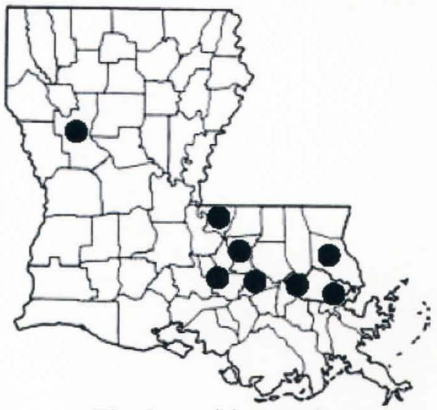


Fig. 3. Parish records for ***C. fungorum***.

The fairly common and variably marked late fall moth ***Choephora fungorum*** (Grote & Robinson) (Figs. 1 and 2) was previously reported in Louisiana by Chapin & Callahan (1967) in the area around Baton Rouge, East Baton Rouge Parish during the months October to December. Forbes (1954) listed the geographical range to include Chatam and Colborne Ontario to Illinois, south to Georgia and Arkansas, and Buffalo, New York. Covell (1984) listed the geographical range to include New York and Southern Ontario, to Florida, west to east Kansas and Texas in the months September to November. Heppner (2003) listed the geographical range to include Ontario to Florida and Illinois to Texas in November to December. This species was not covered by Heitzman & Heitzman (1987), nor Powell & Opler (2009). The parish records for *fungorum* in Louisiana are illustrated in Fig. 3.

Literature Cited

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

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

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

Heitzman, J.R. & J.E. Heitzman, 1987. *Butterflies and Moths of Missouri*. Missouri Dept. of Conservation, 385 pp.

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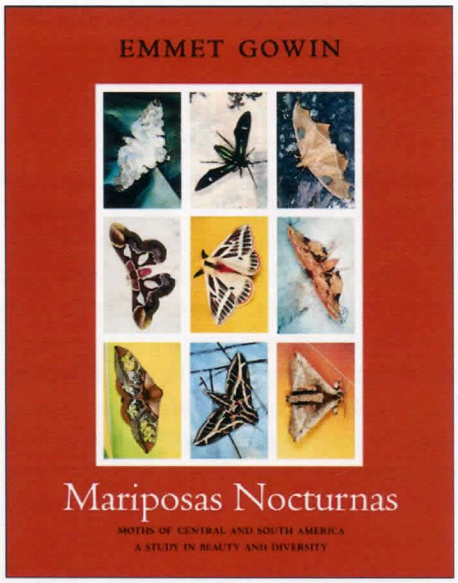
BOOK REVIEW: TWO RECENT ARTFUL WORKS ON NEOTROPICAL MOTHS

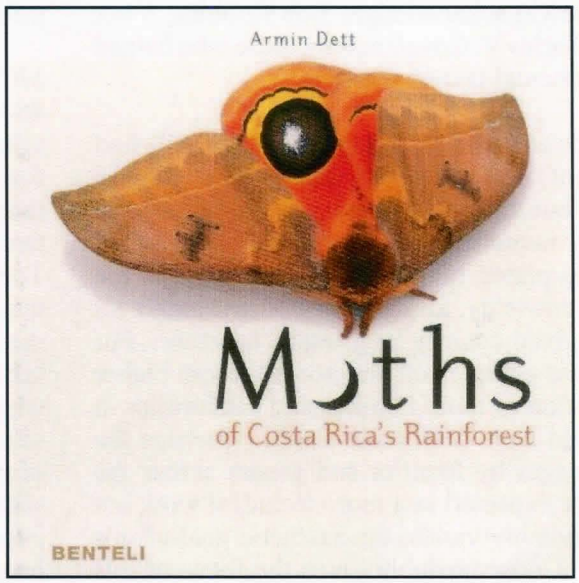
BY

CHUCK SEXTON

Emmet Gowin, *Mariposas Nocturnas, Moths of Central and South America, A Study in Beauty and Diversity*, Univ. of Princeton Press, 2017. Hardcover, 144 pages, 90 color + 2 b/w illus. List price, $49.95. ISBN 978-0-6911-7689-5.

Armin Dett, *Moths of Costa Rica's Rainforest*, Benteli Publishing, 2017. Hardcover, 336 pages, 500 illus. List price, 58 €. ISBN 978-3-7165-1840-3.





These two new volumes were published almost simultaneously in late 2017. Given their overlapping subjects and the similar guiding principles in their layouts, it makes sense to review them together. Gowin and Dett have backgrounds in photography and graphic design, respectively, and both explicitly recite their *lack of* scientific training in Lepidoptera as a *mea culpa* for any errors in the volumes. The goal of each work is to present a large array of moth images in an artistic manner, a goal that is well accomplished – both books offer gorgeous Lepidopteran eye candy. That said, it is not out of bounds to assess these tomes as contributions to our understanding of the faunas covered. I am not familiar enough with this diverse Neotropical fauna to properly vet all of the identifications but each work evinces a very substantial attempt to enlist and rely on extensive museum study and recognized Lepidopteran experts.

Princeton University Press released Emmet Gowin's *Mariposas Nocturnas* (hereafter MN) to much fanfare in September 2017. Gowin's artful earlier works are well-documented and the early reviews of the present work emphasize the continuation of his rightful reputation for recognizing the beauty in both the realm of humanity and of nature. A very moving forward by Terry Tempest Williams places the work in arguably its best context.

MN's large-format, 143-page volume offers nearly 1300 images of living moths from Panama, Ecuador, French Guiana, Bolivia, and Brazil. By virtue of this plethora of species – I count about 658 species in the index – it certainly constitutes the most extensive modern collection of Neotropical moth imagery available in print form to date.

The main section of MN is organized into 51 plates, each with 25 neatly-arrayed rectangular images. The arrangement is different from a purely technical work, in keeping with the author's stated focus, i.e., to portray the beauty and diversity of the subject while incorporating solid scientific (i.e., nomenclatural) data with each image. The sequence of the plates is the first indicator that the focus is more on the gee-whiz factor of the beauty of moths rather than as a formal treatise. The plates are arranged chronologically, corresponding to a few dozen visits the author made to the subject regions over the course of a nearly 13-year period from 2001 to 2014. Each plate highlights the visual diversity of moths in one or more destinations on each of his excursions. Although Panama constitutes the venue for

much of the first half of the plates, the destinations are thereafter mixed according to his itinerary through this period of travel.

The families of moths are completely scrambled on any given plate and across plates. On the facing page of each plate, there is an index of scientific names (genus-species with authors, family, and subfamily designations) keyed to the photos. Thankfully, there is an index to scientific names (genus-species) at the rear of the volume. To his credit Gowin spent countless hours at the National Museum of Natural History comparing his photos to the millions of available specimens. Gowin acknowledges Bob Robbins, Vitor Becker, and Charles V. Covell among those who helped with the monumental taxonomic task.

The scientist or enthusiastic amateur moth-er will find the arrangement of families and species frustrating in their disarray, but the plates are easy to thumb through and not overly numerous. Once one gets used to the sequence of the plates, the geographical context of the images is not unwieldy, although one might prefer all plates from a given country be grouped together. For more convenient comparison and access across higher taxa, the inclusion of moth families and subfamilies in the index would have been most useful. Perhaps the ordering of images by families and genera across the plates would be expected in a more technical work but that would inevitably violate the aesthetic goal of this contribution. Understandably given the focus of this and the next work, micromoths and drab members of the macro families are under-represented or entirely absent.

The moths in MN are photographed on a great variety of backgrounds, including many artificial but artful substrates set up by the author in the field at each station, an effect which I find very pleasing and a welcome change from the ubiquitous white-sheet backgrounds of most mothing efforts. Virtually every image is well cropped to focus on the animal. However, deviating from what might be considered another technical standard, the moths are arranged to face in virtually any direction—most or all presumably in a natural pose. That every moth image is presented in an identical rectangular window gives rise to a lack of size perspective among species. For example, the White Witch moth (*Thysania agrippina*, plate 3, image 16) – a Neotropical giant with a wingspan up to nearly one foot – is offered at the same size as the few tiny Tortricids included on the plates.

Editing errors in MN seem to be very few. On Index 12, the family name for the Geometrid moth *Graphidipus fulvicostaria* is missing. For Plate 21, the names of two images are reversed on the facing index, Fig. 22 of *Morphomima acalis* and Fig. 23 of *Copaxa syntheratoides*.

Armin Dett's *Moths of Costa Rica's Rainforest* (hereafter MCR) seems to have been less heralded, at least on this side of the pond, perhaps due to Benteli's more niche-related publishing domain in the world of art and art history. Dett is an award-winning designer who taught graphic design for 18 years and presently runs a public relations firm. He enlisted eminent Lepidopterist Gunnar Brehm as a consultant and contributor, along with several other contributing authors and taxonomic experts. Brehm offers a prologue to the volume which places it in context from a scientist's perspective. Brehm's family summaries and other technical offerings in the work lift the volume into the realm of scientific utility, from which it might otherwise fall short.

MCR offers thousands of images portraying a reported 450+ moth species. Dett has explicitly limited the selection to "visually eye-catching moths". Perhaps a few more microlepidopteran examples are included here than are found in MN but these amount to just tantalizing crumbs including one Psychid, two Tortricids, a few Gelechioids, about seven Pyralids, and maybe a dozen Crambids, among other families. While there is an effort to present species is some semblance of taxonomic order by superfamilies and families, that is where the orderliness ends, giving way to a varied and visually dazzling arrangement of images. At times, sets of species in one genus are found on a given page, but as with MN the species are laid out for maximum visual impact, taxonomy be damned. On the upside, each image is tactfully labeled with subfamily, genus and species (where known). There are many redundancies with as many as 10 images of the same exact moth portrayed from different angles. The varied perspectives can be appreciated, but the subsequent wasted space is frustrating; the same suite of species might have been arrayed and organized into a volume one-quarter the size as a technical publication. Remarkably, there is *no index* for the volume, the only guide to moth groups being a generalized table of contents by superfamily buried on p. 36.

There is some implicit recognition of size differences in MCR with larger moths taking up more space, but *all* are portrayed much larger than life and differences in size presentation among families varies. As other reviewers have pointed out, from any but an artistic viewpoint, there is a excessive amount of "white space" (literally) with varying numbers of moths per page ranging from one to ten.

A concluding section in MCR on "Aspects of a Moth's Life" includes a miscellaneous array of ten interesting essays on diverse topics ranging from habitat discussions to parasitoid wasps to herp observations to the chemistry of luminescent fungi, each contributed by an invited expert on the topic. These vary in their presentation, some reading like letters to home from the

rainforest while others are concise renditions of a subject akin to an extended abstract.

I found each of these volumes useful to some degree in aiding the identification of my own array of Panamanian moth images garnered during a recent visit. Many species may be illustrated for the first time, or are represented in print or online by extremely few other reference images. This alone offers much cause for celebration, despite the scavenger hunt required to sift through the many illustrations in each work if used as an identification guide. The latter they are not, but they may serve begrudgingly in that capacity. Nonetheless, in the face of such massive and beautiful contributions to the representation of the Neotropical moths, it seems trivial to point out short-comings from any technical perspective. Both are worthy additions to any Lepidopteran library.

(Chuck Sexton, 6007 Salton Dr., Austin, TX, 78759; E-mail: gcwarbler@austin.rr.com)

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PAECTES NUBIFERA
PHOTO BY
MONICA KRANCEVIC

***Paectes nubifera*, female, 17-December-2017,**
Lake Jackson, Brazoria County, Texas,
Monica Krancevic

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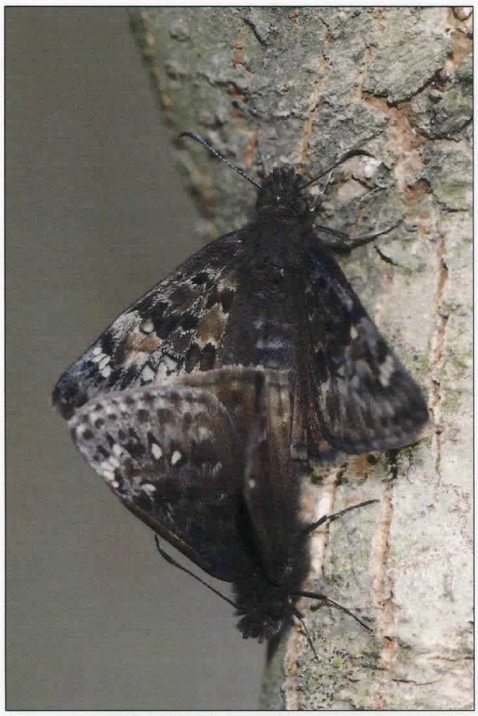
ROMANTIC BUTTERFLIES AND MOTHS

SUBMITTED BY

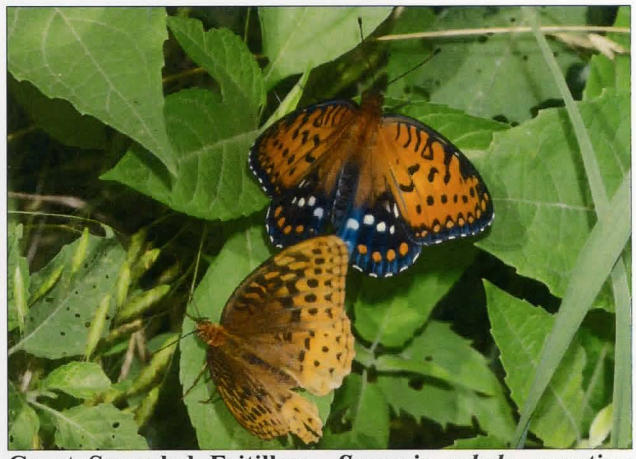
BRYAN E. REYNOLDS



Horace's Duskywings, *Erynnis horatius*, mating, Little River National Wildlife Refuge, McCurtain County, Oklahoma, 24 March 2014 (© Bryan E. Reynolds) [2]

Mating Common Wood-Nymphs, *Cercyonis pegala*, Tallgrass Prairie Preserve, Osage County, Oklahoma, 15 June 2012 (© Bryan E. Reynolds) [2]

Tiger Moths, *Virbia marginata*, sexually dimorphic pair mating, Santa Ana National Wildlife Refuge, Hidalgo County, Texas, 31 October 2017 (© Bryan E. Reynolds) [1]



Great Spangled Fritillary, *Speyeria cybele*, courting Regal Fritillary, *Speyeria idalia*, Prairie State Park, Barton County, Missouri, 17 June 2014 (© Bryan E. Reynolds) [2]

1) Bryan Reynolds' link to his 2017 moth album:
https://www.flickr.com/photos/bryanereynolds/albums/72157692132389664/with/38385684286/

2) Bryan Reynolds' link to many butterfly photos plus other insects, etc.:
https://www.flickr.com/photos/bryanereynolds/albums/with/72157692132389664

PHOSPHILA TURBULENTA HÜBNER, 1818 (LEPIDOPTERA: NOCTUIDAE) IN LOUISIANA

BY

VERNON ANTOINE BROU JR.

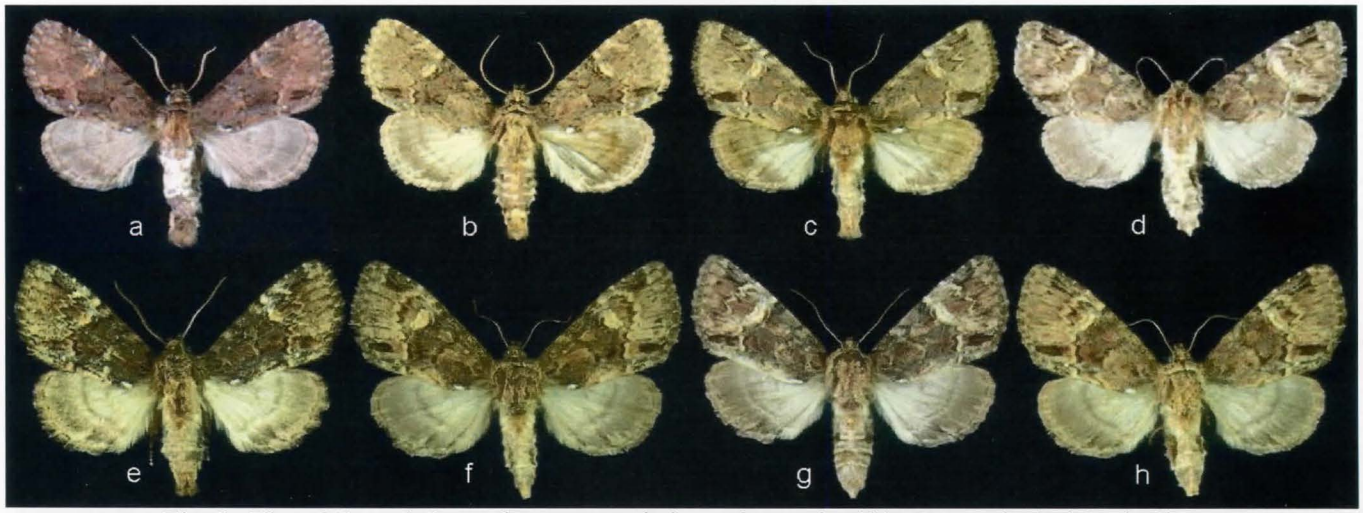


Fig. 1. ***Phosphila turbulenta*** phenotype variations taken at the Abita Entomological Study Site: (males) a. September 7, 1999, b. March 10, 2000, c. March 14, 2005, (females) d. March 10, 1986, e. March 3, 2008, f. March 9, 2000, g. March 3, 2003, h. March 26, 2008.

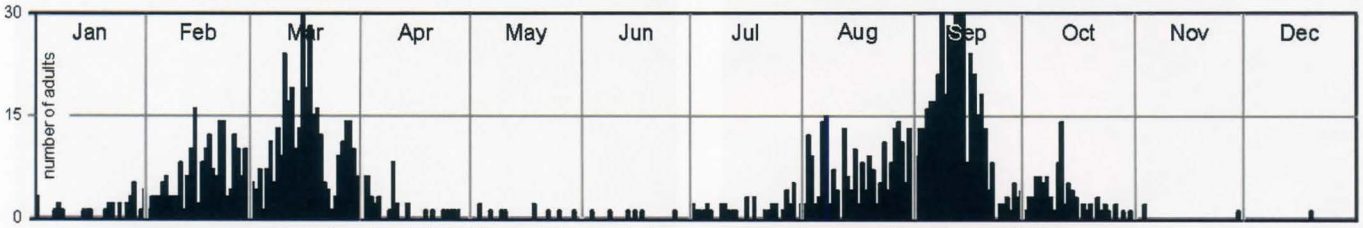


Fig. 2. Adult ***Phosphila turbulenta*** captured in Louisiana. n = 1461

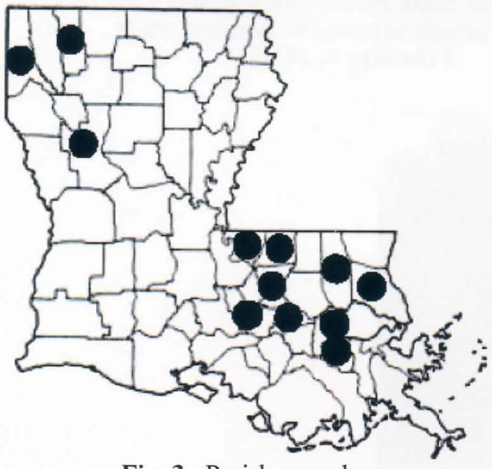


Fig. 3. Parish records for ***P. turbulenta***

The brown in color noctuid moth ***Phosphila turbulenta*** Hübner (Fig. 1) is a fairly abundant species in ultraviolet light traps and in fermenting fruit bait traps. The females most often appear quite large compared to the smaller in size males. Some specimens of either sex appear very dark brown, others have contrasting, lighter in color forewing maculation. Forbes (1954) stated the range of ***turbulenta*** to include "*southern Maine to Florida, west to Illinois and western North Carolina*", and feeding on ***Smilax***. Covell (1984) listed the geographical range of ***turbulenta*** to include: south Maine to Florida, west to Illinois and Texas. Heppner (2003) listed the geographical range of ***turbulenta*** to include: Maine to Florida, and Illinois to Texas. This species was not covered by Chapin and Callahan (1967), Heitzman and Heitzman (1987), nor Powell and Opler (2009). In Louisiana, there are two well separated annual broods peaking early March, and early September (Fig. 2). Adults were captured in all twelve months of the year in this study. The Louisiana parish records are illustrated in Fig. 3.

Literature Cited

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

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

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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.
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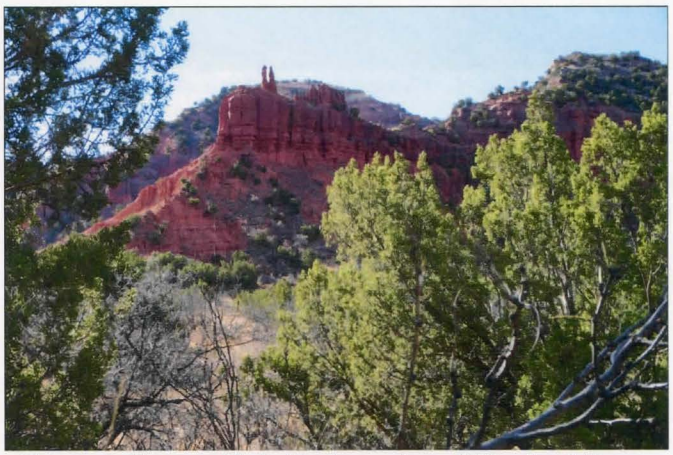
CAPROCK CANYONS STATE PARK (QUITAQUE, TEXAS)
PHOTOS SUBMITTED BY
MIKE BLANTON

Caprock Canyon State Park — view from Lower Canyon (credit Michael P. Blanton, Ph.D., February 4, 2018).



Caprock Canyon State Park — view of The Last Dance Hoodoo (credit Michael P. Blanton, Ph.D., February 4, 2018).

Caprock Canyon State Park — view of North Prong Canyon (credit Michael P. Blanton, Ph.D., February 4, 2018).

[Part 1]

BUTTERFLY ROYALTY TRAVELS NORTH: QUEEN BUTTERFLIES (*DANAUS GILIPPUS BERENICE*) AT ITHACA, NEW YORK, IN 2002

BY

ROBERT DIRIG

These notes and photographs document my observations of this southern butterfly in the Finger Lakes Region of New York in mid-August and September 2002.

Beebe Lake on the Cornell University campus (in Ithaca, Tompkins County, N.Y.) is a large body of open water, edged by typical inland "marshy shore" and "old field" vegetation that grades into a natural woodland of oak, hickory, pine, beech, birch, maple, basswood, and tuliptree (including some old growth) on steep northern and southern slopes [Figs. 1-2]. The lake is actually a reservoir, resulting from flooding of the Fall Creek gorge in 1838, when a young Ezra Cornell (who later founded the University) engineered an 18-foot-high dam for Jeremiah Beebe, so that his water-powered mill, located downstream at the base of Ithaca Falls, could continue to operate in droughty episodes. The current lake level was achieved in 1898 by raising the dam another 10 feet. At present, a network of footpaths provides access to the shores and woodlands of this important Natural Area on the central campus (Ostman & Wesley, 1999, pp. 10-12). A midday hike on the east side of the lake provided a welcome break from my professional duties on many sunny days in warm parts of the year. I have found a surprising variety of natural treasures among Beebe Lake's plants and butterflies during the 50 years I have explored its shores. Among them, in August 2002, were four Queen Butterflies.

Field Observations in 2002

On August 13th I went to the lakeshore at 1:15 p.m. The day was hazy and humid, but sunny, with the temperature above 90°F. "Werly Island" is a natural sand-and-gravel bar on the east (inlet) side of the lake that was planted with some native flora to supplement naturally colonizing plants. This was usually inaccessible, except by wading — which was not practical during a quick ramble after lunch. But because of 2002's prolonged summer drought, in combination with water level manipulation at the dam, on the west end of the basin, the lakebed was dry enough that I could walk across on stepping stones to reach the island on that day [Fig. 3].

From the east shore, I had seen what I at first thought were two **Viceroys (*Limenitis archippus*)** in a spiral dance; and since I have not often see Viceroys here, or chanced on their courtship negotiations anywhere, I investigated. A closer approach showed them to be two male **Queens (*Danaus gilippus berenice*)** — which are about the same size as Viceroys, of beautiful mahogany-brown color, with two rows of bright white spots arching across each forewing [Figs. 4-5], and their overall coloring much darker than either the **Monarch (*Danaus plexippus*)** or its famous mimic. Exploration of the islet revealed another male Queen and a female Monarch [Fig. 7] that seemed to be part of the group. I had my camera, and after recovering from my initial astonishment at such a rare sighting in central New York, began to take photographs and write notes.

All but one of the Queen Butterflies were worn, two of them badly, as if far-flown [Figs. 8-10]. Their flight was slow, majestic, and much like the Monarch's, with alternate flapping and gliding. They were nectaring at Purple Loosestrife (*Lythrum salicaria*) and Joe Pye Weeds (*Eutrochium* sp.), sitting mostly with closed wings, but occasionally fanning them almost flat. A nectaring male flashed his wings at the approach of another male, then the two butterflies slowly spiraled up for a few revolutions until ascertaining their sex, and each going his own way. Males occasionally landed with closed wings, and rested 3-5 ft. up on herbage in the dappled shade of a large Eastern Sycamore (*Platanus occidentalis*), but darted from their perches at a passing **Cabbage White (*Pieris rapae*)** and the other Queens. They remained near tangles of tall wildflowers edging the shore under the Sycamore [Figs. 2 & 6], including Boneset (*Eupatorium perfoliatum*), Blue Vervain (*Verbena hastata*), and Queen Anne's Lace (*Daucus carota*), in addition to the two plants mentioned above. A **Least Skipper (*Ancyloxypha numitor*)** pulsed by, stopping to nectar at Purple Loosestrife, while Annual Cicadas (*Neotibicen* sp.) throbbed in the treetops, and a Belted Kingfisher (*Megaceryle alcyon*) rattled along the shore. I left at 1:50 p.m.

The next day **(August 14th),** I returned from 12:55 to 1:45 p.m., in hazy, humid, breezy, 95°F. weather, with occasional thunder. On the southeastern shore, I immediately encountered a very worn, bird-beak-damaged female Queen, resting in the shade with closed wings, then nectaring at Jóe Pye Weeds and Boneset [Figs. 9-10]. After feeding, she slowly wove through the shoreline shrubbery and herbage, hovering around Common Milkweeds (*Asclepias syriaca*) as if to lay eggs; but the chemical cues did not seem quite right, and I did not witness any ovipositions. When I bent too

QUEEN BUTTERFLIES AT ITHACA, N.Y.—I: **1-2**, Beebe Lake on the Cornell University campus. **3**, Werly Island access. **4-6**, Fresh male at Joe Pye Weed. **7**, Female Monarch on the Island. **8**, Worn male. **9-10**, Very worn, bird-beaked female. *Please see text for details.*

close with my camera, she darted out over the lake and landed on Fragrant White Waterlily (*Nymphaea odorata*) leaves for a few minutes, before returning to the shore. At 1:30 I found a male on the island in the same spot as the day before, rhythmically flashing his wing dorsals while nectaring at Joe Pye Weeds and Blue Vervain; then making a short flight and folding up on herbage in the shade. **Cabbage Whites, Least Skippers, Silver-spotted Skippers (*Epargyreus clarus*),** and an **Eastern Tailed Blue (*Cupido comyntas*)** were also flying in the area.

The third day **(August 15th)** was gloomy and humid, with 90°F. heat, but the same male (identifiable by a wing blemish) was still in the same place on the island at 3:15 p.m., resting on plants with his wings partly spread, floating up and circling at my approach, then sitting down again and closing his wings. A fresh **Common Ringlet (*Coenonympha tullia inornata*)** bounced through nearby grasses and herbage on the shore, the first of the second brood at this site. On **August 16th,** the Queens were gone, but I did see a **Wild Indigo Duskywing (*Erynnis baptisiae*)** and **Peck's Skipper (*Polites peckius*)** among other more common butterflies there.

Life History in 2002

I had reared Queens from egg to adult, 35 years before, and knew that the larvae and pupae were very similar to the Monarch's; but I had recorded few details at the time, and wanted to grow them again, to observe and photograph the life stages. So I caught the female **(of August 14th)** with my fingers and kept her for a couple of days in a large transparent container with enclosed milkweed shoots. She did not lay any eggs on Common Milkweed, but did glue *one* on Swamp Milkweed (*Asclepias incarnata*) [Fig. 11] on **August 17th**: ivory, gumdrop-shaped, with numerous vertical ribs and fine cross-ridges. The egg was so similar to the Monarch's [Fig. 12] that I wasn't sure I had not brought in a Monarch's egg with the piece of foodplant, so waited anxiously until it hatched on **August 20th,** to see if it was a Queen. A glance told me that the newly hatched caterpillar was indeed of the southern visitor, because even in the first instar it showed the *three* pairs of filaments (tubercles) that characterize a Queen's larva [Figs. 13-14], in contrast to the familiar Monarch's, which has two pairs [Fig. 15]. The caterpillar grew very rapidly, avidly feeding on Common Milkweed leaves, but seeming to prefer Swamp Milkweed when both were offered. Common Milkweed has apparently not been recorded as a natural host of Queen larvae, but Swamp Milkweed is listed in the well-known foodplant indices compiled by Tietz (1972) and Robinson *et al.* (2018).

When fully fed (at 13 days), it was a gorgeous caterpillar [Figs. 13-14], ca. 4 cm long and 6 mm in diameter, the fore pair of filaments the longest, at 12 mm (held forward against the substrate at night); the middle pair 8 mm long; and the rear two only 5 mm in length. These were jet black with touches of burgundy at the base — the red color showing up in my photos taken in bright sunlight, but not readily evident to the eye. The face cap was white and pale yellow with concentric black arches, the legs and prolegs shiny jet black, the venter velvety black, and the anal shield black with white edges. Each body segment was white, striped around with fine black lines near the intersegmental folds, and centrally with a wider black band extending upward from the dark prolegs and expanding on the dorsum, where there were two bold, opposing, oblong yellow spots in striking contrast. These were highlighted by a lateral bright yellow band above the prolegs from the thorax to the end of the abdomen. This stunning caterpillar shouted its distastefulness.

The chrysalis formed on **September 2nd,** suspended from the midrib on the underside of a Common Milkweed leaf [Fig. 16]. It was 23 mm long (including the black cremaster) and 10 mm in diameter at its thickest point on the abdomen, where it was ornamented by a black-and-gold ridge. The surface was smooth and shiny, like polished jade or chrysoprase, elegantly seamed and plated, with a gold spot in each forewing cell, two more at their bases, another pair between the compound eyes, and four more on the dorsal thoracic "hump." Although slightly smaller, it is very much like the Monarch's "glass house with gold nails" [Fig. 17-18]. A male adult emerged after 10 days, on **September 12th,** the pupa beginning to darken 24 hours before.

Reflections on 2002 Summer Strays and Migrants

The prevalence of southern butterflies straying into the Northeast in 2002 provided unprecedented opportunities to observe these out-of-region species in the wild. My behavioral notes on the Queens I saw suggest the kinds of observations that can be made of such unusual visitors. It is important to record the ***habitats*** they select, what ***flowers they visit*** for nectar, and ***how they behave***. Do the males perch or patrol? How do they fly? How do they interact with one another, and with other butterflies or insects? Are courtships observed? Where and how do the butterflies rest at night? Is anything seen to prey on them? Do females lay eggs on any northern plants? And are their larvae found wild in the North?

ED KOMPERDA, an experienced lepidopterist, reported a wild Queen caterpillar found in August 2002 on

a milkweed (probably *Asclepias syriaca*, from his description: "the most common type, … light pink flowers, large seed pods") on Stafford Avenue in Woodbury, Nassau County, N.Y., 500 ft. N of the Jericho Turnpike, and 800 ft. W of the Suffolk County line, on western Long Island. His mother thought it was a Monarch caterpillar, but it produced a smaller and very dark brown adult. She showed Ed her strange "Monarch"; he was astounded to see a Queen, and to learn that she had reared it from a young caterpillar found on a milkweed leaf in the yard (the adult emerged ca. **September 3rd**). A photograph Ed shared shows this reared male to have grey lines along the dorsal hindwing veins [Fig. 19, *arrows*], and thus be of **ssp. *strigosus*** [also called **ssp. *thersippus*]**, which is usually found in the American Southwest.

To my knowledge, Queens have not before been reported reproducing in the Northeast. In years like this, we can see such important natural history phenomena happening before our eyes, if we have them open. The presence of reproducing Queens may be ascertained by watching local milkweeds until frost, looking for eggs, finding Monarch-like caterpillars with three sets of filaments and black, yellow-spotted "backs," or spotting wild pupae that are slightly smaller than a Monarch's. Our readily available identification resources, sophisticated online sharing, and large numbers of educated butterfly watchers make us better organized than ever before to track out-of-range movements and reproduction of such rarities.

My first thought on seeing the Queens in Ithaca was that these were releases or escapees from a culture at Cornell. But I asked around, and no one indicated that they were growing this butterfly here in 2002. On reflection, I realized that the ones I saw behaved with the unconscious grace of wild animals, and not with the disorientation of released butterflies. A close look at my photographs showed all but one of the Queens to be badly rubbed and tattered, so I expect that they were authentic wild strays, especially after reading numerous additional reports from New York City, Long Island, and the Niagara Frontier region within a few days of my observations (*NYSButterflies* reports and discussion, summer 2002; and summaries in Fiore & Wallstrom, 2003, and Moskcowitz, 2003).

James A. Scott (1986), in his *Butterflies of North America*, page 232, noted that the Queen "in N Fla. migrates north in spring, and south from Aug. or Sep. to Oct." He also stated that this species "often roost[s] communally," which implies that Queens are highly gregarious. The individuals I saw in Ithaca were of the **Florida/Gulf States subspecies *D. g. berenice*,** which lacks grey edging on the dorsal hindwing veins [Figs. 4-6, 8-10, & 20-21] — in contrast to the **southwestern subspecies (*D. g. strigosus / thersippus*),** which has it [Fig. 19]. Figs. 20-21 portray a wild female ***D. g. berenice*** from Florida, for comparison. With a generation time of not quite 4 weeks (as suggested by my rearing), offspring of early northward migrants of southeastern origin could easily have continued to move north for two or more additional generations to reach New York and New England by mid-August. I saw a fresh male Queen patrolling in a large flower garden on the Cornell campus on **September 19th,** 2002 (also reported to me from the same garden on the same day by another person); he was probably an offspring of the butterflies I found in August by Beebe Lake, which was ca. 1200 feet away. MEENA HARIBAL also reported a teneral male Queen she found near the lighthouse on the south shore of Cayuga Lake in Ithaca, N.Y., on **5 October** 2002 (her email and image to *NYSButterflies*). Both of these were **ssp. *berenice***. It is important to check any Queens that are seen out of range for the bright mahogany dorsal hindwings of the southeastern morph, *vs*. the grey-lined upper hindwing veins of the southwestern form. With a few northeastern occurrences of **ssp. *strigosus / thersippus*** in 2002, we should consider the possibility of the two entities producing offspring with mixed characters if they came into contact.

Summer 2002 was unusually hot and dry in central New York, with many days over 90°F. ***Long periods of such weather may draw southern butterflies and moths far north of their usual ranges.*** For example, I visited coastal North Carolina during the first week of October in 1997. Daytime temperatures there were still about 90°F. Butterflies abounded everywhere, and **Pink-spotted Hawkmoths (*Agrius cingulata*, Sphingidae),** a large, handsome southern moth, were common on the pavement at a gas station under all-night lights on **October 3rd** (Dirig, 2014). Returning to Ithaca, I was surprised by weather as warm as the Carolinas that lingered for several days. During this episode, a colleague brought me a Pink-spotted Hawkmoth he'd found at a light in Berkshire, N.Y. (southeast of Ithaca) on **October 5th** (this species rarely strays into the Northeast); a Cornell entomologist caught a large, battered female **Giant Swallowtail (*Papilio cresphontes*)** in a campus flower garden on **October 6th** (at that time, still a rare stray in central New York, although now resident); and I found a huge male **Spicebush Swallowtail (*Papilio troilus*)** nectaring on New England Asters (*Symphyotrichum novae-angliae*) on the Beebe Lake shore on **October 8th** [Fig. 22]. Although Spicebush Swallowtails occur here, they are sparse, do not live around the lake, never attain the size of this one, and the October date is far too late for a local emergence. ***This suggests that southern insects may move to the northern limits of amenable weather, later in the season, perhaps as a way of expanding the***

QUEEN BUTTERFLIES AT ITHACA, N.Y. — II: **11**. Swamp Milkweed. **12**. Monarch eggs. **13-14**. 5-I Queen larva. **15**. 5-I Monarch larva. **16**. Queen pupa. **17-18**. Monarch pupae. **19**. Adult from wild larva on western L.I., ssp. *strigosus*, with grey edges on dorsal hindwing veins (*arrows*; *photo by Ed Komperda*). **20-21**. A wild female Queen (ssp. *berenice*) at the Kissimmee Prairie in Florida, for comparison. *Please see text for details.*

northern edges of their populations. Tropical storms may also affect such movements, but were not part of the early October 1997 or mid-August 2002 weather in central New York.

I expect that 2002's prolonged summer hot spell caused a similar phenomenon with the Queens (see summary in Fiore & Wallstrom 2003, pp. 4, 31, 49-51); with the **Common Buckeyes (*Junonia coenia*)** and **Sachems (*Atalopedes campestris*)** frequently reported in 2002 discussions on the *NYSButterflies* listserve, and by Steve Walter in his "Mulberry Wing" column; with another Giant Swallowtail seen along Salmon Creek in a Finger Lakes Land Trust preserve in Lansing, north of Ithaca, N.Y., on ca. **September 1st**, flying along a riparian corridor near Prickly Ash (*Zanthoxylum americanum*), one of its northern foodplants; and with an abundant fresh hatch of **American Snouts (*Libytheana carinenta*)**, seen puddling and resting on foliage near Watkins Glen, Schuyler Co., N.Y., in July 2002, evidently the offspring of an early June colonization (for the first time since 1994) [Figs. 23-24]. ERIC H. PATTERSON also reported a **Zebra Longwing (*Heliconius charithonia*)** flying in dappled shade at 5:00 p.m. on **August 25th** near potted Purple Passionflowers (*Passiflora incarnata*) and Hybrid Passionflowers (*P. x alatocaerulea*) in his garden at the edge of the Cornell campus; while horticulturist GLENN BUCIEN reported another Zebra Longwing in early September in a semi-shaded Azalea Garden at the Cornell Botanic Gardens. Since no one responded to my inquiry about rearing this species on campus, these are probably natural occurrences, and unprecedented for the Finger Lakes Region. TOM FIORE (*email of 16 Sept. 2002*) told me of another apparently natural inland report of a Zebra Longwing from Westchester County, N.Y., in the Hudson River corridor, north of N.Y.C., in the 1990s.

I encourage others to take careful notes and photographs, and to post or otherwise publish authenticated sightings to document unusual southern butterfly visitors. ***The most likely inland habitats to find rare strays are wide valleys, lakeshores, flower-filled marshes and meadows, and river and stream corridors; while late-blooming flower gardens become increasingly important as autumn proceeds.*** But since their movements may be largely random, strays can turn up anywhere.

[Adapted from an original post to the *NYSButterflies* listserve on September 16th, 2002. Text and color photographs copyright © 2018 by Robert Dirig. Thanks to Carolyn Klass and Scott LaGreca for reviewing a draft of the text and plates.]

References

Dirig, R., 2014. Southeastern Sphingids. *Southern Lepidopterists' News* 36(3):116.

Fiore, T., & K. Wallstrom, 2003, April. *2002 New York State Butterfly Records*. New York, N.Y., New York Chapter of the North American Butterfly Association, 52 pp.

Moskowitz, D. P., 2003, Summer. The Queen (*Danaus gilippus* Cramer) Dilemma in the Northeastern United States. *News of the Lepidopterists' Society* 45(2):62-63.

Ostman, N., & F. R. Wesley, 1999. *A Field Guide to Cornell's Natural Areas On and Near Campus.* Cornell University, Ithaca, N.Y., 40·pp. + map.

Robinson, G. R., P. R. Ackery, I. J. Kitching, G. W. Beccaloni, & L. M. Hernández, 2018. *HOSTS — A Database of the World's Lepidoptera Hostplants.* [http: // www. nhm. ac. uk / jdsm / research - curation / projects/hostplants/index.dsmi], accessed 5 January 2018.

Scott, J. A., 1986. *The Butterflies of North America, A Natural History and Field Guide*. Stanford, California, Stanford University Press, xvi + 584 pp. + 64 color plates.

Tietz, H. M., 1972. *An Index to the Described Life Histories, Early Stages and Hosts of the Macrolepidoptera of the Continental United States and Canada*. Vols. I & II. Published by A. C. Allen for the Allyn Museum of Entomology, Sarasota, Florida. Vol. I: [i-ii], i-vi, 1-536; Vol. II: [i-ii], 537-1041.

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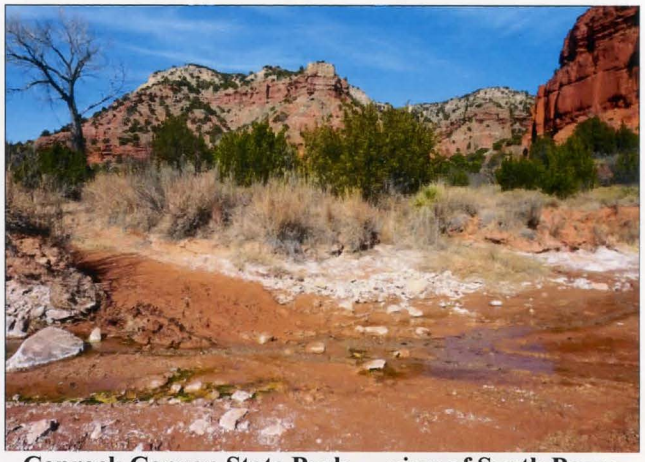
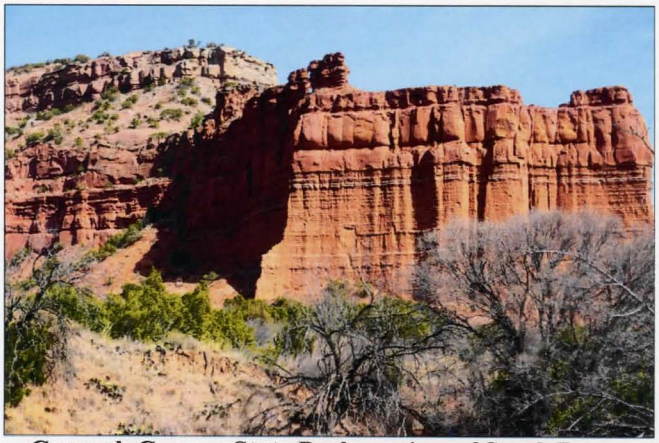
CAPROCK CANYONS STATE PARK (QUITAQUE, TEXAS)
PHOTOS SUBMITTED BY MIKE BLANTON

Caprock Canyon State Park — view of South Prong and the Little Red River (credit Michael P. Blanton, Ph.D., February 4, 2018).



Caprock Canyon State Park — view of South Prong (credit Michael P. Blanton, Ph.D., February 4, 2018).



Caprock Canyon State Park — view of South Prong (credit Michael P. Blanton, Ph.D., February 4, 2018).

[Part 2]

[Photo by Andrei Sourakov]

TWO - BARRED FLASHER (*ASTRAPTES FULGERATOR*) PARTIAL LIFE HISTORY

BY
BERRY NALL

I found this caterpillar wrapped in a leaf of coyotillo (*Karwinskia humboldtiana*) in October. It took almost 30 days to pupate from the time I found it.

Caterpillar when found on coyotillo, October 12, 2008

The caterpillar was kept in an empty mayonnaise jar with paper towels placed in the bottom. I placed a fresh coyotillo branch in the jar each day. At first the caterpillar rolled a leaf for a shelter, and I just left that leaf in the jar. When it was larger it started sewing two leaves together. During the last week before pupation it sowed a leaf over the towels. Perhaps it got tired of me opening the leaves for pictures, or perhaps it thought the paper towels more comfortable than dried leaves!

Many butterfly chrysalides become clear when the butterfly is ready to emerge. However, in this case there was no indication when the skipper was ready to eclose from the pupa. Even after it emerged, the empty casing retained the same blue-white coloration it had when freshly formed.

October 20, 2008

November 3, 2008

October 24, 2008

Ready to pupate, November 8, 2008

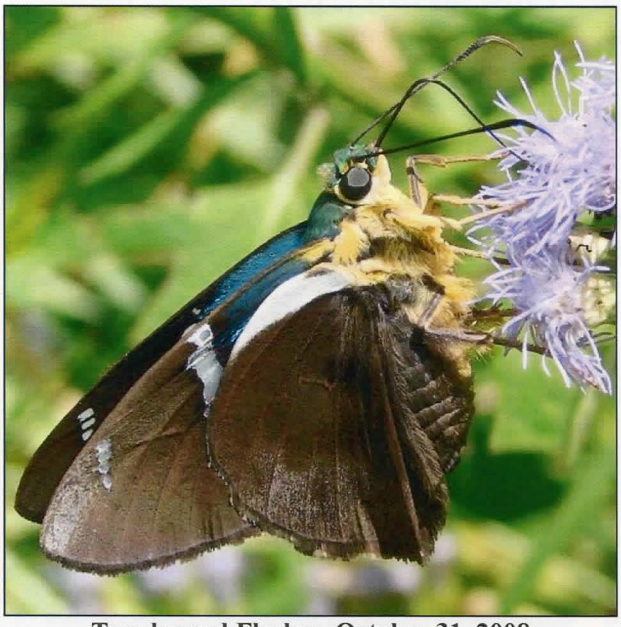
Newly formed pupa, November 10, 2008

An interesting paper showing that there are actually many "Two-barred Flasher" species can be found at http://www.pnas.org/content/101/41/14812.full.pdf?ck=nck. If you look at the paper, you will see that this Texas caterpillar is distinctly different from all of the Costa Rican caterpillars.

[Note: caterpillars were all raised at Mr. Nall's home in Falcon Heights, Texas.]

The freshly emerged Two-barred Flasher, December 3, 2008

Two-barred Flasher, November 26, 2008



Two-barred Flasher, October 31, 2008

The SL Society and the Editor thank Mr. Berry Nall for allowing us to reprint his life history of the Two-barred Flasher (*Astraptes fulgerator*) in the SLS NEWS. The original publication on the internet is listed as: http://leps.thenalls.net/content2.php?ref=Species/Eudaminae/fulgerator/life/fulgerator_life.htm

Mr. Nall's website "*Berry's Butterfly Photos*" can be viewed at http://leps.the nalls.net/ His contact E-mail is lb@the nalls.net

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DEFINITIONS:

Allochronic - occurring in different time periods, usually used for geological time periods. [1] However, this word, ***allochronic***, has also been used to differentiate groups of a specific butterfly emerging in different years. The reference is to two groups of butterflies, which have a two year developmental period. One ***cohort*** emerges in odd-numbered years and the other ***cohort*** emerges in even-numbered years.

A synonym for ***allochronic*** is ***asynchronous*** - not occurring or existing at the same time or having the same period or phase. [2]

Cohort - a group of subjects [people, animals, insects (butterflies/moths in our case), *etc.*)] who have experienced or shared a particular event usually in a particular time period. However, rather than a particular time period sometimes a particular place can be referenced. [3]

1. http://www.thefreedictionary.com/allochronic
2. http://www.vocabulary.com/dictionary/allochronic
3. https://en.wikipedia.org/wiki/Cohort_(statistics)

ABAGROTIS ALTERNATA (GROTE, 1864) (LEPIDOPTERA: NOCTUIDAE) IN LOUISIANA

BY

VERNON ANTOINE BROU JR.

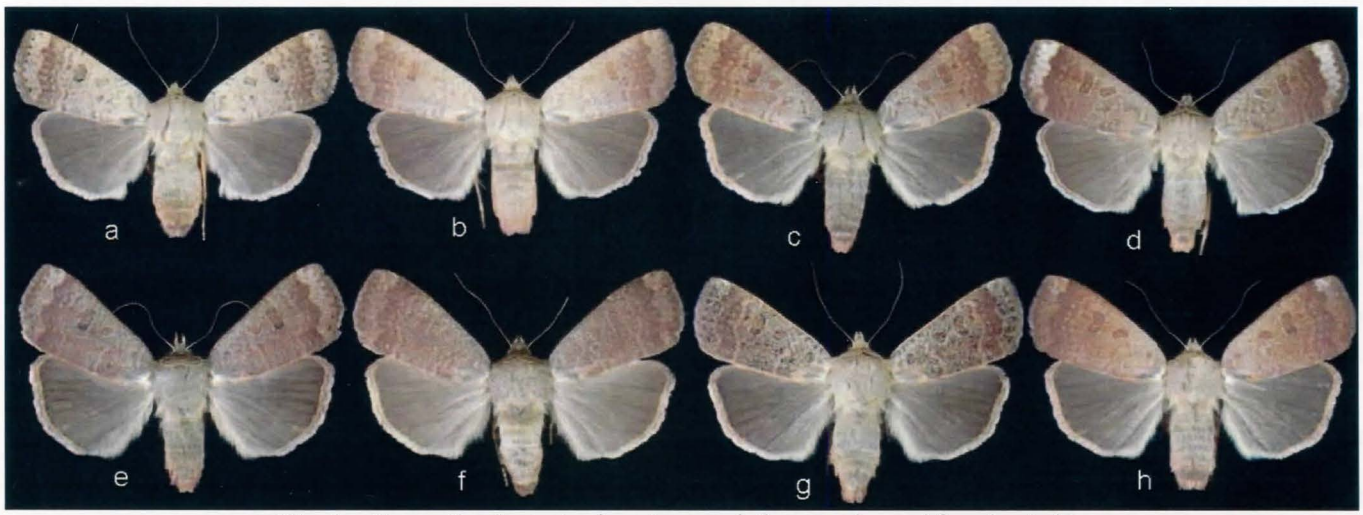

Fig. 1. ***Abagrotis alternata*** phenotype variations, males and females (a-h).

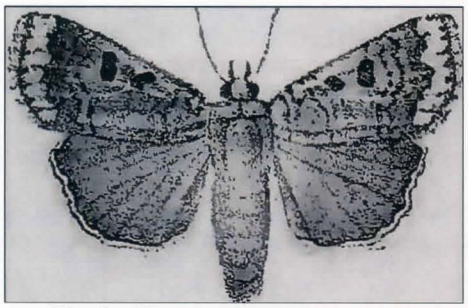

Fig. 2. ***Noctua alternata***, nov. sp. Original description (Plate 5, fig. 8. ♀)

The somewhat variable in appearance noctuid cutworm moth ***Abagrotis alternata*** (Grote) (Figs. 1 and 2) was originally described in 1864 as ***Noctua alternata*** Grote, nov. sp. habitat. - Middle States. (Coll. Ent. Soc. Phil.) Exp. ♂ 1.40 inch. It is unclear how many specimens (just one, or more than one) that Grote had before him, because only a drawing of a female is illustrated, which I have reproduced here (Fig. 2), but he only mentions a male in the text description. Since it was first described, ***alternata*** has been placed in various other genera by several authors: ***Agrotis alternata*** (Grote, 1868), ***Cerastis alternata*** (Grote, 1874), ***Rhynchcigrotis alternata*** (J . E. Smith, 1890), ***Triphaena alternata*** (Hampson, 1903), ***Lampra alternata*** (Benjamin, 1921), and presently ***Abagrotis alternata*** (McDunnough, 1938).

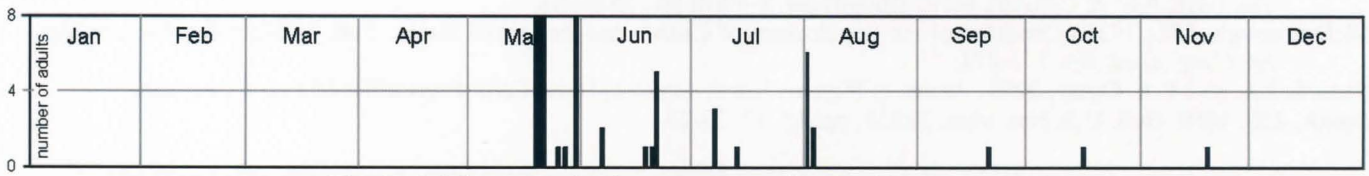

Fig. 3. Adult ***Abagrotis alternata*** captured in Louisiana. n = 176

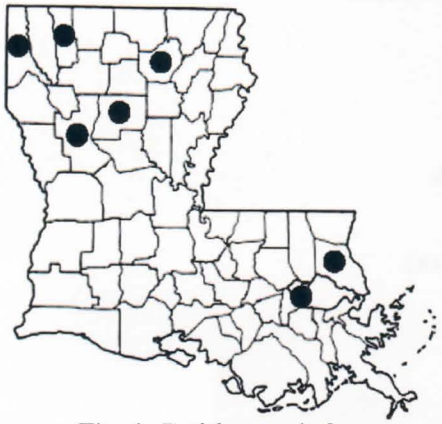

Fig. 4. Parish records for ***A. alternata***.

In a remarkable investigation involving this species and others, Benjamin (1921) reviewed a total of 18 males, and 50 females of ***alternata*** from Canada: Manitoba, Ontario, and Ottawa, and in the US: Arizona, Colorado, Illinois, Indiana, Iowa, Kansas, Massachusetts, Michigan, New Jersey, New Mexico, New York, Ohio, Pennsylvania, and Utah. Forbes (1954) reported ***Noctua alternata*** from Quebec, Alberta and Utah, south to Mississippi in the months June to September, and injurious to cherry, oak, and hickory.

Buckett (1968) studied 98 males and 162 females of ***alternata*** from Canada: Alberta, Manitoba, Nova Scotia, Ontario, Ottawa, and Quebec, and in the United States from: Colorado, Connecticut, Florida, Illinois, Indiana, Kansas, Maine, Maryland, Massachusetts, Mississippi, Missouri, New Hampshire, New Jersey, New Mexico, New York, Ohio, Pennsylvania, South Dakota, Tennessee, Utah, Virginia, and Wisconsin.

Covell (1984) reported ***alternata*** to be common throughout the entire eastern half of North America in the months June to October. Heppner (2003) reported ***alternata*** to occur from Quebec to Florida and Alberta, to Utah and Texas, and adults in the month of July.

This species was not covered by Chapin and Callahan (1967) for the state of Louisiana, nor Heitzman and Heitzman (1987) for the state of Missouri. Powell and Opler (2009) covered eight species of the genus ***Abagrotis***, but like so many of the species I have previously reported upon in the past and known to occur in western North America, these authors did not include ***alternata***.

Within Louisiana, adults of ***alternata*** have been captured most abundantly in May, but occasionally also in the six subsequent months, into November (Fig. 3). Based upon this small skewed phenology sample, I cannot confirm more than one annual brood of ***alternata***. I have previously reported on numerous lepidoptera species which adults have been collected in Louisiana over a period of six months, and also assumed to be single brooded, e.g., ***Catocala carissima*** Hulst (Brou, 2008). The confirmed parish records for ***alternata*** in Louisiana are illustrated in Fig. 4.

I thank ricky Patterson for commenting upn this manuscript in most helpful ways.

Literature Cited

Benjamin, F. H., 1921. A Study of the Noctuid Moths of the genera Lampra Hübner and Cryptocala, gen. nov. *Bull. So. Calif. Acad. Sci.* 71-154.

Brou Jr., V.A., 2008. Catocala carissima Hulst, (Lepidoptera: Noctuidae) 1880 in Louisiana. *South. Lepid. News* 30: 15-16.

Buckett, J.S., 1968. *Revision of the Neararctic moth genus Abagrotis with descriptions of new species (Lepidoptera: Noctuidae Part IV: the alternata group, with descriptions of new species from southern California; the discoidalis group, the apposita group*. Bureau of Entomol., Dept. Agr. Sacramento, Calif.

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

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

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

Grote, A.R., 1864. Descriptions of North American Lepidoptera. No. 3. *Proc. Ent. Soc. Phila.* 3: 73-92.

Grote, A.R., 1868. On a new genus of Noctuidae allied to Dyops with remarks on certain species of Agrotis. *Trans. American Entomol. Soc.* 2: 309.

Grote, A. R., 1874. Notes on Noctuidae. *Canada Ent.* 6:15.

Hampson, G.F., 1903. Cat. Phalaenidae Brit. Mus. 4:625, 637-638, pl. 77, fig. 12.

Heitzman, J.R. and J.E. Heitzman, 1987. *Butterflies and Moths of Missouri*. Missouri Dept. of Conservation, 385 pp.

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.

McDunnough, J.H., 1938. Checklist of the Lepidoptera of Canada and the United States. Part. 1. Macrolepidoptera. Mem. *So. Calif. Acad. Sci.* 1: 1-275.

Powell, J.A. and P.A. Opler, 2009. *Moths of Western North America*, Univ. Calif. Press xiii + 369 pp + 64 plates.

Smith, J.E., 1890. Bull. U.S. Nat. Mus., No.38, pp. 15, 17, 23-24.

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

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Found resting on Red Oak
(May 4, 2017)
(Lubbock, Texas)
(Photo by Reid Norman).

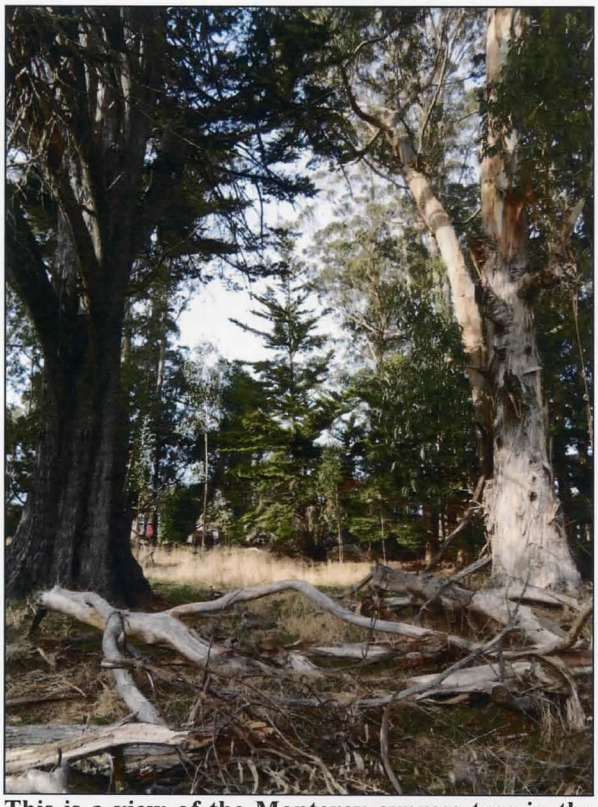
VISITING CALIFORNIA'S MONARCH OVERWINTERING SITES IN 2017

BY

CANDY SARIKONDA

During late December 2017, my family and I journeyed to California for our annual visit to two of our favorite monarch overwintering sites. We have long enjoyed seeing the monarchs at Lighthouse Field State Beach and Pacific Grove Monarch Butterfly Sanctuary, and always look forward to visiting these groves.

Anxious to see how the monarchs were doing this year, we arrived at Lighthouse Field in Santa Cruz, California, on December 23, 2017. The grove is located at the southwest corner of Pelton Avenue and West Cliff Drive, about 100 yards from the oceanfront. It is a gem of a grove, but surprisingly some locals still are not aware of its existence. We parked on Pelton Ave, and walked into the adjacent field, heading for the trail that would lead us to the butterfly grove. We followed the long and winding path through the field and trees, excited to see what lie around the corner.



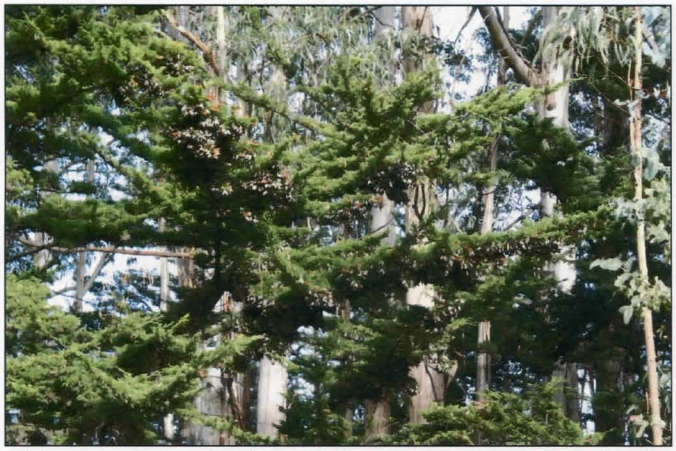
This is a view of the Monterey cypress tree in the center of the grove at Lighthouse Field. The grove is made up of eucalyptus and cypress, and the monarchs cluster primarily in this cypress tree.

As we rounded a bend, we saw two monarchs in flight, fluttering like shimmering stained glass in the dappled sunlight filtering through the large Monterey cypress trees. Some monarchs were nectaring from the blossoms of nearby eucalyptus trees, while others basked in the sunlight. As we came closer to the grove, we noticed a group of people standing in awe of a cypress tree in the center of the grove. The cypress tree was packed with about 10,000 clustering monarchs! I squealed with delight.

It was a welcome sight, knowing the stresses that the western monarchs had faced this year. An unusually warm, prolonged fall had led to a delayed migration, and there were many reports of monarchs mating late into the season and producing offspring. Migrating monarchs also had to contend with wildfires and smoke along their migratory route, and the effects of yet another dry season. I was relieved to see this many monarchs in the grove, truthfully having expected to see far less. We spent an hour walking around the grove, my kids quickly finding their favorite areas to explore, while I took numerous photos of the monarchs and searched — unsuccessfully — for tagged monarchs. I later learned the official monarch count for Lighthouse Field was 12,000 on Thanksgiving Day, and 10,214 on New Year's Day.

After leaving the grove, we continued our journey south to Pacific Grove. Pacific Grove, also known as "Butterfly Town," has a wonderful monarch sanctuary located next to the Butterfly Grove Inn. This grove is my favorite of all, the ancient soul of the grove can easily be felt upon entering it. But this year, like last year, I could feel the canopy opening in the grove, and the cool winds moving up through the center. The next morning, I stood on the balcony of the inn and observed the grove. There was a noticeable absence of the morning fog that often graces the site. Concerned, I entered the grove and walked down the path, anxious to see the source of the breach in microclimate. I found several trees cut down, and several other trees struggling for survival. Pitch canker, a fungal disease, has taken a toll on the beautiful Monterey pines in the grove. Drought-stressed trees become susceptible to the fungus, and once infected by the fungus, the trees are then attacked by bark beetles which quickly kill the trees. The city has been working on a plan to restore the grove for years. I could only hope that the plan would soon work to restore my most cherished grove.

I hooked up with friends from the area, both of whom serve as Pacific Grove Museum of Natural History docents and conduct the weekly monarch counts at the Pacific Grove Monarch Butterfly Sanctuary. As I lamented the lack of fog, docent Stephanie Turcotte Edenholm agreed. "It has been really dry," she said.



This is an overall view of the monarch clusters in the Monterey cypress tree at Lighthouse Field. At first glance, you might think there are only hundreds of monarchs. But look closer, and you will see thousands hidden in the shadows.

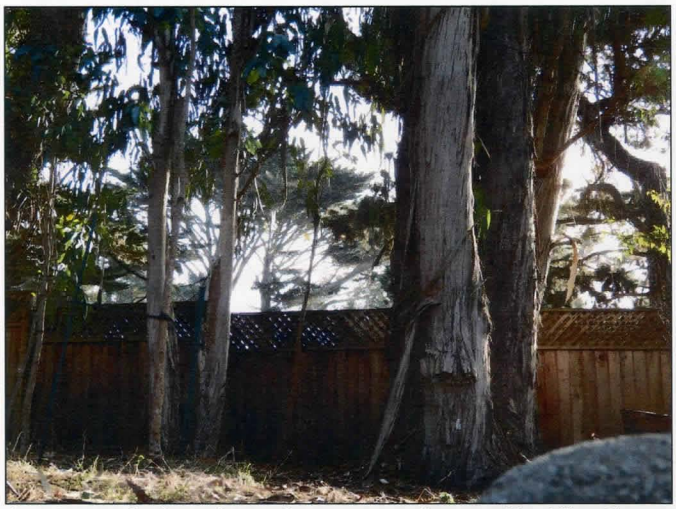
A close-up view of monarchs clustered on a branch of the cypress tree located at the center of the grove.

Monarch clusters at Lighthouse Field, monarchs that were in the sun took the opportunity to bask at times.

Close-up of clustering monarchs at the tip of a cypress branch.

Using my camera to zoom in and peer into the shadows, it was possible to see the thousands of monarchs packed tightly and tucked away in the shadows.

A dead monarch I found lying on the ground at Lighthouse Field, on the walking path that surrounds the grove. Note the missing abdomen; but intact wings, thorax and legs.



A view of the clustering monarchs at Pacific Grove Monarch Butterfly Sanctuary; this photo was taken from inside the grove, showing the clusters hanging in the Monterey pine just over the fence, in the neighbor's yard.

Stumps in the center of the grove at Pacific Grove Monarch Butterfly Sanctuary, indicating the loss of trees in the grove in recent years.

Turcotte Edenholm talked about the fear they had at the start of the monitoring season, when relatively few monarchs showed up to cluster in the grove. Like last year, the monarchs were once again staying on the adjacent neighbor's property, clustering in the Monterey pine trees in her backyard. Thankfully, the neighbor kindly allows the docents into her yard to do the weekly monarch count. Just a few weeks before the Thanksgiving Day count, the monarchs numbered 2900. But cool weather subsequently moved in, and the monarchs moved into the sanctuary, clustering in the southeast corner of the grove on the eucalyptus and cypress trees. The count on November 28th was 7350, a welcome increase but still the lowest population in the grove since 2010.

A view of the clusters in the neighbor's yard, at Pacific Grove. This photo was taken from the road next to the neighbor's house. Note the clusters in the Monterey pine tree, just above the roof line. This is the perfect spot to catch the first rays of sunlight in the morning, and the last rays of sunlight in the evening.

I wondered if the Thanksgiving Day count was the peak number for the season, trying to gauge what affect the late migration and mating activity had on the number of overwintering monarchs. Pacific Grove Monarch Butterfly Sanctuary is monitored weekly during the overwintering season, and docent Connie Masotti shared her observations. "Before that cold spell (over Thanksgiving), we were seeing mated pairs in the trees and lots of mating chases. It stayed relatively cold most of December and they seemed to stay put, but then it got warmer and the chases started again, and the numbers dropped dramatically for the New Year's Day count." The official count at the grove on New Year's Day was down to 4520. It was unclear what happened to the monarchs. Since museum staff are not currently tagging at the grove, it is difficult to assess movement between overwintering sites this season. In the past, tagging was done by Museum volunteers during the 2014-2015 overwintering season, and the results were reported in the Pacific Grove Museum of Natural History Monarch Monitoring Project report, which showed the recovery locations of monarchs tagged at Pacific Grove.

Monarchs tagged at Pacific Grove were recovered at Andrew Molera State Park in Big Sur on January 1, 2015, and again in late January of that year. A monarch tagged at Pacific Grove was also recovered on 11-29-14 at Lighthouse Field in Santa Cruz, indicating the potential for movement between colonies during the overwintering season. Masotti noted that for the past 3-4 years, monarchs have entirely left the grove by mid-February, dispersing to their summer breeding grounds.

Masotti reported that the discovery of "Zombie butterflies" continues to occur. Last year, Masotti arrived to the grove one morning to do the monarch count, and found 192 butterflies on the ground trying to

fly — but without their abdomens. Another 20 butterflies were dead on the ground. She later obtained photos of a fox squirrel eating the monarchs. There has

A view of a cluster in the Monterey pine at Pacific Grove, taken in the morning sun.

been discussion as to how to address this non-native squirrel's behavior, since docents have continued to find zombie butterflies. So far this year, Masotti reports finding 77 zombie butterflies, and noted that volunteers are seeing a similar situation in Santa Cruz. It seems more than one predator has an unusual taste for monarchs!

Since my visit to California, the Xerces Society has released the official results of the Western Monarch Thanksgiving Day count, indicating the total count for the Western monarch population. Their results show a total of 192,629 monarchs at 262 sites. "This is the lowest number of monarchs counted since 2012, despite volunteers visiting nearly twice as many sites as they did that year. The total represents less than one-sixth of the 1.2 million monarchs recorded in 1997, the first year of the Western Monarch Thanksgiving Count (WMTC), and is part of a long - term downward trend in the population of monarchs overwintering in California. A study led by Cheryl Schultz, of Washington State University Vancouver, analyzed WMTC data and comparable historical data and demonstrated a dramatic population decline of over 95% since the 1980s. This is similar to the decline of over 80% seen in the monarch population that overwinters in central Mexico since the 1990s," reports Katie Hietala-Henschell, Conservation Biologist for Xerces Society.

I don't know what the future will hold for the western monarch population. But I do know this: more people are engaged in monitoring and helping monarchs than ever before. This year had a record number of overwintering sites being monitored by a record number of volunteers. Many people are working to improve monarch habitat not only in the west, but throughout the country. That gives me hope. As many others have noted, conservation is not an end game. There will always be work to do. As long as there are those willing to help, we can make a future for monarchs and the other pollinators that share their habitat.

A close-up of the clusters at Pacific Grove, glowing in the morning sun.

(Candy Sarikonda, E-mail: Koundinya@buckeye-express.com)

ERICHSON'S WHITE - SKIPPER (*HELIOPYRGUS DOMICELLA*) LIFE HISTORY

BY
BERRY NALL

Erichson's White-Skipper uses a plant called Bladdermallow (*Herissantia crispa*). In Starr County, TX, I find this plant in areas that offer partial shelter from sun and rain. It grows quickly when there is rain, but during dry seasons it is dormant. In addition to the skippers, the plant can also host some moth species. Consequentially, leaves on these plants to not last long. Perhaps competition for this food source is one reason that Erichson's White-Skippers are not more common in this area.

The first five pictures are of a caterpillar found in 2013. I did not photograph the chrysalis, or get good pictures of the adult, so I have filled out the study with pictures of a caterpillar raised in 2009. I observed molts, so my guess is that the first photograph is of a first-instar caterpillar. However, I cannot be certain of this.

The caterpillars form leaf shelters, and stay in them as long as possible. While I was photographing the 2013 caterpillar, another hatched from an egg on a potted plant in my office. It matured very slowly during the winter. It would eat primarily or exclusively from the leaf in which it was sheltered until all that remained was a netting of leaf veins. Then it would move to a new shelter and repeat the process. It moved at least six times before pupating. It emerged in early March.

In spring of 2014 I noticed that a small potted Bladdermallow I was keeping outside was slowly disappearing. I examined it and found a caterpillar that had overwintered. It became active in late February, and pupated and emerged in March.

Ultimate instar, 5-XII-2013

Prepupal, 21-X-2009

First instar, probably, when found; 31-X-2013

Second (?) instar, 12-XI-2013

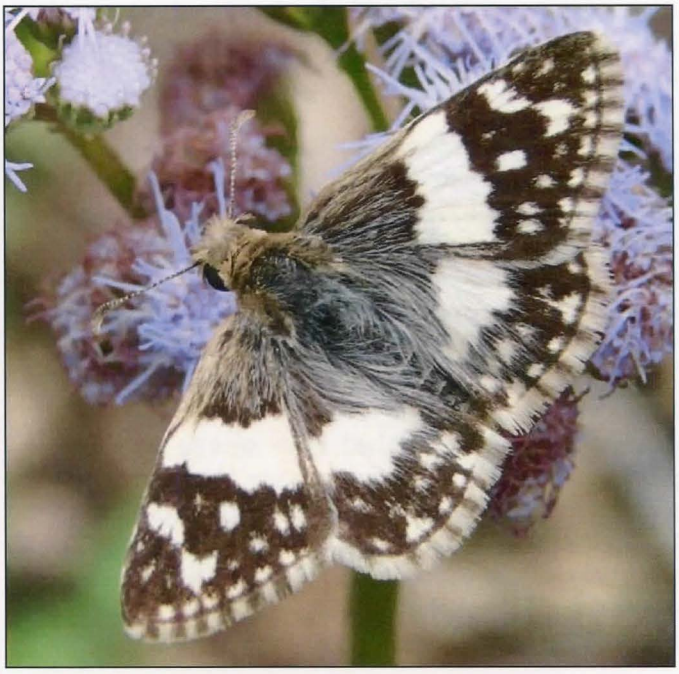
Third (?) instar, 19-XI-2013

Penultimate instar, 28-XI-2013

Fresh chrysalis, 22-X-2009

Ready to emerge, 30-X-2009

Fresh Erichson's White-Skipper, 31-X-2009



Falcon Heights, Texas, 10-II-2008
(http://leps.thenalls.net/speciesnum.php?lep=281)

The SL Society and the Editor thank Mr. Berry Nall for allowing us to reprint his life history of the Erichson's White-Skipper (*Heliopyrgus domicella*) in the SLS NEWS. The original publication on the internet is listed as: http://leps.thenalls.net/content2.php?ref=Species/ Pyrginae/domicella/life/domicella_life.htm

Mr. Nall's website "*Berry's Butterfly Photos*" can be viewed at http://leps.the nalls.net/ His contact E-mail is lb@the nalls.net

[Note: caterpillars were all raised at Mr. Nall's home in Falcon Heights, Texas.]

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WELCOME TO OUR SL SOCIETY NEW MEMBERS

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CATOCALA PRETIOSA LINTNER, 1876 AND *CATOCALA TEXARKANA* BROWER 1976 IN LOUISIANA

BY

VERNON ANTOINE BROU JR.

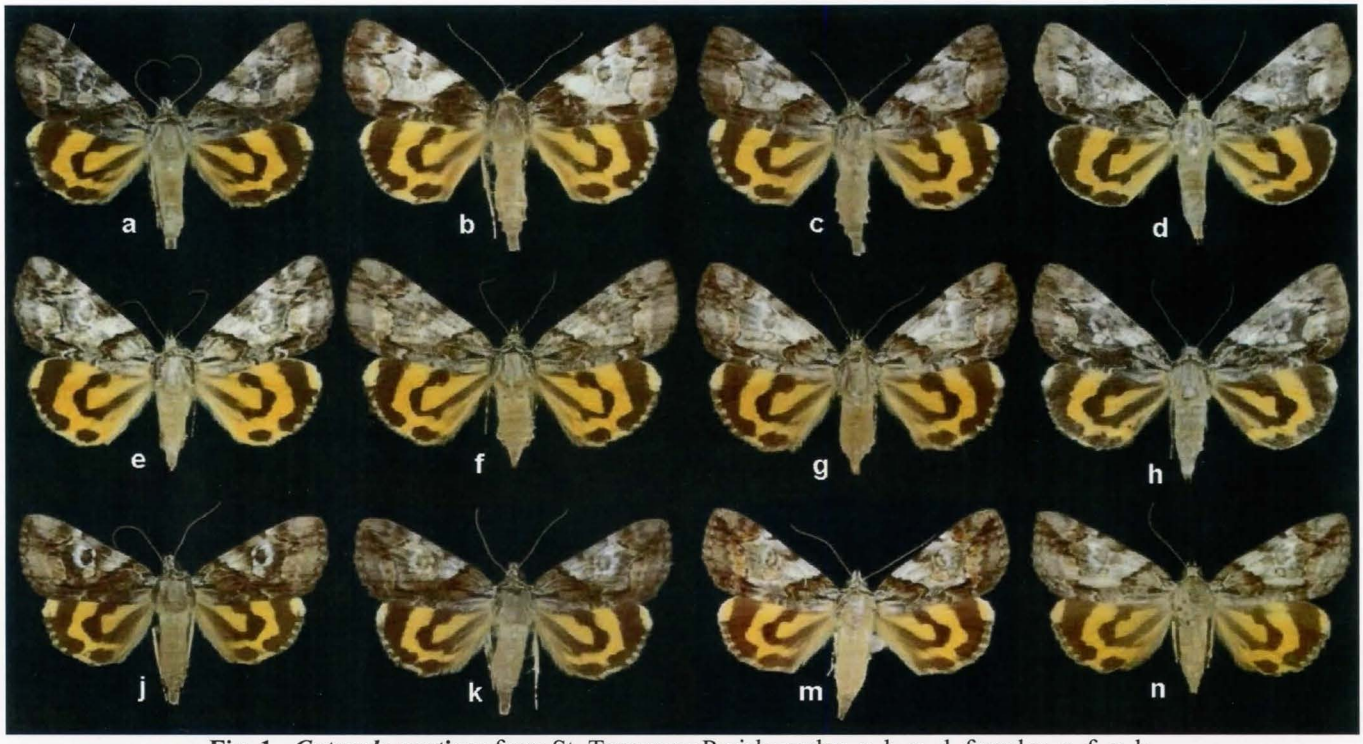

Fig. 1. ***Catocala pretiosa*** from St. Tammany Parish: males. a, b, c, d, females. e, f, g, h, ***Catocala texarkana*** from Webster Parish: males. j, k, females. m, n.

In the checklist of moths for North America, (Hodges, et al., 1983), authors J. G. Franclemont & E. L. Todd, listed the underwing moth ***Catocala pretiosa*** Lintner (Fig. 1) as a form of ***Catocala crataegi*** Saunders. I do not agree with this interpretation, as even upon comparison of external characteristics, both are obviously distinct in maculation, color, shape, and size. ***C. crataegi*** appears to occur more abundantly in northerly areas of the state of Louisiana. With the many publications about these involved species I briefly discuss here, each subsequent author has a different interpretation or opinion as to the validity and how these various names are treated. It is not my intention to further expound upon all of these names, except as they relate to this discussion concerning the assignment of the names ***pretiosa*** and ***texarkana*** in Louisiana.

Any mention of these various similar species, or subspecies, and forms of: ***Catocala mira*** Grote, ***Catocala crataegi*** Saunders, ***Catocala pretiosa*** Lintner, ***Catocala blandula*** Hulst, ***Catocala lincolnana*** Brower, and ***Catocala texarkana*** Brower must be preceded by a historical timeline of when these species were described, validated, reassigned, or discussed. As evidenced here, based upon these 19 referenced publications over the past 142 years (1876-2018), the species names ***mira*** and ***crataegi*** appear to have survived taxonomically intact over this time, but the status of ***pretiosa*** and ***texarkana*** have been dictated by changing opinions, from whomever are the more recent and subsequent authors of the times. This is true even in the most current taxonomical treatments of these species today.

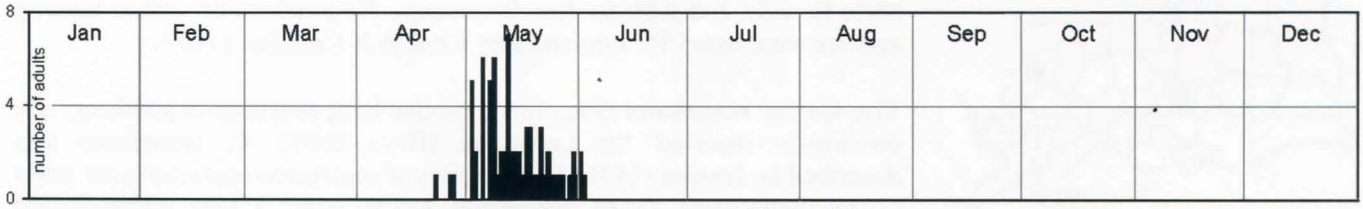

Fig. 2. ***Catocala pretiosa*** captured in Louisiana. n = 71

1876. All three species: ***Catocala crataegi*** Saunders, ***Catocala mira*** Grote, and ***Catocala pretiosa*** Lintner (TL. Albany, New York.), were described in 1876. *N.B.* I call to the readers attention that the original description of ***crataegi*** by Saunders was based upon larvae, not using adults.

1882. These same three species ***crataegi, mira***, and ***pretiosa*** were listed as valid by Grote in his *'New Check List of North American Moths'*.

1884. Hulst stated "***pretiosa*** *I am unable to separate from* ***crataegi***".

1891. The species ***crataegi*** and ***mira*** were listed as distinct species, and ***pretiosa*** was synonymized under ***crataegi*** in J. B. Smith's *'Check List of Lepidoptera of Boreal America'*.

1918. Barnes & McDunnough illustrated and listed ***pretiosa*** as a form of ***crataegi*** and discussed the history of confusion at that time with species ***Catocala blandula*** Hulst, ***mira***, and ***crataegi***, as well as the numerous synonymous names associated with all these various species, thus making it difficult to determine the true geographical distributions as treated by previous authors.

1938. McDunnough provided the same treatment, ***crataegi*** and ***mira*** listed as distinct species, and ***pretiosa*** synonymized under ***crataegi*** in the *'Checklist of the Lepidoptera of Canada and the United States'*.

1954. All three species: ***Catocala crataegi*** Saunders, ***Catocala mira*** Grote, and ***Catocala pretiosa*** Lintner were listed as valid species by Forbes.

1976. Sargent, T.D. 1976 in *'Legion of Night The underwing moths'* stated concerning ***pretiosa*** "*The status of this moth is obviously obscure.*" "*... or is it a form of* ***crataegi*** *or* ***mira*** ...?". Otherwise Sargent discussed ***pretiosa*** only under the heading ***C. crataegi***, not as a valid species.

1976. Brower described ***texarkana*** and ***lincolnana*** in *'New Catocala of North America (Noctuidae)'*.

1980. McCabe & Johnson listed a specimen from the Lintner collection in the N.Y. State Mus. of ***pretiosa*** as a syntype.

1982. Because no types of ***pretiosa*** existed, Schweitzer illustrated and designated a lectotype of ***pretiosa*** from the Lintner collection labeled New York, July 10, 1874. This author discussed and compared related species ***mira***, ***crataegi, blandula***, and ***texarkana***.

1983. Hodges et al., listed ***crataegi***, ***texarkana,*** and ***mira*** as valid species, but ***pretiosa*** was synonymized under ***crataegi*** as a form.

1984. Covell treated ***crataegi***, ***mira, blandula***, ***lincolnana***, and ***texarkana*** as valid species but without mention of ***pretiosa.***

1992. Rings, et al., illustrated ***pretiosa*** as a valid species recorded in Ohio, but stated it has not been taken in Ohio in nearly 100 years.

1999. Knudson & Bordelon listed ***crataegi, mira, pretiosa*** and ***texarkana*** as valid species occurring in Texas.

2003. Heppner listed ***crataegi*** and ***texarkana*** as valid species occurring from Florida, and listed ***pretiosa*** as a form of ***crataegi***.

2005. Brou illustrated and briefly discussed the presence of ***texarkana*** Brower in Louisiana.

2010. The species ***crataegi***, ***mira***, and ***pretiosa*** are listed as distinct species, though ***texarkana*** is now listed as a subspecies of ***pretiosa***, by Gall & Hawks, and by Lafontaine & Schmidt.

In Louisiana, ***pretiosa*** is known from a series of about 78 specimens captured by this author from late April through early June. Before me are 44 males and 27 females of adult ***pretiosa*** (Fig. 2) captured in Louisiana; typical phenotypes are illustrated in Fig. 1a-h. Adults were recorded at ultraviolet light and fermenting fruit bait traps in three parishes (Fig. 3).

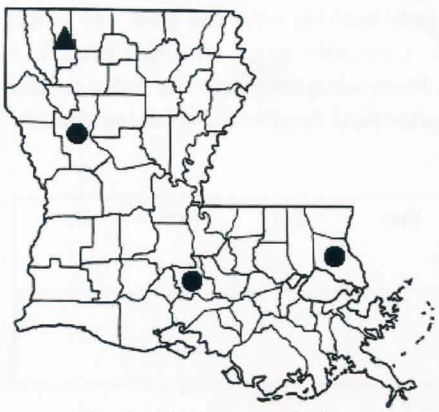

Fig 3. Parish records for ***pretiosa*** ● and ***texarkana*** ▲

The majority of ***pretiosa*** specimens in Louisiana are recorded from the Abita Springs entomological study site, sec.24T6SR12E, 4.2 mi NE of Abita Springs, but it is not at all common at any of these few locations illustrated in Fig. 3. The amount of specimens (78) is indicative of collecting continually for the past 34 years at this location using a series of both light traps and bait traps. I make note that ***crataegi*** has also been taken at this same locality, but with far less frequency. No ***pretiosa*** or similar looking species were listed for Louisiana by Chapin & Callahan (1967).

The species ***texarkana*** (Fig. 1j-n), similar in appearance to ***pretiosa***, was previously reported for Louisiana (Brou, 2005). ***C. texarkana*** was described by Brower (1976) from a series of specimens captured in the years (1938-1940) from Texas and Arkansas. In 1980, I sent specimens of numerous Louisiana ***Catocala*** species to Brower, including specimens of ***texarkana*** from Lake Bistineau State Park, Webster Parish, the location of

my series of several dozen ***texarkana*** specimens which were taken in 1979-80. His labels state "*possible **texarkana***". I might add, numerous specimens of about 10 common species of ***Catocala*** were returned misidentified from Brower. I suspect Brower's eyesight was failing, as series of several common species were each misidentified as three or four entirely different species. It was at this time Brower was claiming to be responsible for authoring the upcoming MONA ***Catocala*** fascicle. My Webster Parish ***texarkana*** specimens match precisely the shape and maculation of the two examples illustrated in Brower's original description. There is currently considerable conjecture that ***pretiosa*** is synonymous with ***texarkana.*** I am not convinced that this is so for the following reasons. The series of ***texarkana*** specimens I have from Webster Parish in northwest Louisiana have slightly smaller wing lengths (generally males averaging about 19-20 mm, females averaging about 21 mm), compared to ***pretiosa*** I am listing from the other three parish locations (generally males averaging about 20-22 mm and females averaging about 22-24 mm), an attribute clearly visually evident when comparing series of both species.

Fig. 4. Male genitalia: a. ***texarkana***, b. ***pretiosa***.

Also, the wing shape is consistently narrower in the ***texarkana*** specimens, an attribute clearly visually evident when the two species are compared (see Fig. 1). Furthermore, in most cases these attributes along with the ability to distinguish the subtle maculation and color differences of each species, one can visually separate the two entities among Louisiana material with little trouble in reasonable quality, undamaged specimens.

I have illustrated the male genitalia of the two species in question (Fig. 4). Numerous smaller U.S. ***Catocala*** species have very similar male genitalia structures, thus hindering genitalic analysis from being a useful tool to distinguish various species. Perhaps everting the aedeagus could aid in this matter, but I have not done this. Note that the aedeagus of ***texarkana*** is noticeably bowed and has a more bulbous proximal end, more so than in ***pretiosa***, and there are differences in the sizes and shapes of other genital structures, the valvae, processes of the sacculus, and uncus. For those who believe that the novel use of DNA is the 'be-all and end-all' and is the last word concerning these two species, I remind them that 'so did each of the authors who published on these subjects during the past 142 years'.

I thank Ricky Patterson for commenting upon this manuscript in most helpful ways.

Note: Auburn E. Brower, died at age of 93 onApril 8, 1994. He was a resident of Augusta, Maine. A member of the Lepidopterists' Society, he received a Ph.D. degree in Entomology in 1932. His thesis was on the biology of North American Catocala. The Auburn E. Brower collection of insects was donated to the Smithsonian Institution. The collection consisted of 130,104 arthropods, including 115,282 specimens of Lepidoptera, which included 21,900 specimens of the genus Catocala (Davis and Hevel, 1995). I corresponded with Brower for several decades, and had the pleasurae to meet and talk with him in person at an annual Lepidopterists' Society meeting in Florida during the 1970s.

Literature Cited

Brou, V. A., 2005. Catocala lincolnana Brower and Catocala texarkana Brower in Louisiana. *South. Lepid. News* 27:28.

Brower, A.E., 1976. New Catocala of North America (Noctuidae). *Jour. Lepid. Soc.* 30: 33-37.

Barnes, WM & J. McDunnough, 1918. *Illustrations of the North American species of the genus Catocala.* Mem. Am. Mus. Nat. Hist. New Series, Vol. III, part 1.

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

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

Davis, D.R. & G. Hevel, 1995. Donation of the Auburn E. Brower Collection to the Smithsonian Institution. *Jour. Lepid.Soc.* 49 (3) 253-254.

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

Gall, L.F., & D.C. Hawks, 2010. Systematics of moths in the genus Catocala (Lepidoptera, Erebidae) IV. Nomenclatorial stabilization of the Nearctic fauna, with a revised synonymic check list. In: Schmidt BC, Lafontaine JD (Eds) Contributions to the systematics of New World macro-moths II. *ZooKeys* 39: 37–83. doi: 10.3897/zookeys.39.425.

Grote, A.R., 1882. *New Check List of North American Moths.* New York. pp.

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.

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

Hulst, G.D., 1884. The genus Catocala. *Bull. Brooklyn Ent. Soc.* 7: 14-56.

McDunnough, J.H., 1938. Checklist of the Lepidoptera of Canada and the United States. Part 1. Macrolepidoptera. *Mem. So. Calif Acad. Sci.* 1: 1-275.

Knudson, E. & C. Bordelon, 1999. *Texas Lepidoptera Survey, Checklist of the Lepidoptera of Texas* 2000 edit. Privately printed.

Lafontaine J.D. & B.C. Schmidt, 2010. Annotated check list of the Noctuoidea (Insecta, Lepidoptera) of North America north of Mexico. *ZooKeys* 40: 1–239. doi:10.3897/zookeys.40.414

Lintner, J.A., 1872-78. *Entomological contributions. I-IV*. Reports of the New York State Cabinet of Natural History. Albany.

McCabe, T.L. & L.M. Johnson, 1980. Catalogue of the Types in the New York State Museum Insect Collection N.Y.S.M. Albany, New York. Bull. 434, 8 pp.

Rings, R.W., E.H. Metzler, F.J. Arnold, & D.H. Harris, 1992. *The Owlet Moths of Ohio Order Lepidoptera Family Noctuidae,* Ohio Biol. Surv. Bull News Series Vol. 9 No.2 vi +219 pp. + 16 plates.

Sargent, T.D., 1976. *Legion of Night: The underwing moths*. Univ. Mass. Press. Amherst. 222 pp.

Saunders, W., 1876. *Notes on Catocalas*. The Canadian Ent. p. 72-75.

Schweitzer, D.F., 1982. The larva and status of Catocala pretiosa (Noctuidae), with designation of a Lectotype. *Jour. Lepid. Soc.* 36: 18-30

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ANGLED LEAFWING (*ANAEA GLYCERIUM*)
SUBMITTED BY
MIKE RICKARD

Angled Leafwing (*Anaea glycerium*) at the National Butterfly Center, Mission, Texas, 29 January, 2017. Found by Lorna Graham. Photo by Mike Rickard

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FIELD TRIP IN ARIZONA

BY

KELLY RICHERS

The following report is from a collecting trip in the vicinity of Tucson, Arizona over a 5 day period. The ostensible purpose of the trip was to attend the national meeting of the Lepidopterists' Society which was held from the 29th of July to the 2nd of August. While the meeting was great I did spend a *bit of time* in the field.

The collection locations were as follows:

July 28: 8 traps along Carr Canyon Road in the Huachuca Mountains west of Sierra Vista, to the top, from about 5500' to about 7500' with a blacklight sheet at 7300'

July 29: Madera Canyon in the Santa Rita Mountains, four traps from the picnic area in Pimia County at the entrance to the top in Santa Cruz County, where there was also a sheet with MV light.

July 30: Both Box Canyon and Florida Canyon. Florida Canyon was two traps, Box Canyon was a trap and sheet with MV light and various others with MV lights along the road above the bridge.

July 31: Pena Blanca, at the picnic area near the entrance. MV light, no real trapping due to constant rain.

August 1: Florida Canyon again, 4 traps along the road to the parking area, including the parking area itself.

Butterfly collecting was limited to the **28th of July** in Florida and Box Canyons, and on the **30th of July** at Florida Canyon.

The following are new species for me caught on this trip:

948	Himmacia huachucella
1525	Triclonella xuthocelis
2276	Scodesdeflecta
2498	Embola ciccella
3035	Eucosma morrisoni
4854	Scybalistodes vermiculalis
5148	Epipagis disparilis
5504	Xubida dentilineatella
5577	Epipaschia superatalis
6079	Dysodia granulata
6458	Stenoporpia dionaria
6508	Glaucina ignavaria
6778	Ceratonyx arizonensis
6779	Ceratonyx permagnaria
6942	Eusarca graceiaria
7025	Nemoria diamesa
7054	Dichorda consequaria
7289	Monostoecha semipectinata
7660	Lacosoma arizonicum
7747	Automeris iris
7913	Datana neomexicana
7913.1	Datana rotunda?
7914	Datana chiriquensis
7987	Heterocampa benitensis
8015	Oligocentria coloradensis
8040	Dysschema howard1
8145.1	Hypercompe extrema
8206	Lophocampa roseata
8236	Euchaetes castalla
8240	Euchaetes polingi
8242	Euchaetes antica
8405	Oxycilla tripla
8515	Scolecocampa atriluna
8593	Cissusa mucronata
9006	Tripudia luda
9008	Tripudia luxuriosa
9084	Ponometia bicolorata
9122	Spragueia dama
9132	Spragueia margana
9173	Bagisara oula
9269	Acronicta edolata
9302	Gerra radicalis
9308	Euscirrhopterus cosyra
9661	Crambodes talidiformis
9686.1	Bryolymnia anthracitaria
9695.1	Condica luxuriosa
9726	Azenia edentata
9729	Azenia implora
9758	Lineostriastiria hachita
9769	Eulithosia discistriga
9789	Chamaeclea permana
10023	Viridemas galena
10191	Cucullia laetifica
11029.1	Abagrotis mexicana
11124	Schinia errans
11128	Schinia arcigera
11134.1	Schinia mexicana
4510	Microtia elva


Himmacia ♀
huachucella
948


Kelly Richers at uv trap
Triclonella ♂
xuthocelis
1525


Scodes ♂
deflecta
2276


Embola ♂
ciccella
2498


Pelochrista ♂
morrisoni
3035


Scybalistodes ♀
vermiculalis
4854


Epipagis ♂
dispariis
5148


Xubida ♀
dentilineatella
5504


Epipaschia ♂
superatalis
5577


Dysodia granulata ♀
6079


Stenoporpia dionaria ♂
6458


Glaucina ignavaria ♂
6508


Ceratonyx arizonensis ♂
6778


Ceratonyx permagnaria ♂
6779


Eusarca graceiaria ♂
6942

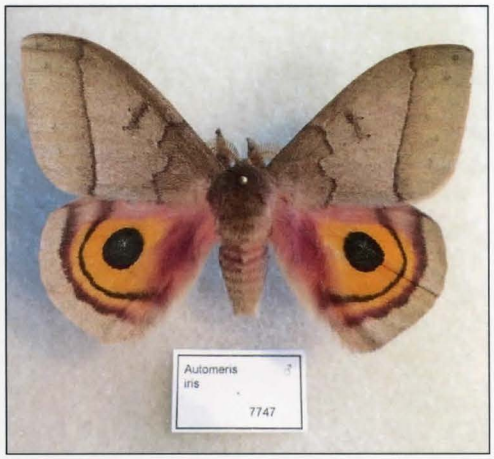

Nemoria diamesa ♂
7025


Dichorda consequaria ♀
7054


Monostoecha semipectinata ♂
7289


Lacosoma ♂
arizonicum
7660


Heterocampa ♂
benitensis
7687


Automeris ♂
iris
7747


Datana ♂
neomexicana
7913

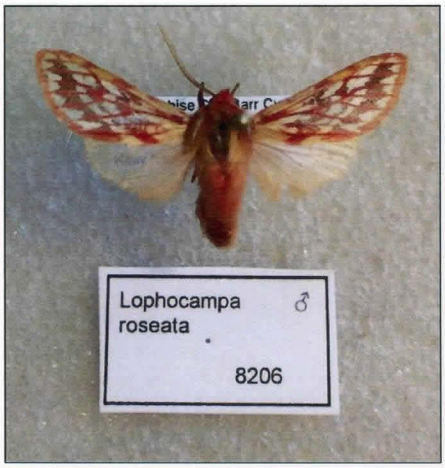

Datana ♂
rotunda
7913.01

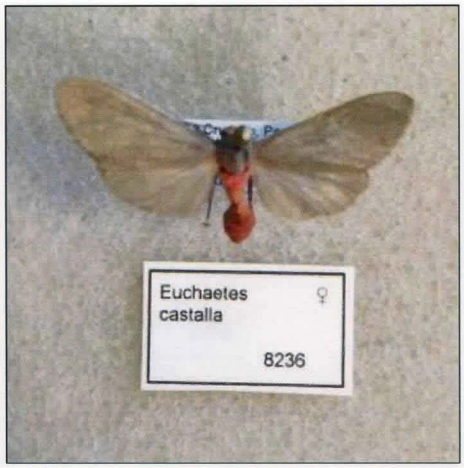

Datana ♂
chriiquensis
7914

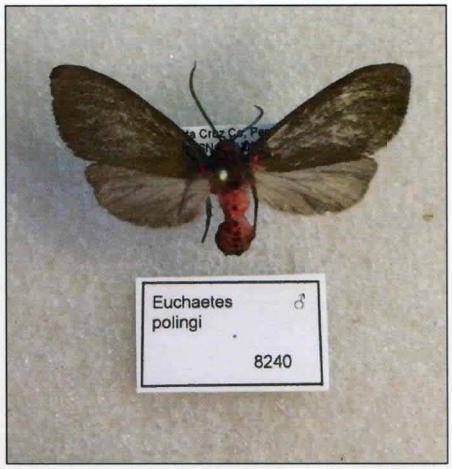

Heterocampa ♂
benitensis
7987

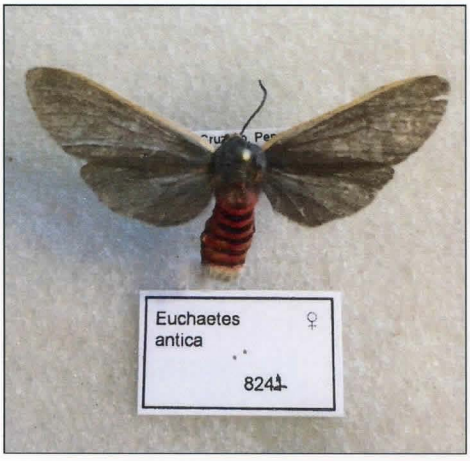

Oligocentria ♂
coloradensis
8015


Hypercompe ♂
extrema
8145.1

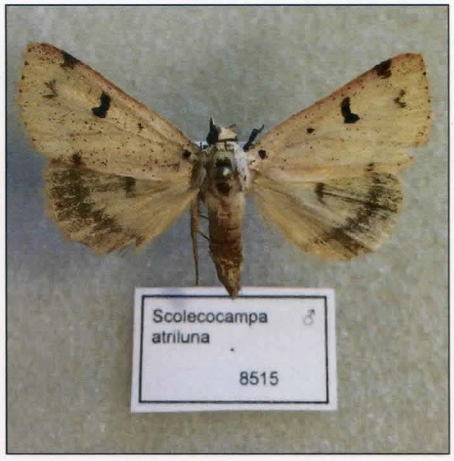

Lophocampa ♂
roseata
8206


Euchaetes ♀
castalla
8236


Euchaetes ♂
polingi
8240

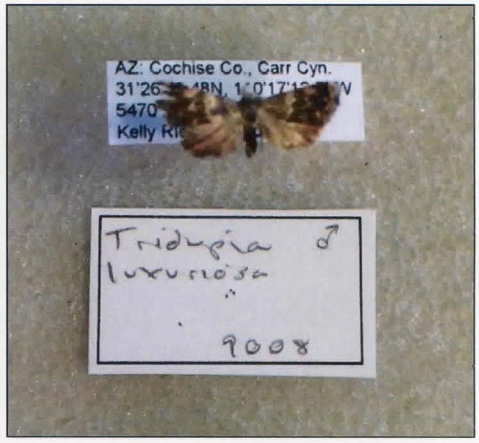

Euchaetes ♀
antica
8241


Oxycilla ♂
tripla
8405


Scolecocampa ♂
atriluna
8515


Cissusa ♂
mucronata
8593


Tripudia ♀
luda
9006

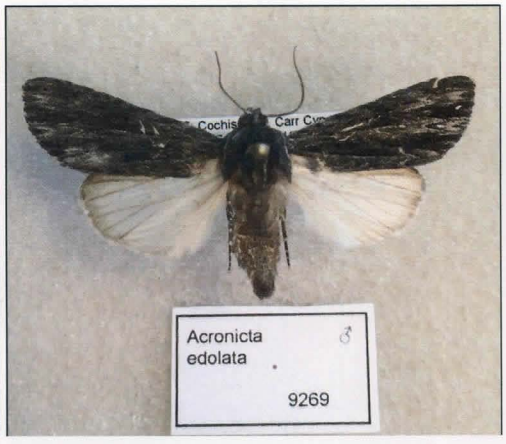

AZ: Cochise Co., Carr Cyn.
Tridropia ♂
luxuriosa
9008


Ponometia
bicolorata ♂
9084


Spragueia
dama ♀
9122


Spragueia
margana ♂
9132


Bagisera
oula ♀
9173


Acronicta
edolata ♂
9269


Gerra
radicalis ♂
9302

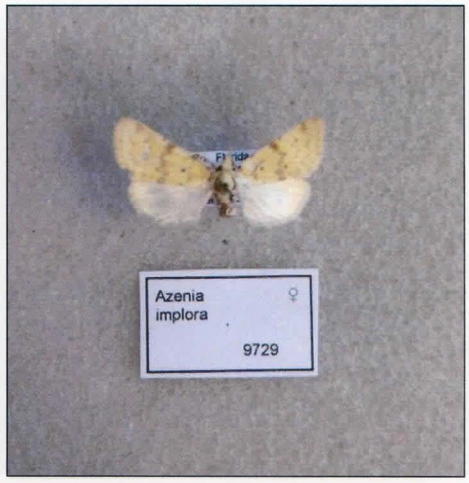

Euscirrhopterus
cosyra ♂
9308


Crambodes
talidiformis ♂
9661


Bryolymnia
anthracitaria ♀
9686.1


Condica
luxuriosa ♂
9695.1


Azenia
edentata ♂
9726

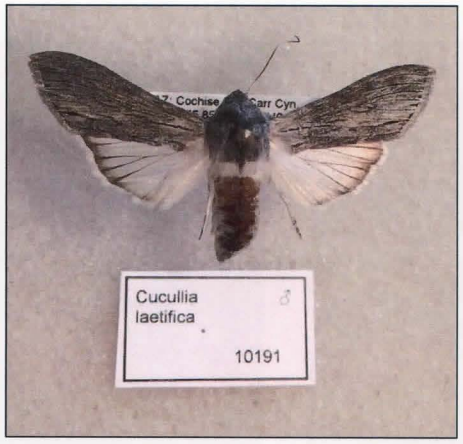

Azenia
implora ♀
9729

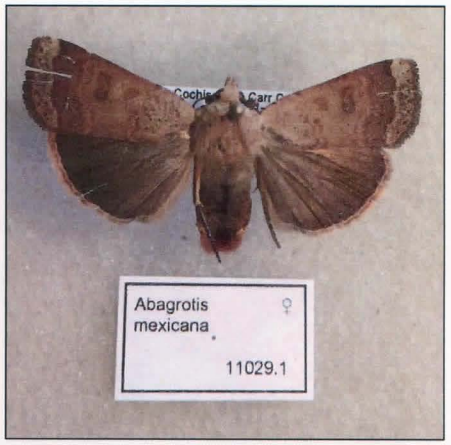

Llineostriastiria
hachita ♀
9758


Eulithosia
discistriga ♂
9769


Chamaeclea
permana ♂
9789


Viridemas ♂
galena
10023


Cucullia
laetifica ♂
10191


Abagrotis
mexicana ♀
11029.1

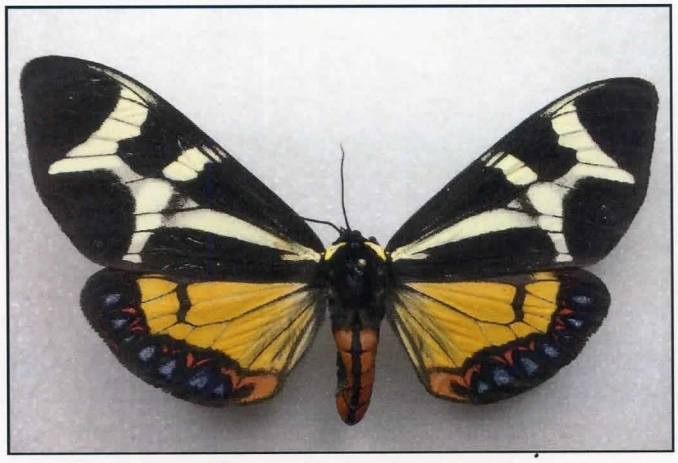
Over 1800 specimens were identified (See Table 1) and there are still approximately 120 unidentified specimens. [All identifications are made by me and performed without any dissections.]

Abbreviations used in Table l:

Carr = Carr Canyon Road in the Huachuca Mountains
Box = Box Canyon, 20 miles south of Tucson, at the north end of the Santa Rita Mountains
Fl = Florida Canyon south of Tucson (less than 35 miles from Tucson)
Mad = Madera Canyon south of Tucson (less than 35 miles from Tucson)
PB = Pena Blanca (Southwest of Tucson)
M = Male
F = Female

[See the article "*It was the Best of Times; It Was the worst of Times*" in the *Southern Lepidopterists' News* Vol. 39 No.4 (2017), pgs. 335-340, for more information about collecting in the above areas in southern Arizona.]

Mictoria elva



Dysschema howardi

Table 1			Carr M	Carr F	Box M	Box F	Fl M	Fl F	Mad M	Mad F	PB M	PB F
312	Daviscardia	coloradella	1						1			
352	Acrolophus	filicornus	2					1				
358	Acrolophus	klotsi			2							2
359.a	Acrolophus	laticapitanus clarkei										1
373	Acrolophus	popeanella					2		3		1	
385	Acrolophus	variabilis					2				3	
948	Himmacia	huachucella					6	3		1		
1004	Ethmia	marmorea	1									
1012	Antaeotricha	lindseyi	1									
1525	Triclonella	xuthocelis	2									
2276	Scodes	deflecta						1	1			
2498	Embola	ciccella					1	1	2			
3035	Eucosma	morrisoni	1									
3494	Cydia	latiferreana								1		
3729	Sparganothoides	machimiana	1							1		
3796	Henricus	contrastana								1		
4623	Harrisina	metallica (brillians)				1	1					
4635	Neoalbertia	fusca					1		3			
4640	Trosia	obsolescens					3					
4647.a	Megalopyge	opercularis bissesa	2				1			1		
4648	Norape	tenera					5		2			
4650	Norape	ovina					4	3			1	
4669.1	Perola	clara									2	
4680	Isa	schaefferana							1			
4681	Isa	textula		1								
4690	Euclea	obliqua (dolliana)	1									
4696	Euclea	incisa					8					
4702	Dalcerides	ingenitus	1									
4798	Frechinia	helianthiales		1			4		4			
4807	Edia	semiluna					1					
4826.b	Mimoschinia	rufofascialis decorata			2		3					
4854	Scybalistodes	vermiculalis			1		3	2	1			
4895	Chalcoela	iphitalis			2		1		1			
4967	Hahncappsia	mancalis		1			3					
4993	Loxostege	albiceralis	1		1		5	4	3			1
5033	Pyrausta	grotei	1		1							
5034	Pyrausta	signatalis	4				1		1			
5113	Apilocrocis	pimalis					2					
5130	Choristostigma	roseopennalis	19	2								
5148	Epipagis	disparilis									1	
5159	Desmia	funeralis	2					1	3	1		
5175	Diathrausta	harlequinalis					4	3	2	1		
5240.a	Agathodes	designalis monstralis		1			1		1			
5256	Diastictis	fracturalis		1								
5292	Conchylodes	ovulalis	1				3					
5432	Fissicrambus	intermedius					1					
5458	Diptychophora	harlequinalis							1			
5464	Urola	nivalis							1			
5504	Xubida	dentilineatella	3	3			3		1	2		
5537	Caphys	arizonensis	2	3						7		
5553	Galasa	nigripunctalis	3	2			6		7			
5566	Arta	statalis	1									
5568	Arta	olivalis	1							1		
5574.1	Heliades	huachucalis	3	3					5	1		
5577	Epipaschia	superatalis	1				1					
5580	Cacozelia	basiochrealis		1	1		2	1	5			
5589	Oneida	luniferella luniferella	4	1					3			

5613	Pococera	thoracicella					3					
5730	Dasypyga	alternosquamella	1									
5744	Etiella	zinckenella				1	1					
5795	Scotia	inconditella	3	3								
5854	Dioryctria	cambiicola	1									
5974	Alberada	parabates	2									
5980	Rumatha	polingella	1									
6061	Arivaca	linella	1	1					1			
6079	Dysodia	granulata	3	2				1	1	1		
6211	Hellinsia	grandis					1	1				
6380	Digrammia	californiaria		1								
6374	Digrammia	delectata						1				
6385	Digrammia	triviata	6	3					3			
6393	Digrammia	yavapai	2									
6415	Rindgea	cyda					1		1			
6417	Rindgea	hypaethrata							1			
6419.a	Isturgia	dislocaria malefactaria					1					
6420	Fernaldella	fimetaria					2					
6423	Taeniogramma	octolineata					6	1				
6424	Taeniogramma	mendicata	2						4	2		
6425	Taeniogramma	tenebrosata					2					
6445	Glena	grisearia	3	1			1		1			
6451	Glena	I. interpunctata	4						2			
6458	Stenoporpia	dionaria	1									
6462	Stenoporpia	anastomosaria								1		
6472	Stenoporpia	glaucomarginaria	1									
6488	Glaucina	erroraria					1					
6508	Glaucina	ignavaria	10	1						1		
6577	Iridopsis	obliquaria	1				1					
6590	Anavitrinella	pampinaria	3				2		4	1		1
6613	Prionomelia	spododea	7									
6615	Tracheops	bolteri	6	6				2	15	4		
6632	Galenara	stenomacra		1								
6635	Vinemina	opacaria	3						7	2		
6636	Vinemina	catalina	1									
6695	Ixala	d. desperaria	1									
6707	Pterospoda	opuscularia	1									
6760	Pero	b. behrensaria	5	3							1	
6764	Phaeoura	cristifera							1	1		
6771	Phaeoura	cana	1									1
6773.a	Holochroa	dissociarus varius	5						20	2		
6778	Ceratonyx	arizonensis	1									
6779	Ceratonyx	permagnaria	1									
6865.1	Caripeta	suffusata		2								
6866	Caripeta	interalbicans	3									
6874	Caripeta	macularia	2									
6876	Nemeris	speciosa	1									
6880	Destutia	flumenata	1					1	1			1
6885	Besma	quercivoraria						1				
6887	Besma	sesquilinearia	1	1								
6939	Eusarca	geniculata	2	1								
6940	Eusarca	tibiaria	9	1					6			
6942	Eusarca	graceiaria	2						2			
7021	Nemoria	arizonaria							3			
7025	Nemoria	diamesa	1									
7036	Nemoria	zelotes	6	1			4	1	14	1		
7044	Nemoria	festaria					1					
7054	Dichorda	consequaria							4	1		
7059.a	Synchlora	frondaria avidaria									1	
7074	Chlorochlamys	phyllinaria							1			
7100	Lobocleta	peralbata	3				1	1	3	1		

7110	Idaea	basinta					3	1					
7128	Arcobara	multilineata					1						
7265	Hydriomena	barnesata							1	1			
7289	Monostoecha	semipectinata							2				
7309	Spargania	viridescens								1			
7347	Stamnodes	formosata		1					1				
7356	Stamnoctenis	morrisata	4	3			2	1	8	2			
7406	Zenophleps	lignicolorata	1										
7466	Eupithecia	edna	2	1									
7660	Lacosoma	arizonicum	3										
7664	Apatelodes	pudefacta	2				1			1	1	2	
7671	Tolype	austella			1			1	2				
7681	Apotolype	brevicrista			1		1		1				
7684	Artace	colaria	2										
7692	Dicogaster	coronada	5	1			2	1	6	1			
7696	Gloveria	arizonensis		8						2			
7705	Eacles	oslari	4						1		1		
7707.a	Citheronia	splendens sinaloensis									2	1	
7711	Sphingicampa	hubbardi					1		1				
7713.1	Sphingicampa	montana					5			1			
7747	Automeris	iris			1		7						
7757.1	Antheraea	oculea					1		3		5		
7769	Hyalophora	gloveri	2										
7775	Manduca	sexta		1	9		2		1		2		
7776	Manduca	quinquemaculatus			1		1						
7778	Manduca	rustica										1	
7781	Manduca	muscosa			20	4	2				1		
7782	Manduca	florestan			1	1					2		
7788	Ceratomia	sonorensis									2		
7822	Smerinthus	cerisyi				1							
7825	Paonias	myops	1							1			
7863	Eumorpha	typhon						1					
7889	Xylophanes	falco	10						1		1		
7894	Hyles	lineata						1					
7908.2	Datana	perfusa	2				6	1	6				
7908.1	Datana	mesillae			1	1			2				
7908.1	Datana	nr messillae	2				9		14				
7908.2	Datana	perfusa							3				
7913	Datana	neomexicana							2				
7913.1	Datana	rotunda?					1						
7914	Datana	chiriquensis					1						
7955	Symmerista	zacualpana							7				
7960	Notela	jaliscana					2	3					
7962	Afilia	oslari					4		7			1	
7963	Scevesia	angustiora	4										
7964	Cargida	pyrrha					1		1				
7970	Litodonta	wymola					1				1		
7976	Macrurocampa	dorothea	3	1					2				
7987	Heterocampa	benitensis					1						
7993	Heterocampa	lunata	2									1	
8015	Oligocentria	coloradensis											
8027	Lirimiris	truncata					4						
8028	Crinodes	biedermanis	12	1							2		
8029	Pseudhapigia	brunnea	1		1		7	3	1				
8040	Dysschema	howardi				1							
8052	Crambidia	pura	1	1			2	1	2	1			
8066	Cisthene	tenuifascia					6	1				1	
8115.a	Virbia	costata parvula	2				1		8				
8116	Virbia	ostenta		1									
8131.a	Estigmene	acrea arizonensis					1						
8132	Estigmene	albida	1				1						

8144	Hypercompe	permaculata	5									
8145.1	Hypercompe	extrema	2									
8149	Hypercompe	suffusa	1		1		4		1			
8155.a	Arachnis	aulaea pompeia	1									
8201	Hypocrisias	minima	1		1	1	2	1	1			
8205	Halysidota	davisii					1					
8206	Lophocampa	roseata	3									
8212	Lophocampa	mixta	1						1			
8213	Lophocampa	pura	9							2		
8217.1	Leucanopsis	perdentata	7				6		8			1
8217.2	Leucanopsis	lurida	9	3					6		1	
8218	Pseudohemihyalea	ambigua	1									
8219	Apocrisias	thaumasta	1	1					1	2		
8226	Carales	arizonensis	2	5								1
8233	Euchaetes	perlevis			1							
8236	Euchaetes	castalla										1
8240	Euchaetes	polingi									1	
8242	Euchaetes	antica										2
8253	Pygarctia	roseicapitis	3						2			
8258	Bertholdia	trigona	1	7					1		2	1
8371	Bleptina	inferior	4	1						1		
8405	Oxycilla	tripla	2				1		4	1		
8472.b	Hemeroplanis	historalis (finitima concoloralis)	1	1					1			
8485	Nychioptera	noctuidalis	1				2	1	4			
8496	Isogona	segura					9	2			1	
8500	Metalectra	quadrisignata	1									
8508	Metalectra	cinctus	1							1		
8515	Scolecocampa	atriluna	4						1			1
8520	Gabara	stygialis	7						3			
8563	Lygephila	victoria	2									
8565	Obrima	rinconada					4					
8576	Azeta	schausi	10	6					1		2	
8590	Panopoda	rigida	8	3					3	2	1	
8593	Cissusa	mucronata	2									
8594	Cissusa	indiscreta	1				2					
8614	Bulia	deducta	2			1		1				
8654	Lesmone	griseipennis	1				1					
8659	Heteranassa	mima							2	1	2	1
8675	Toxonprucha	clientis		1				3	1			
8677	Zaleops	umbrina			2		3	1			1	
8677	Zaleops	umbrina (paressa)					1					
8689	Zale	lunata	2				3	1	1			
8715	Zale	colorado	5	2					4	5	1	
8719.a	Euparthenos	nubilis apache	6	2					1			
8740	Callistege	intercalaris	3						1			
8741	Callistege	diagonalis	3				5	2	4			1
8748	Celiptera	valina							1			
8753	Ptichodis	ovalis	7	4						1		
8798.a	Catocala	neogama euphemia	1						1	1		
8853	Catocala	violenta	1	1								
8955.a	Marathyssa	inficita minus										1
8959.1	Paectes	abrostolella	2						6	3		1
8968.2	Eutelia	furcata			1							
8986	Meganola	dentata		1							1	
9006	Tripudia	luda						1				
9008	Tripudia	luxuriosa	1									
9014	Cobubatha	lixiva (basicinerea)		1			1					
9017.1	Cobubatha	chiquita			1	1	8		1		1	
9034	Amiana	niama	1			2			4	1		
9074	Metaponpneumata	rogenhoferi	1									

9084	Ponometia	bicolorata	1				2						
9087	Ponometia	venustula			4	2	1	3		1			
9090	Ponometia	candefacta	2		1		5	1					1
9092	Ponometia	huita	2						4	1			
9098	Ponometia	phecolisca	1	1									
9105	Ponometia	acutus					1						
9111	Tarache	augustipennis			1								
9113	Tarache	huachuca			1		1						
9118	Ponometia	tripartita			1	1	1						1
9120	Tarache	idella			1							1	1
9122	Spragueia	dama					1						
9123	Spragueia	cleta					1						
9129	Spragueia	funeralis			2		2	3		1			
9130	Spragueia	obatra					6	2	3	1			1
9132	Spragueia	margana					1	1					
9142	Tarache	quadriplaga		1	6							2	1
9148	Tarache	lucasi				1	1						
9149	Tarache	expolita					1						
9159.1	Tarache	toddi	1										
9159.2	Tarache	geminocula			1								1
9164	Acontia	behrii			1								
9173	Bagisara	oula											1
9191	Meleneta	antennata	8						3				
9193	Raphia	frater							2				
9188.1	Charadra	tapa	9						1	1			
9231	Acronicta	strigulata		1									
9234	Acronicta	beameri	1										
9255.a	Acronicta	brumosa persuasa					1						
9269	Acronicta	edolata	1										
9283	Chloronycta	tybo	2						4	1			1
9302	Gerra	radicalis	2	1			1		3				
9303	Gerra	sevorsa	2	1				3					
9304	Gerrodes	minatea					3	2	2			1	
9307	Euscirrhopterus	gloveri			2		2	1				1	4
9308	Euscirrhopterus	cosyra					2						
9590	Properigea	continens		1			1		5	2			
9597	Hemibryomima	chryselectra	7	1				1	10	1			
9620	Miracavira	brillians	2										
9621	Miracavira	sylvia	2						2			1	
9661	Crambodes	talidiformis	2	1			2	1	1	3			
9686.1	Bryolymnia	anthracitaria								2			
9691	Condica	temecula							3				
9695	Condica	albolabes	13	4				1	8	1			
9695.1	Condica	luxuriosa							1				
9716	Stibaera	thyatiroides	4			3	10		4	1			
9718	Emarginea	percara (pallida)					2	1	1				1
9719	Emarginea	dulcinea	1	1					2				
9721	Ogdoconta	moreno					1	1					
9726	Azenia	edentata			3	1	14		4			1	1
9729	Azenia	implora					1	2					
9737	Neumoegenia	poetica					3		1	2		1	
9758	Lineostriastiria	hachita			1	1							
9769	Eulithosia	discistriga					1						
9789	Chamaeclea	permana								1			
9791	Oslari	viridifera	1		3	3	2					2	2
9799	Nocloa	alcandra			2								
9800	Nocloa	aliaga						1				1	2
9829	Prothrinax	luteomedia			2	1	1						
10023	Viridemas	galena	4										
10039	Oxycnemis	advena (gustis)						1					
10191	Cucullia	laetifica	3	2									

10196	Cucullia	lilacina								1		
10224	Anarta	mutata						3				
10309	Trichordestra	prodeniformis	1									
10429	Dargida	grammivora							1	1		
10431.c	Dargida	diffusa neptis			5	4	4		3		2	1
10545	Homorthodes	gigantoides	1									
10585	Orthodes	majuscul (crenulata)	2				4		2			
10600	Hypotrix	hueco	1	1							2	
10601	Hexorthodes	accurata	18	2			2		3	1		
10603	Hexorthodes	catalina	2									
10606	Hypotrix	lunata		2								
10613	Neleucania	praegracilis (suavis)		1								
10614	Hypotrix	ferricola	1									
10616	Hypotrix	parallela	1									
10634	Lophoceramica	artega	12	2			1		6			
10873	Dichagyris	salina	4							1		
10876	Dichagyris	capota	2	1								
10878	Striacosta	albicosta	5									
11017	Abagrotis	bimarginalis		1								
11029.1	Abagrotis	mexicana		2								
11047	Parabagrotis	exsertistigma	2	1								
11053	Ufeus	faunus	4	1								
11074	Heliocheilus	paradoxus	9	8			1				1	1
11124	Schinia	errans									1	
11128	Schinia	arcigera		1		1						
11134.1	Schinia	mexicana	4	2					1		1	
11203	Schinia	luxa					2					
11216	Grotella	blanca					1					
3885	Codatractus	arizonensis					2					
3910	Thorybes	pylades				1						
3922	Cogia	hippalus			1		2	1				
3977	Pholisora	catullus			2							
4512	Dymasia	chara chara			10	1	4					
4357	Leptotes	marina				1		2				
4359.b	Hemiargus	ceraunus gyas					1					
4360.a	Hemiargus	isola alce					1					
4499.a	Chlosyne	lacinia crocale				1	2	1				
4499.a	Chlosyne	lacinia crocale form rufescens			1	1						
4510	Microtia	elva			6	2	3	1				
4513.b	Texola	elada perse			7	4	3	1				
4615.b	Danaus	glippus strigosus										
			500	146	117	44	34	92	375	91	62	45
							0					

TOTAL 1812

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AN ABERRANT *MARPESIA PETREUS* (CRAMER) FROM BROWARD COUNTY, FLORIDA

BY

MARC C. MINNO

The Ruddy Daggerwing (*Marpesia petreus*, Lepidoptera: Nymphalidae: Cyrestinae) is a locally common forest butterfly in southern Florida. Hundreds of individuals sometimes occur in forests with the larval host trees during certain years. It is less common in central Florida and the Florida Keys. The larvae feed on the leaves of Florida's native Strangler Fig (*Ficus aurea* Nutt.) and Wild Banyan Tree (*Ficus citrifolia* Mill.), and sometimes on exotic fig species such as the Common Fig (*Ficus carica* L.). Pat Howell, now retired from Broward County Parks, photographed an unusual female Ruddy Daggerwing (Fig. 1, left) with increased black markings, especially on the hindwings in Fern Forest County Park in December 2015. It's the only one like it that I have seen.

Fig. 1. Wild female Ruddy Daggerwings (*Marpesia petreus*) from southeastern Florida. Left: Aberrant individual from Fern Forest County Park, Broward County, December 2015, by Pat Howell. Right: Typical individual from Loxahatchee National Wildlife Refuge Visitor Center area, Palm Beach County, December 3, 2016 (photo by Marc Minno).

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ELOUSA ALBICANS (ERIBIDAE) – TEXAS STATE RECORD

SUBMITTED BY
MIKE RICKARD

Elousa albicans **(Eribidae), Texas State record, Hidalgo County, Mission, 4 November, 2017, came to yard blacklight. A tropical species first entering the United States in southern Florida, and now in southern Texas (photo by Mike Rickard).**

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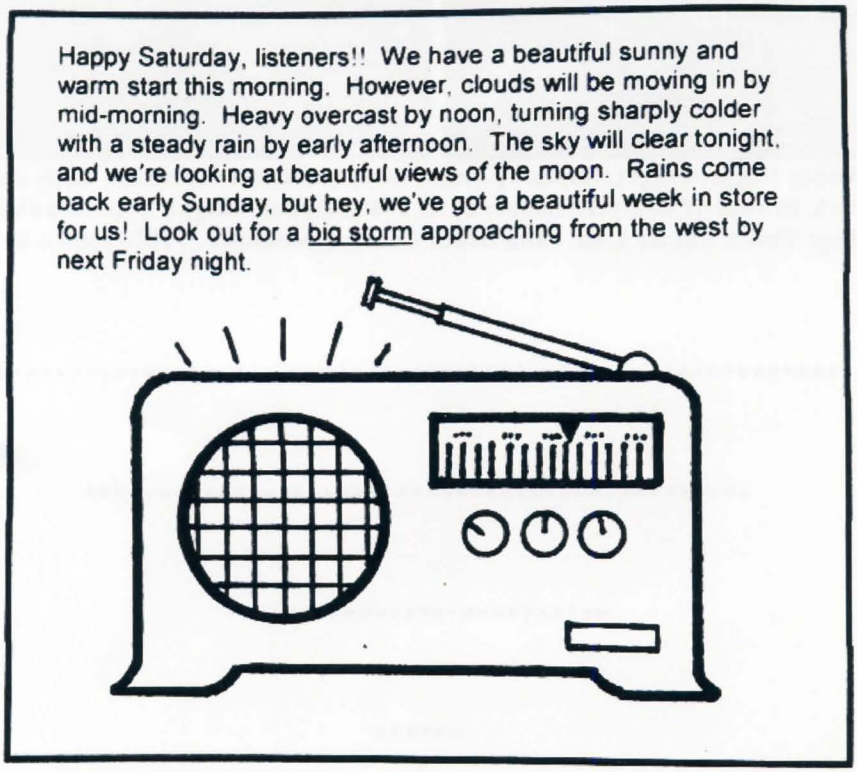
A typical Saturday morning weather forecast for the weekend butterfly collector.



Cartoon by Harry Pavulaan

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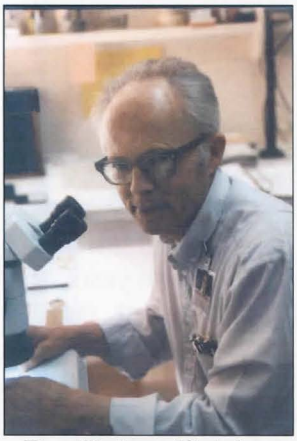
RONALD WILLIAM HODGES 1934 - 2017



Ron Hodges (October 1996)

Ron Hodges, retired USDA Lepidoptera specialist at the U. S. National Museum, died on December10, 2017, in Eugene, Oregon, at age 83. He had suffered a stroke several years previously but still continued living in his home surrounded by a notable garden which was his latter year hobby. He was predeceased in 2006 by his beloved and artistically talented wife, Elaine R. Snyder Hodges, a noted scientific illustrator.

Ron Hodges (National Museum of Natural History in Washington DC, 1992)

Ron was born August 7, 1934, grew up in Michigan and received his BS and MS at Michigan State University. He received his PhD in Entomology under the late Dr. John G. Franclemont at Cornell University in 1961. He chose to work on challenging microlepidopteran families, with greatest accomplishments the fascicles of *Moths of America North of Mexico* on Famiy Sphingidae and Superfamily Gelechioidea (especially Cosmopterigidae and Oecophoridae, and genera *Dichomeris* and *Chionodes*). He was cofounder with the late Richard B. Dominick of the Wedge Entomological Foundation and managing editor of the monograph series for many years.

Ron was known for highly proficient and precise taxonomic excellence and a quiet, warm and friendly personality. He assisted many who asked for his help, including myself when needing identifications of Kentucky micromoths for the faunal study in that state. I will miss him sorely, but with fond memories of having known him.

– Charlie Covell

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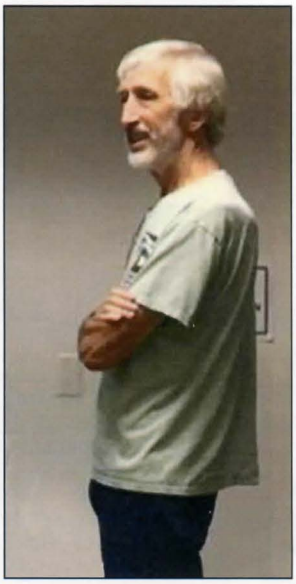
PETER JAAP ELIAZAR



Peter J. Eliazar

A well-known and long-active Florida lepidopterist and sea turtle conservationist passed away on Christmas Eve, 2017, at the age of 64. Peter was born in Amsterdam, Holland, but his parents brought him to St. Petersburg, FL, when he was two; and it was there that he grew up. He had battled cancer for over two years, and was present at the September 2017 meeting of the Association of Tropical Lepidopterists/Southern Lepidopterist Society at the McGuire Center in Gainesville. He had served several years as Treasurer of the ATL, and over the years had visited many countries on field trips with Tom Emmel and other lepidopterists. He earned his BS in Zoology and MS in Entomology at the University of Florida and he made his career in conservation ecology at the Archie Carr Center for Sea Turtle Research at UF. Peter was a gentle and warm, friendly person ever ready to help others. He leaves behind his devoted wife Christine, four children and five grandchildren, as well as many grieving friends.

– Charlie Covell

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REPORTS OF STATE COORDINATORS

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

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

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

Charlie sends in the following report:

Florida report, August 16 - Dec. 31, 2017.

In the absence of contributions for Florida, my report is confined to Alachua County, mostly Gainesville and vicinity during the period. My observations indicated fewer than normal *Panoquina ocola* and many more *Phoebis philea*, *Pontia protodice* (see previous report) and *Anartia jatrophae* than in the past dozen years of my observations. Hurricane Irma 9 –10 certainly impacted our biota, but I have heard of no records of unusual species seen after its passing us. Fall saw a fine flight of butterflies in Gainesville, FL, and vicinity as numbers below indicate. No wild habitat surveyed. Most are from Gainesville Country Club, the McGuire Center "back yard" (with greenhouse and many flowering plants outside), and 207 NE 9thAve. — our home in the historic downtown "Duckpond Neighborhood." As usual, I plead for Florida lepidopterists to send me their records. I'll try to keep reports on a quarterly basis from now on.

Urbanus proteus, Aug. 18,22, 23, 24, 30, Sept. 1, 3, 5, 6, 13, 19, 21, 22, 28, 29, Oct. 7, 13, 16, 23, 24, 25, 27, 31, Nov. 3, 4, 6, 9, 11, Dec. 5, 14, 22
Urbanus dorantes, Sept. 28, Oct. 4, Nov. 9, Dec. 5, 20
Erynnis horatius, Aug. 18, 23, Sept. 4, 17, 22, 28
Pyrgus communis (complex), Aug. 23
Pyrgus oileus, Sept. 3, 5
Lerema accius, Aug. 31, Sept. 3, 5, Oct. 31, Nov. 3, 7
Atalopedes campestris, Sept. 22
Hylephila phyleus, Aug. 16, 18, 23, Sept. 3, 4, 5, 21, 22, 27, 29, Oct. 4, 11, 13, 18, 20, 24, Nov, 6, Dec. 1
Ancyloxipha numitor, Sept. 1
Panoquina ocola, Sept. 22, Oct. 27, Nov. 3, 6, Dec. 14Battus philenor, Aug. 22, Sept. 3, 21,27
Battus polydamas, Sept. 3, 5, 12, 19, 21, 28, Oct. 13, 16, 23, 25,
Papilio troilus, Aug. 18, 21, 23, 24, Sept. 8, 12, 27, Oct. 16
Papilio glaucus, Sept. 8 , 28
Papilio palamedes, Sept. 2, 12, 13
Eurytides marcellus, Aug. 18
Heraclides cresphontes, Aug. 21, 22, 23, 24, 30, Sept. 3, 5, 9, 17, 28, Oct. 4
Pontia protodice, Aug. 18,
Phoebis sennae, Aug. 16, 18,22, 23, 24, 30, Sept. 1, 3, 4, 5, 12, 21, 22, 27, 28, 29, Oct. 4, 7, 11, 13, 16, 18, 20, 23, 25, Nov. 1, 4, 6, 10, 22, Dec. 1, 6, 22
Phoebis philea, Aug. 16, 18, 23, 24, 30, Sept. 1, 4, 5, 8, 29, Oct. 4, 11, 20, Nov. 1, 3, 10
Pyrisitia lisa, Oct. 16, 18, 20, Nov. 6, 9, 11, Dec. 1,
Eurema daira, Aug. 18, Oct. 7,
Abaeis nicippe, Aug. 18, 23,30, Sept. 1, 3, 5, 29, Oct. 4, 11, 13, Nov. 6, 9
Atlides halesus, Nov. 4 (female)
Leptotes cassius, Sept. 17, Oct. 16.Nov. 3, 4, 6, 9, 11, 22, Dec. 4, 5, 6, 14, 17, 18, 19, 21, 22, 24
Hemiargus ceraunus, Sept. 28
Phyciodes tharos, Sept. 27
Phyciodes phaon, Aug. 24, Sept. 4, 5, 28, Oct. 11, 13, 23, 24, 25, Nov. 1, 3, 6, Dec. 5
Limenitis archippus, Aug. 16, 23, Sept. 1, 4, 22, Oct. 27, Dec. 22
Limenitis arthemis astyanax, Aug. 23, 30, Sept. 1,
Vanessa atalanta, Dec. 15
Vanessa cardui, Sept. 28, Oct. 4 (several; reported elsewhere in town; seem to be migrating), 11

Junonia coenia, Aug. 18,Sept. 28, 29, 20, 25, 27, Nov. 6, 9, 22
Anartia jatrophae, Aug. 24, 30, Sept. 1, 4, 19, 22, 27, 28, 29, Oct. 4, 11, 13, 16, 24, Nov. 1, 6,7, 9, 10,11, Dec. 1, 5, 6
Euptoieta claudia, Aug. 22
Asterocampa celtis, Sept. 27, Oct. 13, 18
Agraulis vanillae, Aug. 16, 18, 21, 22, 23, 24, 30, 31, Sept. 1, 2, 3, 4, 5, 8, 12, 17,19, 21, 22, 27, 28, 29, Oct. 4, 7, 11, 13, 16, 23, 24, 25, 27, 31, Nov. 1, 3, 6, 7, 9, 11, 22, Dec. 5, 6, 17,19, 22
Heliconius charithonia, Aug. 21, 22, 23, 24, 30,31, Sept. 1, 2, 3, 4, 5, 8, 11, 12, 17, 19, 21, 22, 28, 29, Oct. 4, 7, 13, 16, 23, 24, 27, 31, Nov. 3, 4, 6, 9, 11, Dec. 1, 5, 11. 14, 17, 19, 22, 24
Danaus gilippus berenice, Nov. 10, 22, Dec. 5
Danaus plexippus, Aug. 18, 21, 30, Sept. 21, Oct. 4, 11, 20, 24, 25, 31,Nov. 1, 3, 7, 9, 10, 22,Dec. 14, 15, 19, 20, 22, 24

Moths: (note: a long list of moth species recorded at Paynes Prairies State Park on the night of Sept. 22, 2017, was published in the previous issue of this magazine)

Herpetogramma phaeopteralis (Crambidae), Aug. 22, Gainesville
Iridopsis defectaria (Geometridae), Sept. 9, Gainesville
Eacles imperialis (Saturniidae), Sept. 5, Gainesville

Butterflies recorded at Covell home, 207 NE 9th Ave., Gainesville, FL, during 2017, with dates of first sighting. There were 19 recorded in 2016, 20 in 2015, and 26 in 2014.

1. *Leptotes cassius*	Jan. 1, flying in back yard
2. *Heliconius charithonia*	Jan. 1, flying in back yard
3. *Phoebis sennae*	Jan. 2, flying outside driveway
4. *Papilio glaucus*	Jan. 16, flying around our big azalea bush
5. *Eurema daira*	Feb. 19, flying and lighting in back yard
6. *Heraclides cresphontes*	Feb. 19, flying around lemon tree
7. *Danaus plexippus*	Mar. 8, flying in back yard
8. *Libytheana carinenta*	Mar. 25, several in holly tree in back yard
9. *Junonia coenia*	Mar. 25, one resting in back lawn
10. *Parhassius m-album*	Apr. 1, in Viburnum tree in our yard
11. *Vanessa virginiensis*	Apr. 7, in Viburnum tree in our yard
12. *Erynnis horatius*	May 4, nectaring on Bidens in back yard
13. *Papilio troilus*	May 7, female resting on plant in backyard
14. *Battus polydamas*	July 5, nectaring on Plumbago
15. *Lerema accius*	Aug. 31, nectaring on Plumbago
16. *Papilio palamedes*	Sept.2, flying in back yard
17. *Phoebis philea*	Sept. 8, male flying near foodplant
18. *Urbanus proteus*	Sept. 13, on Mexican petunias out front
19. *Atlides halesus*	Nov. 4, female resting on back lawn
20. *Pyrisitia lisa*	Nov. 11, flying in our back yard
21. *Anartia jatrophae*	Nov. 11, flying in our back yard

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Jeff Slotten sent in this report (Florida) for the December (2017) issue of the NEWS. Somehow it never got published [most likely Editor's fault]:

"Since I was asked to lead the butterfly outing on September 22nd, I decided to check out some areas in Goethe State Forest, Levy County along Roads 326 and 327. I found the following species and did not necessarily collect them all:"

Eurytides marcellus - males and females uncommon
Battus philenor - males and females frequent
Papilio troilus - males and females frequent

Papilio polyxenes - 2 females
Papilio palamedes - males and females frequent
Heraclides cresphontes - mostly males and one female uncommon
Colias cesonia - males and females uncommon
Abaeis nicippe - 1 seen
Eurema daira - several seen
Phoebis sennae - males and females but mostly males and common
Calycopis cecrops - 2 seen
Hemiargus ceraunus - 2
Heliconius charitonia - 2 seen
Euptoieta claudia - 3 seen
Phyciodes phaon - 1 seen
Junonia coenia - several seen
Danaus gilippus - several males and females
Thorybes species - several but did not identify on the wing
Urbanus proteus - common
Erynnis horatius - males and females common
Erynnis zarucco - uncommon
Atalopedes campestris - common males and females (what a pest since they look a bit like other skippers until one gets fairly close)
Polites vibex - males and females common
Nastra probably *neamathla* - but only two seen and could not identify definitely on the wing
Hesperia attalus - males and females infrequent
Wallengrenia otho - infrequent
Anatrytone logan - common males and females
Oligoria maculata - 2 seen
Panoquina ocola - common
Megathymus yuccae - one young tent with live larva
Megathymus cofaqui - 2 tents already emerged

Grammia placentia - larvae common eating flowers of liatris
Utetheisa bella - common in grasses

"Some geometrids and noctuids and pyralids popped up here and there during my walk through the sandhill habitat. I did not check any wetland areas." JS

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

James sends in the following report:

The contributors include James Adams (JKA or no notation), Brian Scholtens (BS), John Hyatt (JH) and Lance Durden (LD). Others are indicated with their records. Most records presented here represent new or interesting records (range extensions, unusual dates, uncommon species, county records, etc.), or more complete lists for new locations/new times of year. All known new STATE and COUNTY records are indicated, and all dates listed below are 2018 unless otherwise specified.

Rocky Face ridgeline, just W of Dalton at crest of Dug Gap Battle Rd., Whitfield Co., Feb. 15 - 16:
NOCTUIDAE: *Feralia major, Lithophane grotei, Cerastis tebebrifera.*

Carbondale, I-75 exit 326, Whitfield Co.:
NOCTUIDAE: *Feralia major* (first individual on January 17 this year).

Taylor's Ridge 5 mi. W of Villanow, Walker Co., Feb. 22 - 23:
GEOMETRIDAE: *Tornos scolopacinarius, Phaeoura quernaria* (early); *Ceratonyx satanaria* (abundant); *Cladara angulineata.* **NOCTUIDAE**: *Feralia major, Psaphida styracis, Lithophane lemmeri* (COUNTY;

extremely uncommon in STATE), *Pyreferra hesperidago, Elaphria georgei* (very early), *Cerastis tenebrifera* (abundant).

Unicoi Park Lodge, Helen, White Co., Feb. 24, Brittany White:
GEOMETRIDAE: *Ceratonyx satanaria* (COUNTY; not many northeastern GA records).

Calhoun, Gordon Co. (JA residence):
GEOMETRIDAE: *Ceratonyx satanaria*, Feb. 19. **NOLIDAE**: *Nycteola metaspilella*, Feb. 21.

Statesboro, Bulloch Co., LD
Aug. 16-22, 2017, with David Grundy:
COSMOPTERIGIDAE: *Cosmopterix sinelinea*. **GEOMETRIDAE**: *Scopula timandrata, Leptostales crossii* (COUNTY). **EREBIDAE**: *Melanomma auricinctaria* (COUNTY), *Sigela eoides*. **NOLIDAE**: *Nola clethrae*. **NOCTUIDAE**: *Capsula oblonga* (6 individuals).
Feb. 17:
GEOMETRIDAE: *Cladara anguilineata* (LD thought this was a COUNTY record, but he examined his collection and found another taken March 12, 2007).

Townsend WMA, McIntosh Co., February 23-24, LD:
GEOMETRIDAE: *Glena cognataria* (13 males, 1 female), *Nemoria bifilata.* **NOCTUIDAE**: *Leucania linda*

Kittles Island, McIntosh Co. (John Hyatt residence), JH and David Grundy, Aug. 19. 2017:
PSYCHIDAE: *Oiketicus abbotii*. **EREBIDAE**: *Simplicia cornicalis*. **NOCTUIDAE**: *Emarginea percara*.

Sapelo Island, McIntosh Co.:
Feb. 23-24, LD:
GEOMETRIDAE: *Iridopsis pergracilis, Hypomecis umbrosaria* (new to island), *Nemoria elfa, N. catachloa.* **EREBIDAE**: *Simplicia cornicalis, Epidromia rotundata* (early). **NOLIDAE**: *Nola ovilla*. **NOCTUIDAE**: *Charadra deridens, Lithophane lemmeri, L. abita*.

Rhine, N 31.986997 W -83.203251, Dodge Co., Dec. 18, 2017, Raymond Little:
NOCTUIDAE: *Condica cupentia* (COUNTY).

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

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

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

Harry LeGrand sends in the following **SUMMER BUTTERFLY RECORDS** for North Carolina. Records are from June through August 2017. Names in parentheses are counties.

Summer 2017 was a rather normal one, in terms of temperature and rainfall across the region. Some areas were well below normal in rainfall later in summer, but no parts of the state were in drought conditions. However, the negative effects of Hurricane Matthew and several other flooding events from last fall left Coastal Plain butterfly populations down 80-90% from those of 2012 and earlier – just as I had predicted over the winter and this spring. Thankfully, butterfly numbers in the western part of the state were close to usual numbers. As expected, based on reports from outside the state in early summer, North Carolina did receive a modest push of eastbound *Vanessa cardui* individuals into the state, starting mainly in July. Though there were several dozen reports of this species, there was only one count in double-digits. On the other hand, southern immigrant species were in low numbers, with only a very few reports of *Pyrisitia lisa* and *Urbanus proteus*; plus, there were no sightings of rare strays of any kind.

PAPILIONIDAE:

Papilio cresphontes, Tom Stock had a respectable total of five, near Duck (Dare) on August 5. The species is essentially just a migrant or stray in the Piedmont (except possibly at a few foothill mountains), so one seen by Taylor Pieph off at Ezell Farm (Mecklenburg) on August 21 was a good find. More significant was the observation by Loretta Lutman of at least one male and at least one female in her Asheboro (Randolph) yard on August 17, 23, and 24. Each of these likely eclosed in her yard or nearby, and she does have hostplants in her garden. She has a record of this swallowtail from last year in her yard, as well. This is likely the first strong indication of breeding by this species in most of the Piedmont, though this should not be implied to be a range expansion but simply a case of a migrant, gravid female ovipositing where it could find a suitable hostplant.

PIERIDAE:

Pontia protodice, the species had a banner early part of the season, with some reports from new locations. John Jarvis had as many as seven (on June 26) in fields around Mebane (Alamance) on several dates in June and July. Harry LeGrand had an excellent ten individuals south of Raleigh (Wake) on June 2, but mowing and spraying later in summer essentially terminated sightings there. A first recent record for Cumberland County was one photographed by M. Morales at Lake Rim Park on June 11. One was photographed by Lee Weber in Union County (**COUNTY**) on June 8, and another was also photographed by Michael Plauche at Brevard (Transylvania) (**COUNTY**) on July 27.

Pyrisitia lisa, of the disappointingly few summer reports, the only significant one was a somewhat early individual near Leicester (Buncombe), as seen by Doug Johnston on July 8. One on the Hanging Rock State Park (Stokes) butterfly count on August 16, as reported by Brian Bockhahn, was a surprise for that northwestern Piedmont location.

LYCAENIDAE:

Atlides halesus, scarce in the Piedmont was one photographed by Lori Carlson and John Jarvis in their yard in Hillsborough (Orange) on July 27.

Satyrium titus, the species was poorly noted this season, for unknown reasons. Rare in the mountains were singles seen by Doug Johnston near Leicester (Buncombe) on June 18 and a good tally of three at nearby Sandy Mush Game Land on June 20, also seen by Doug Johnston.

Satyrium liparops, sadly no reports came from downstate, but two were made in the mountains in Buncombe County: singles seen by Gail Lankford in Britten Cove on June 23 and by Doug Johnston near Leicester on July 6.

NYMPHALIDAE:

Speyeria diana, a female was a bit early (also with a more expected male) in Nancy Cowal's yard in the foothills near Old Fort (McDowell) on June 19.

Polygonia faunus smithi, the first recent record for the northern mountains was one seen well by Cary Paynter at Bald Mountain (Watauga) on August 12. Most recent records are from Mount Mitchell State Park (Yancey), but this is more because of people shunning to look for this elusive species elsewhere in the mountains and taking the "easy road" by going to a well-established location to see them.

Vanessa cardui, of the several dozen reports, the highest total came from Mount Mitchell State Park (Yancey), where Eric Shaw and party observed 12 on August 26.

Lethe creola, an excellent count for the mountains, where generally quite scarce and local (at low elevations), was four as noted by Gail Lankford and Janie Owens near Swannanoa (Buncombe) on August 15.

Hermeuptychia intricata, Harry LeGrand and Salman Abdulali visited the Island Creek (Jones) site where the species has been previously collected, on August 27. All satyrs identified appeared to be this species and not *H. sosybius*, based on the shape of the post-median band. As longleaf spikegrass (*Chasmanthium sessiliflorum*) is a scarce grass in the Coastal Plain, but is the most abundant grass at this high-pH forest site, LeGrand suspects that it is a (or the) hostplant at this site. Obviously, observers need to locate and photograph this butterfly species at additional locales, though it is clear that the great majority of *Hermeuptychia* individuals in the Coastal Plain are

H. sosybius, based on the shape of the post-median band.

Danaus gilippus, the only report for the season was at an expected locale – Fort Fisher (New Hanover), as noted by John Taggart on August 27. This area has a near-annual small population in late summer and fall, in part owing to a large amount of swallow-wort (*Cynanchum angustifolium*), the butterfly's hostplant, at this site.

HESPERIIDAE:

Urbanus proteus, Doug Johnston noted one very early – for the mountains, no less – near Leicester (Buncombe) on June 19. Another in that county was seen by Gail Lankford and party on August 5. There were, however, very few reports from the Piedmont and most of the Coastal Plain.

Thorybes confusis, one photographed by Joe Lafferty in his yard on July 14 in Sunset Beach (Brunswick) was perhaps the first ever reported from a yard in the state!

Staphylus hayhurstii, this scarce species was gratifyingly seen at scattered sites across the state. Despite it being known from just two mountain counties, there were a number of reports from one of them (Buncombe). In this county Gail Lankford, Janie Owens, and others saw the species on several dates in the Swannanoa area, as did Doug Johnston in the Leicester area, with a peak there of three on August 1.

Polites vibex, this species is a rare breeder in the Piedmont and is essentially limited to the eastern and southern fringes. Taylor Piephoff had a likely record Piedmont tally of five on August 19, at Ezell Farm (Mecklenburg), where there is presumably a small resident population.

Problema byssus, one reported as "worn" by Bud Webster near Raleigh (Wake) was odd for the date of August 21. Normally, the first brood is long finished by then, and the second brood begins around this date. Wake County lies along the northern edge of the species' range.

Euphyes dion, an excellent count for the southern Piedmont, which lies at the northern edge of the range, was six seen by Carolyn Seaton at Elon Park (Mecklenburg) on August 30.

Euphyes dukesi, the only report was of one at a known site at Duck (Dare) on August 5, as seen by Tom Stock.

Euphyes berryi, the most significant record for the season was the filling of a large gap in the species' known range, at the Sandy Run Savannas State Natural Area (Onslow) (**COUNTY**). At this site, Salman Abdulali and Ed Corey photographed different individuals on August 26. This record fills a gap of perhaps 100 miles between Craven and Carteret Counties to the northeast and Columbus County to the southwest. Though the individuals were found in savanna habitat, the species has still not been found in similar habitat in well-studied savannas at Holly Shelter Game Land (Pender) and Green Swamp (Brunswick), or in nearly all of the savannas surveyed in coastal South Carolina. Thus, much is still to be learned about why the species is so scarce and/or local in the Carolinas, though most of the North Carolina records are actually from ditches and the margins of canals (which are not rare habitats at all!).

Lerodea eufala, John Jarvis photographed one, perhaps a migrant, at Mebane (Alamance) (**COUNTY**), on July 16-18, one of a few Piedmont reports for the season. It is not clear if the species is a short-distance migrant to the Piedmont or is a "winter-stressed" resident species that has life stages that occasionally survive a winter to produce a small summer brood. The latter is more likely the case, as it is difficult to believe this small skipper actually migrates moderate distances.

Calpodes ethlius, not surprisingly, the only seasonal report came from a consistent locale – Duck (Dare), where Tom Stock saw one at a stand of cannas on August 5.

Ocola Skipper, quite early, especially in the mountains, was one seen by Doug Johnston in the Leicester (Buncombe) area on June.

[Note: Harry's report should have been published in the December 2017 issue of the NEWS. Editor's mistake.]

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

Brian sends in the following report:

NOCTUIDAE:

Alypia wittfeldii - Botany Bay Wildlife Management Area, Charleston County, SC, 05-April-2017 - William Johnston, photo - **State Record**.

CRAMBIDAE:

Palpita quadristigmalis - Caw Caw County Park, Charleston County, SC, 26 May 2017 - Brian Scholtens.

TENNESSEE: John Hyatt, 233 Park Ridge Court, Kingsport, TN 37664, E-Mail: jkshyatt@centurylink.net

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

Monica Krancevic submits the following report for November 11, 2017 - February 15, 2018: Lake Jackson, Brazoria County, TX, Patio, Small lot, Private Residence (29.04N, 95.42W).

Ghastly late autumn-winter on the SE Texas Gulf Coast with several hard freezes, sleet and snow.

All observations are posted at: http://www.inaturalist.org/observations/krancmm

NEW at LOCATION

Family	Species	Dates	Comments
Euteliidae	*Paectes nubifera*	17-Dec	Female
Noctuidae	*Euxoa inconcinna*	26-Nov	Tentative Image ID: ECK
Noctuidae	*Leucania subpunctata*	04-Dec	Image ID:ECK

2017 showed a few interesting changes from 2016:

Erinnyis obscura	2016 – 2 individuals; 2017 – 9 records (13 individuals) through 30-Dec-2017
Manduca sexta	2016 – 8 records (14 individuals); 2017 – 4 individuals
Lineodes interrupta	2016 – 2 individuals; 2017 – 7 records (12 individuals) with 4 at one time on 11-Oct-2017
Magusa divaricata	2016 – 4 individuals; 2017 – 8 records (11 individuals). Increase observed throughout TX on iNaturalist

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Stuart Marcus sends this report for November 11, 2017 – February 15, 2018: Trinity National Wildlife Refuge, Liberty, Liberty County, TX (30.097N, 94.765W).

New species added to the Refuge between these dates

COUNTY RECORDS

Family	Species	Dates	Comments
Geometridae	*Iridopsis vellivolata*	2-Nov-17	
Tortricidae	*Coelostathma placidana*	20-Dec-17	
Ypsolophidae	*Ypsolopha unicpunctella*	11-Jan-18	

VIRGINIA: Harry Pavulaan, P.O. Box 1124, Herndon VA 20172, E-Mail: pavulaan@aol.com

BUTTERFLIES:

Pieris rapae – Loudoun County: Leesburg, continuous flight through November and last seen 11/21/17 and 12/3/17, despite several light frosts and one intervening cold snap with nights into upper teens (obs. H. Pavulaan). Richmond City: Maymont Park, 11/21/17 (Bill Hark).

Colias philodice – Loudoun County: Leesburg, 12/4/17 (obs. H. Pavulaan). Lovettesville, 10/15/17 (female observed by H. Pavulaan for several minutes with no net handy, yellow FW's and white HW's). Richmond City: Maymont Park, 11/21/17 (Bill Hark).

Colias eurytheme – Loudoun County: Leesburg, also a continuous flight through November and into December. Despite only a few nightly frosts, but with two cold snaps with single night each dropping into upper teens, late November and December dates follow with numbers observed: 11/21/17 (1), 12/3/17 (3), 12/4/17 (5), 12/18/17 (1), 12/19/17 (1) (obs. and photos H. Pavulaan).

Phoebis sennae – Loudoun County: Lovettesville, 10/15/17 (10+ observed by H. Pavulaan heading due north at breakneck speed through one backyard. Interestingly, virtually all of them flew exactly following the same path as the others. Had I had a net, I could have stood in the path and waited for one.)

Phoebis agarithe – Loudoun County: Lovettesville, 10/15/17 (obs. H. Pavulaan). While I normally don't like to report sight records like this, I am very familiar with this butterfly over several years of collecting in Florida. This flew on the date when numerous *P. sennae* were flying northward through a relative's backyard. This individual came down a grassy hillside right toward our party, flew literally right past me with it's powerful bouncy flight. Did not follow the path of the *P. sennae* but very close, and heading north. Bright unmarked fluorescent orange color gave it away.

Everes comyntas – Loudoun County: Leesburg, 10/22/17 (obs. H. Pavulaan).

Celastrina neglecta – Loudoun County: Leesburg, 10/9/17, 10/10/17 (2), 10/15/17, 10/22/17 (obs. H. Pavulaan). Odd fall brood in small numbers this year, likely due to prolonged warmth. Unfortunately, there are no potential hosts in proper floral bud stage at this time of year.

Euptoieta claudia – Loudoun County: Leesburg, 11/21/17, 12/3/17 (obs. H. Pavulaan). Richmond City: Maymont Park, 12/4/17 (Bill Hark).

Vanessa cardui – Loudoun County: Leesburg, 10/15/17 - 10/22/17 (10+ obs. in flower garden each day, H. Pavulaan).

Junonia coenia – Loudoun County: Leesburg, also a continuous flight through November and into December. Despite only a few nightly frosts, but with two cold snaps with single night each dropping into upper teens, late November and December dates follow with numbers observed: 11/21/17 (2), 12/3/17 (1), 12/4/17 (2), 12/18/17 (1), 12/19/17 (1) (obs. H. Pavulaan). Richmond City: Maymont Park, 11/21/17 (Bill Hark).

Danaus plexippus – Loudoun County: Leesburg, 10/15/17, first evidence this year of the southerly migration. Not seen for several days and on this day, several were observed flying southeastward through my garden. Not seen on 10/16/17 or later!

Atalopedes campestris – Loudoun County: Leesburg, 10/22/17 (30+ obs. in flower garden, H. Pavulaan). Strong late brood.

MOTHS:

Euxoa albipennis – Loudoun County: Leesburg, 9/29/17 (coll. H. Pavulaan).

Manduca sexta – Loudoun County: Leesburg, fully grown larvae on 9/29/17 and 9/30/17 on Banana Pepper and Sweet Bell Pepper, both fully parasitized (obs. H. Pavulaan).

Scopula limboundata – Loudoun County: Leesburg, 5/29/17 (coll. H. Pavulaan)

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The Southern Lepidopterists' News is published four times annually. Membership dues are $25.00 annually. The organization is open to anyone, especially those with an interest in the Lepidoptera of the southern United States. Information about the Society may be obtained from Marc Minno, Membership Coordinator, 600 NW 34 Terrace, Gainesville, FL 32607, E-Mail: mminno@bellsouth.net, and dues may be sent to Jeffrey R. Slotten, Treasurer, 5421 NW 69th Lane, Gainesville, FL 32653.
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