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OF THE UNITED STATES (WEBSITE: www.southernlepsoc.org/)

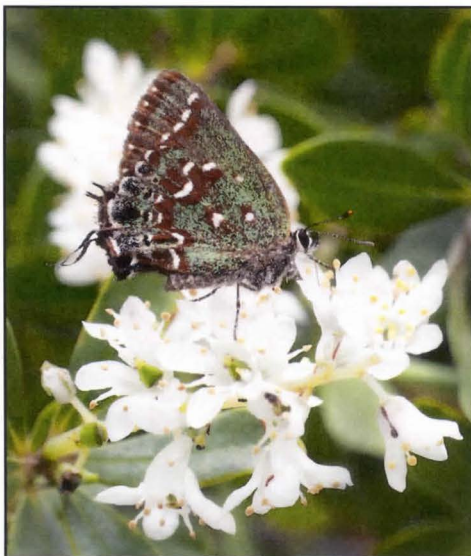
J. BARRY LOMBARDINI: EDITOR

SEARCHING FOR HESSEL'S HAIRSTREAKS IN ALABAMA

TEXT BY PAULETTE HAYWOOD OGARD

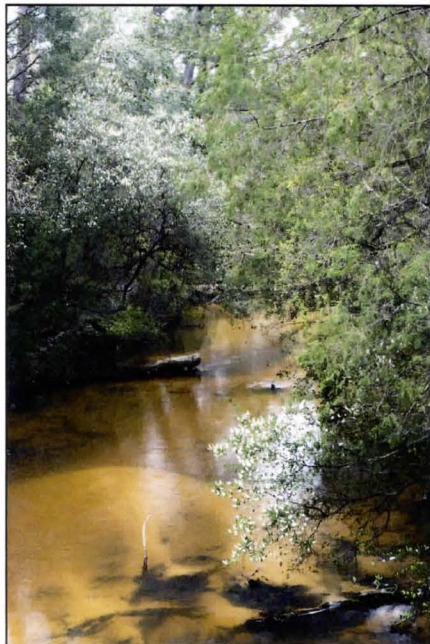
PHOTOGRAPHY BY SARA BRIGHT

On March 29, 2010, Sara Bright and I decided to make one more effort to find Hessel's Hairstreaks (*Callophrys hesseli*) in our home state of Alabama. Although field-guide range maps indicated that their population extends into Alabama, we had not been able to find a single documented sighting. We began to suspect that the maps were more indicative of the historic range of the butterflies' sole caterpillar host, Atlantic White Cedar (*Chamaecyparis thyoides*), than the butterfly itself. Our past attempts to find the hairstreaks by locating stands of the cedars had been disappointing: most trees had disappeared due to logging, land development, or hurricane damage. And none had yielded any little green butterflies.

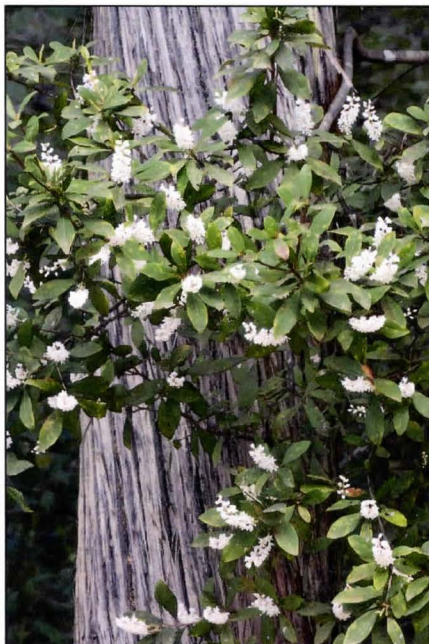


Hessel's Hairstreak (*Callophrys hesseli*)
nectaring on Black Titi
(*Cliftonia monophylla*)

We had travelled to the Florida Panhandle to see Brown Elfins. While watching the elfins, we were delighted to see that Hessel's Hairstreaks were also in the mix. Realizing that we were definitely within their flight time, we decided to cancel plans to search for Brown Elfins in Alabama and look for Hessel's Hairstreaks instead. On a whim, we made a beeline for the state line, crossed the Perdido River, and began to use our Delorme map to find the nearest wetlands. Turning onto roads that led us near the banks of the river, we found ourselves on the outskirts of the tiny town of Seminole (pop. 1,160). Lost River Road provides access to a community of modest river homes, and we were elated to see Atlantic White Cedars interspersed along its edges. We were even more elated to see a tiny triangular shape dart out and back from the top of the tallest cedar. Fading daylight prevented us from making a positive ID, but the next morning we were able to confirm that Hessel's Hairstreaks swirled among the treetops.



Atlantic White Cedar
(*Chamaecyparis thyoides*) and
Black Titi (*Cliftonia monophylla*)



Black Titi (*Cliftonia monophylla*)
against bark of Atlantic White
Cedar (*Chamaecyparis thyoides*)



Egg



Early instar



Caterpillar

Narrow roads filtered through the area and so did the cedars. While it did not resemble the pristine Atlantic White Cedar wetlands we had imagined—many of these trees grew along driveways, near boat docks, and on yard edges—whenever we found tall stands of trees, we almost always saw a few hairstreaks. Our total count was not huge (approximately 20), but Hessel's were dispersed throughout the area.

Atlantic White Cedars are evergreen conifers that reach 60-80 feet in height. Their foliage is feathery and grows in flattened sprays. Their range is limited to a ribbon of freshwater wetlands along the Atlantic and Gulf Coasts. In Alabama, they are known from only four counties and have all but disappeared from most. The cedars' lightweight, rot-resistant wood made them an eagerly sought commodity during the past two

centuries, and they were harvested almost out of existence. Seminole, located in Baldwin County, was originally a logging town, its name chosen not to commemorate a tribe of Native Americans but to honor the Seminole Lumber Company, which had holdings in the area. We had heard of another site in Baldwin County, dubbed "the Perdido Tract" that had recently been acquired by The Nature Conservancy. Located near Gateswood, it was said to contain a large Atlantic White Cedar wetland. Encouraged by our success in Seminole, we decided to continue our search.

The tract is east of Highway 112 and south of Gateswood, but once we entered it, we had no idea where to go. We decided to try to wind our way to the river. After a few false starts, we turned onto a rutted, sandy road that contained the unspoiled Atlantic White Cedar habitat we had imagined. Cedars were everywhere, in all shapes and sizes. Giants towered above the landscape and saplings sprouted from the road ruts. We looked at the tops of the tallest and were not disappointed. Hessel's Hairstreaks perched on the branchlets.

During the height of their spring flight, Hessel's Hairstreaks were by far the most common butterfly along the white cedar corridor. Our high count was 75. Other lepidoptera included Palamedes Swallowtails, Eastern Tiger Swallowtails, Cloudless Sulphurs, Red-banded Hairstreaks, Southern Pearly-eyes, and Carolina Satyrs. As we walked, we disturbed dozens of chocolate moths (later identified as *Argyrostromis sylvanum*, *A. erasa*, and *A. quadrifilaris*). The most impressive resident (at least to me, as I backpedaled in the other direction) was a fat and happy rattlesnake that stretched from one side of the road to the other.

Our focus is on life history, so we visited this site several times.....(Continued on page 64)

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The Southern Lepidopterists' Society is open to anyone with an interest in the Lepidoptera of the southern region of the United States. Annual membership dues:

Regular	\$20.00
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A newsletter, The News of the Southern Lepidopterists' Society is published four times annually.

Information about the Society may be obtained from the Membership Coordinator or the Society Website: www.southernlepsoc.org/

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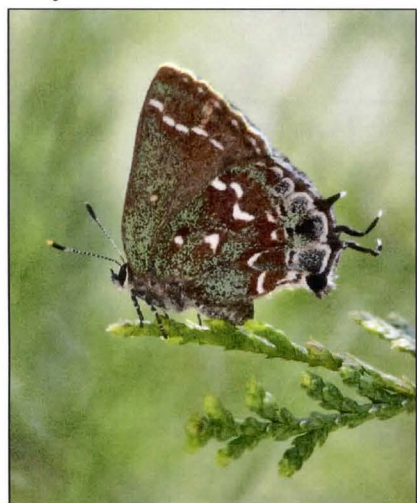
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Chrysalid

(Continued from page 62).....over the next three years to document as much as possible. We observed that (as is true of many butterfly species) male and female Hessel's Hairstreaks lead very different lives. While males perched on the treetops and engaged in their eye-catching aerals, females removed themselves from the commotion and settled at lower levels. They primarily rested there until early afternoon when they searched for ovipositing sites. The first female we saw deposit an egg chose a tall tree but then selected a limb that was only five feet from the ground. Others were observed using saplings. Eggs are flattened, pale blue discs and are deposited singly on branchlets. When we returned to search for caterpillars, we found several early instar as well as a final instar larvae on branches head-high and lower. First-instar caterpillars appear to be a single flake of foliage, but as they grow, their coloration provides remarkable camouflage. They are as green as their cedar hosts, and are ornamented with pale chevrons that give the illusion of overlapping cedar scales. Chrysalides are bark-brown and are formed near the base of the tree.



Perched Hessel's Hairstreak

We still do not fully understand the nectar requirements and preferences of Hessel's Hairstreaks in this locality. Although we estimate that we totaled 25 observation hours, we witnessed only four butterflies visiting flowers: once in Seminole and three times in the Perdido Tract. Each chose Black Titi (*Cliftonia monophylla*), a prevalent spring-blooming shrub that often grows at the base of the cedars.

Our latest encounter with Alabama's Hessel's Hairstreaks occurred in the summer of 2012. We had travelled again to Florida's Panhandle in search of the rare Pot of Gold Lily, and a Hessel's Hairstreak flew up from the path and perched on a short Atlantic White Cedar. On August 2, we detoured through the Perdido Tract and were delighted to find two tiny green hairstreaks among the cedars, indicating that these butterflies may have at least a partial third brood.

Today, thanks to a remarkable partnership between the Alabama Chapter of The Nature Conservancy, the Forever Wild Program, and the State Lands Division, the Perdido River-Longleaf Hills Tract consists of more than 9000 acres of forested wetlands that supports the Atlantic White Cedar community as well as an upland pine-sandhill forest. It provides a link in a much larger endeavor that could ultimately supply a travel route for wildlife across southwest Alabama and the Florida Panhandle. If habitat conservation efforts like this continue, more thriving colonies of Hessel's Hairstreaks may ultimately be discovered in Alabama.

The authors are grateful to Dr. Peter Van Zandt for identifying the chocolate moths.

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**RUSTIC SPHINX, *MANDUCA RUSTICA* (SPHINGIDAE),
LARVAL HERBIVORY ON NON - NATIVE *BUDDLEIA DAVIDII*
IN GEORGIA**

BY
LANCE A. DURDEN

Buddleia (*Buddleja* of some authors) *davidii* (family Loganiaceae or Buddleiaceae/Buddlejaceae according to different authors), often called butterfly bush, is native to China and Japan but it is widely planted around much of the world, especially in North America and Europe, as an ornamental. It is favored by some entomologists, particularly lepidopterists, because the inflorescences are highly attractive to nectar feeding adult insects including butterflies during daylight hours and moths mostly at night. However, because this shrub is not native to North America or Europe, it is often considered to be an invasive species and can spread to areas where native vegetation would normally persist, especially in the United States (Borge, 2012) and Britain (personal observations). In fact, some growers in non-native regions recommend removing the inflorescences after they have bloomed in an attempt to prevent seed dispersal into native plant communities (Larson, 2012).

Although many adult insects feed on nectar from *B. davidii* blooms in North America, Borge (2012) reported only one native caterpillar species known to feed on the leaves of this shrub in the USA. Lacking or having very few native insect herbivores is a fairly widespread phenomenon for plants introduced into new regions because the insects that evolved to feed on and exploit the leaves were typically not introduced with the plant (Liu & Sterling, 2006).

The Borge (2012) record was from the Natural History Museum's Lepidoptera foodplant database which lists larvae of the elachistid *Pyramidobela angelarum* Keifer (buddleia budworm moth) as feeding on *B. davidii* leaves. This moth has been recorded from California but it has presumably been introduced from elsewhere. However, a Wikipedia site (Anon, 2013) lists several species of Lepidoptera with larvae that feed on *B. davidii* leaves. Most of these are Asian species that occur naturally in China and Japan within the native range of *B. davidii*. However, in addition to *P. angelarum*, the following two species were recorded from North America: *Argyrotaenia franciscana* (Walsingham) (orange tortrix moth — recorded as *A. citrana* which is currently treated as a junior synonym of *A. franciscana*) (Tortricidae) and *Euphydryas chalcedonia* (Doubleday) (variable



Fig. 1. Lateral view of 5th instar larva of *Manduca rustica* feeding on *Buddleia davidii* leaves, Bulloch Co., Georgia, July 2011.

checkerspot butterfly) (Nymphalidae). All three of these lepidopteran species occur in the western United States and not in eastern states.

In July 2011, a full grown, fifth instar larva of *Manduca rustica* (Fabricius) was found devouring leaves of a *B. davidii* bush near Statesboro (Bulloch Co.), Georgia (Figs. 1, 2). The identification was made based on the seven pairs of lateral purple-gray-white stripes, the dorso-ventrally elongated spiracles, the highly granulated caudal horn, the green head lacking stripes, the numerous small spiny protuberances on the dorsal thoracic region, and by comparison with images in Wagner (2005) and Tuttle (2007). Nevertheless, the purplish black sections of the lateral stripes are paler in the Georgia specimen shown in Figures 1 and 2 than in most specimens.



Fig. 2. Dorsal view of 5th instar larva of *Manduca rustica* on *Buddleia davidii*, Bulloch Co., Georgia, July 2011.

Larvae of *M. rustica* are known to be polyphagous with larval foodplant records including various members of the families Boraginaceae and Verbenaceae, crossvine (*Bignonia capreolata*) and other *Bignonia* species, knockaway (*Ehretia anacua*), lantana (*Lantana camara*), beautyberry (*Callicarpa americana*), desert willow (*Chilopsis linearis*), yellow elder (*Tecoma stans*), fringe trees (*Chionanthus* spp.), ashes (*Fraxinia* spp.), hollies (*Ilex* spp.), Cordias (*Cordia* spp.), beebrushes (*Aloysia* spp.), jasmines (*Jasminum* spp.) and the introduced (non-native) matgrass (*Nardus stricta*) and cape honeysuckle (*Tecomaria capensis*) (Hodges, 1971; Covell, 1984; Wagner, 2005; Tuttle, 2007). However, there are no previous records of *M. rustica* larvae feeding on leaves of *B. davidii* and it will be of interest to see if additional records of this hostplant association are noted in the future. There are records of larval herbivory on *B. davidii* leaves by three other sphingid species in invasive regions for this plant outside of North America. These records are for *Coelonia fulvinotata* (Butler) in east Africa and for *Aellopus tantalus* (L.) and *Enyo ocypete* (L.) both in Brazil (Anon, 2013). The latter two sphingid species have been recorded in southern Florida (Tuttle, 2007) so records of their larvae feeding on *B. davidii* leaves in North America may be forthcoming.

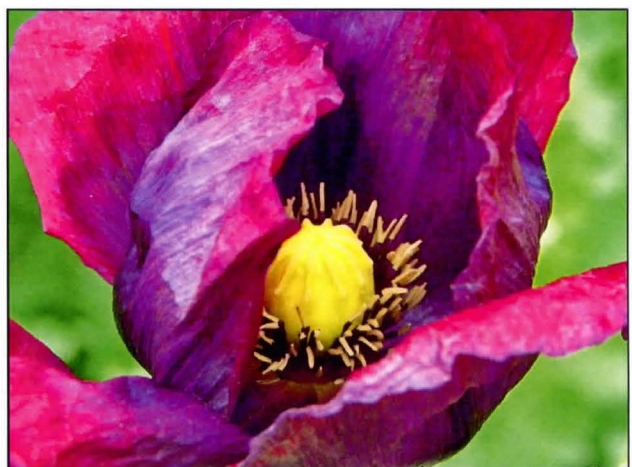
LITERATURE CITED

- Anon., 2013. *List of Lepidoptera that feed on Buddleja*. Wikipedia entry. http://en.wikipedia.org/wiki/List_of_Lepidoptera_that_feed_on_Buddleja (accessed, 23 April 2013).
- Borge, M. A., 2012. Butterfly bush: are there better alternatives? *Butterfly Gardener* 7(2): 4-6.
- Covell, C. V., Jr., 1984. *A field guide to the moths of eastern North America*. Houghton-Mifflin: Boston. 496 p.
- Hodges, R. W., 1971. *The moths of America north of Mexico*. Fascicle 21. Sphingoidea. E. W. Classey Ltd. and R. D. B. Publications, Inc. 158 p. + 14 plates + xii.
- Larson, L., 2012. Butterfly bush: ultimate butterfly magnet. *Butterfly Gardener* 7(2): 8-10.
- Liu, H & P. Stiling, 2006. Testing the enemy release hypothesis: a review and meta-analysis. *Biological Invasions* 8: 1535-1545.
- Tuttle, J. P., 2007. *The hawk moths of North America: a natural history study of the Sphingidae of the United States and Canada*. The Wedge Entomological Foundation, Washington DC. 253 p.
- Wagner, D. L., 2005. *Caterpillars of eastern North America*. Princeton Field Guides. Princeton University Press, Princeton. 512 p.

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Single form of red opium poppy with honeybee, the main pollinator. Butterflies ignore these poppies.



Single form of purple opium poppy. Honeybees are chief pollinators.

Photos from the Garden of Gary N. Ross during the Spring of 2013 (Baton Rouge, LA).

ANOTHER FINE MESKE

BY

CRAIG W. MARKS

Several years ago I was reviewing a spreadsheet posted online by Kreg Ellzey which listed the various butterflies he had seen in Louisiana. His list included Meske's Skipper, *Hesperia meskei*, seen in Kisatchie National Forest. Then, in 2007, while writing an article on the Butterflies of Central Louisiana (See *Southern Lepidopterists Society News*, Vol. 30 No. 1), I corresponded with Kil Roever about his sightings in that region in the early 1970's, and learned these sightings included the Meske's Skipper.

Several of the field guides I had at the time did not include this skipper as part of Louisiana's fauna. For example, Opler's range map excluded both Louisiana and Mississippi, as did Kaufman. The only Louisiana reference I could find was by Glassberg *et al.* (2000), "A recent report from southern LA may mean that there are populations connecting the east Texas and Florida populations."

Pelham (2008) lists *H. meskei* as having three subspecies. The subspecies in Texas is *H. m. meskei*, described by Edwards in 1877. The subspecies in Florida (excluding the Keys) is *H. m. straton*, also described by Edwards, in 1881. The third subspecies is limited to the lower Keys and appears to be endangered.

Also called the Dixie Skipper (Pyle, 1981) and the Gulf Coast Skipper (Scott), its range is primarily across the southern United States from southern North Carolina to Florida with isolated colonies in central Arkansas and east Texas (and reported just this past October from Oklahoma). According to Pyle, "This species has the most narrowly restricted southern range of any *Hesperia*."

Glassberg (1999) described it as, "One of our more elusive and rarely seen skippers," while Kaufman called it, "an elusive skipper of the southeast. Rare and local within its range." According to Cech and Tudor (2005), little was known about it for nearly 125 years but recent field studies in North Carolina and central Florida have increased that knowledge. They describe it as living mainly in dry, sandhill pinelands or similar habitat, and that it is well adapted to fire-prone habitats. They agreed with prior characterizations of this skipper as a solitary species, rarely found in numbers. They also note that when at nectar, the skipper may stay put for a considerable period of time.

Emmitt (2005) described its preferred habitat as, "Sunny open longleaf pine stands and broomsedge fields.

Frequently burned areas where the grass is not mowed is a favorable habitat. Adults fly in two broods, the first during June and the second from early September until late October." He also commented that finding this rare skipper was very difficult, suggesting that it be looked for in open grassy areas in longleaf pine stands with lots of blue flowers. Harris noted it seemed to be attracted to yellow flowers. Ultimately, I found it attracted to both blue and yellow flowers, but more so to yellow.

Its larval host plants have been identified as grasses including little bluestem *Andropogon scoparius* and arrowfeather three-awn *Aristida purpurascens*. According to Allen, little bluestem can frequently be found in Louisiana along the edges of pine forests and disturbed areas, particularly west of the Mississippi River. He reported it as present in Natchitoches Parish, as well as other parishes in that region such as Grant and Rapides Parishes. Arrowfeather threeawn is also present in Natchitoches Parish, described as frequently found along the edges of forests in the pine regions of the state.

The guides I referenced agree that *meskei* has two broods, May to June and September to October. Most suggest it is more common during the second brood. In fact, Emmitt (2005) noted that the first brood was rarely recorded in North Carolina.

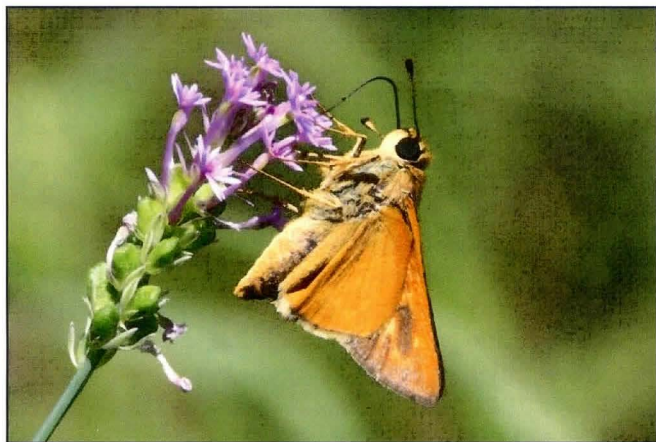
This skipper was not reported from Louisiana by any of the early authors reporting on pre-1971 sightings. The only Louisiana reference on BAMONA is Jeff Trahan's report on 12-VI-2009. The Lepidopterist's Society season summary records included Jeff Trahan's and my separate sightings in 2009 and Jeff's and my joint sighting in 2010. In NABA's database, Ellzey's sighting on 15-VI-2003 was listed as the first sighting for Louisiana. While not actually the first sighting (Roever's sightings were more than 30 years earlier, well before NABA came into existence), Kreg's report appears to have been the first made to NABA. He ultimately saw 18 individuals over three days between 15-VI and 23-VI-2003 in Kisatchie National Forest.

The Kisatchie National Forest is the only National Forest in Louisiana. Spread across seven of the ten parishes that make up CenLa (central Louisiana), it is divided into five managed units that are called Ranger Districts and which total over 604,000 acres of public lands. The Kisatchie Ranger District of Kisatchie National Forest is located in the hilly, pine-strewn regions of Natchitoches and Rapides Parishes, north and west of Alexandria, LA. Some of the hills and mesas in

the Kisatchie Ranger District qualify as steep and rocky, although none are more than 400 feet high.

Within that District is the Longleaf Vista Recreation Area, surrounded on three sides by the 8,700-acre Kisatchie Hills Wilderness. This day-use recreation area offers a variety of uses including picnicking and a 1.5 mile interpretive trail that makes a loop through a wide variety of forest settings from meadows, to bottomland hardwoods, to high mesas, to creeks. The Wilderness Area has several extensive trails such as the Backbone Trail and the Caroline Dormon Trail Spur. The Caroline Dormon Trail is 10.5 miles of trail that starts on Forest Highway 59 (the Longleaf Trail Scenic Byway, a 17 mile drive thru the Wilderness Area) and ends just short of the Kisatchie Bayou Recreation Complex. To get there from Interstate 49 take the Derry exit which is exit number 119 and then drive south on LA Highway 119 5.5 miles to FH 59. Turn right (west) on FH 59 and travel 3 miles to the sign for the Longleaf Vista Area.

I should note that the Lepidopterists' Society's season summary records also listed a report by Kevin Cunningham in 1996. It so happens that Kevin and I had become friends, communicating several times a year, so I contacted Kevin about his report. The skipper he reported as *meskei* was caught on 24-IX-1996, near



Pictures taken by Jeff Trahan (12-VI-2009).

Schriever, Louisiana, less than a mile from the northern most tip of Terrebonne Parish. This would truly qualify as "southern" Louisiana, and, I believe, was the record referenced by Glassberg *et al.* (2000). When I inquired about the habitat, Kevin's response was, "It was caught in a weedy/grassy area around a sewage retention pond about a mile from the nearest woods (no piney woods around here)".

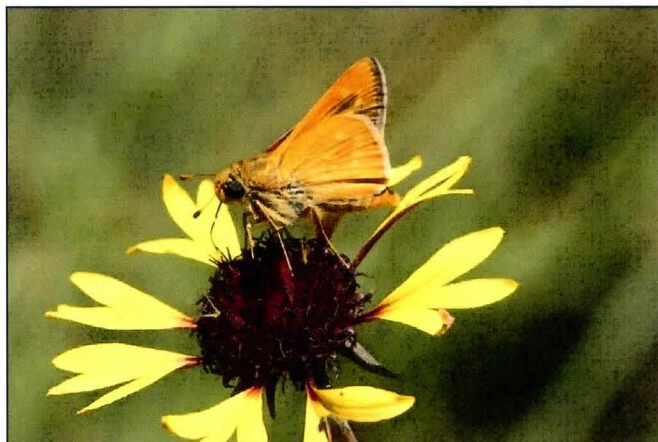
This type of habitat just didn't match my research data on *meskei*, so I asked Kevin if his mystery bug might be something else. After consulting with Andy Warren (our skipper "go to guy" here in Louisiana), the resulting diagnosis was that the mystery bug was a male Yehl

Skipper (*Poanes yehl*).

Returning to my hunt for this elusive skipper, in 2006, I had communicated with Kreg Ellzey and asked where he had seen it within the National Forest. The area he identified was within the Natchitoches Parish Unit, along the Longleaf Trail Scenic Byway west of the Longleaf Vista. Unfortunately, when I initially checked the area it had recently been burned and was devoid of any activity. Since 2009, the area has regenerated but I have yet to see any Meske's Skippers even though the area has been searched regularly.

As noted above, I first located this unique skipper in 2009. In 2008, Kil Roever had directed me to FS 321, a red dirt road within that Unit, and suggested that I begin to search where it intersected with the Scenic Byway (FH 59), then working back toward FS 380, another dirt road. The habitat in this particular area matches closely that described by Cech and Tudor and Emmitt as the habitat preferred by this skipper, drier, open pine forest with several types of grasses growing beneath the pine trees.

Before I could get up to Kisatchie, I passed this information along to Rosemary Seidler and Jeff Trahan from Shreveport who visited the area on 12-VI-2009.



They were able to locate the skipper precisely where Kil had predicted it would be, and then had called me to pass along their information (see pictures). I visited five days later on 17-VI-2009 and saw 34. Also present in the area were Palamedes Swallowtails, Spicebush Swallowtails, Hoary Edges, Northern Broken-dashes, Southern Cloudywing, Dusky Roadside Skippers and Swarthy Skippers.

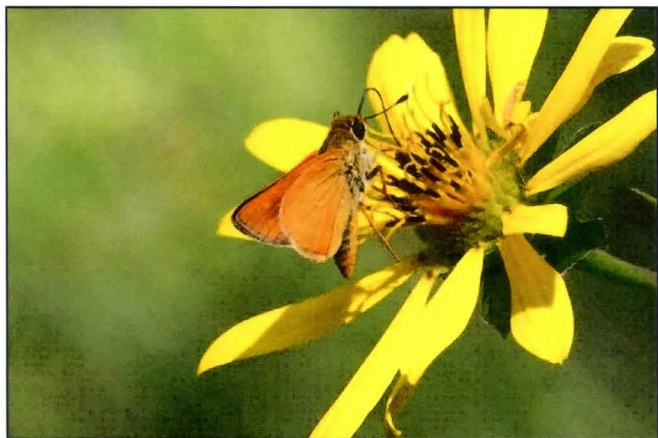
Recognizing the uniqueness of the bug and the numbers seen the year before, Jeff Trahan and I agreed to schedule the 2010 Kisatchie Longleaf Trail NABA 4th of July Count for 19-VI-2010, timed to match the flight of this skipper. The count set a record for the most Meske's Skippers tallied during one of these counts, 42.

Also seen flying that year was one Wild Indigo Duskywing, Swarthy Skippers, Southern Cloudywings, Pearl Crescents, Gray Hairstreaks, and Spicebush Swallowtails.

In 2012, I visited Kisatchie on 16-VI. The weather was sunny, warm (but not brutal hot) and dry. I ended up seeing 31 species. There were a lot of butterflies flying, but they were mostly three species, Little Yellows (present at virtually every area I inspected), Common Buckeyes and Pearl Crescents. Ten days earlier, Jeff Trahan had seen these skippers at the same location as

none on this trip. There was a single Southern Pearly-eye (this is a new area within Kisatchie for this butterfly) and several Common Wood Nymphs flying in the area. I only see this latter bug at a couple of locations within the state and not every year, so it was nice to find them.

I still have only seen this skipper in one particular area within the Unit, in the area of FS 321 between FH 59 and FS 380. However, as I was researching this article, I communicated with Ricky Patterson from Mississippi about an article I was researching on Berry's Skippers.



Again, pictures courtesy of Jeff Trahan.

While exchanging information, he advised he had seen this bug three times in Louisiana, all three occasions being in the Natchitoches Parish Unit of Kisatchie. Specifically, he reported seeing, "about six *Hesperia meskei* June 4, 2004, about a dozen June 10, 2006, and over 40 on June 19, 2009," two days after I was there. He advised that they were widespread along FH 59, the Scenic Byway, the same general area identified by Ellzey.

So, at Kisatchie it appears to primarily fly in mid-June. I am unaware of any reports of a second brood. Look for it in the ditches that border FS 321. Specifically, look for it as it takes nectar from what I believe to be a member of the *Coreopsis* family, a type of tickseed. This flower has a yellow center. There is a similar flower growing not just in the ditches, but also back in the pines. This one is a type of coneflower with a black center, and these skippers like it as well. In fact, they seem to like yellow flowers in general, but will also visit blue flowers. The photographs are presented courtesy of Jeff Trahan.

Consistent with Harris' (1972) observations in Georgia, the adults would appear as if out of nowhere from the open woods and alight on scattered flowers. It is a fast flier. In fact, you can hear it as it "buzzes" past, but once it lands on a yellow flower, it can be approached and easily photographed and/or netted. Contrary to some of the comments noted above, when it is on the wing in



before, and I was concerned their flight might be over even though I was there on the same weekend I had found them the last 3 years,

The east side of the particular road where they had been seen in the past had not only been burned, but there were actual logging operations ongoing on that same side of the road. I saw none between 10:00 and 11:00, but then saw four when I returned around 12:00. Other butterflies noted included two "summer brood" Zebra Swallowtails with the characteristic darker shading and long tails, a late date for this second brood. I also saw a male Great Southern White, possibly the first recorded for the location and parish.

After lunch, I walked the Caroline Dohrman Trail along a small creek in an area of abundant sweetleaf bushes where I had found King Hairstreaks in the past but found

Kisatchie, it is present in numbers. As I have noted, on two of the three times I have found it, over 30 were seen, both males and females.

As noted above, the reference to a Meske's Skipper from southern Louisiana has been found to be incorrect. That leaves all current reports of Meske's Skippers in Louisiana to be from Natchitoches Parish. I believe this population in Louisiana is an extension eastward of the subspecies in east Texas. The habitat in Kisatchie is virtually identical to the Big Pineywoods region of east Texas. Wauer (2006) has indicated this skipper can be

found immediately across the Louisiana-Texas state-line in Sabine National Forest, a driving distance of about 50 miles, less as a crow flies (I'm sorry, I don't know how to calculate that distance "as a skipper flies"). Other locations in east Texas, near the state-line, where this skipper has been reported are the Angelina National Forest and Big Thicket area, all well within 100 miles of Kisatchie NF. Despite Mather's predictions, I've found no record of this skipper in Mississippi, so it does not appear the population at Kisatchie is an extension of the Florida subspecies.

References

- Allen, C.M., D.A. Newman and H.H. Winters, 2004. *Grasses of Louisiana, 3rd Edition*. Allen's Native Ventures, LLC, Pitkin, LA. 374 pp.
- Brock, Jim P. and Kaufman, Kenn, 2003. *The Kaufman Focus Guide to Butterflies of North America*. Houghton Mifflin Co., 384 pp.
- Cech, R., and G. Tudor, 2005. *Butterflies of the East Coast: An Observer's Guide*. Princeton University Press, Princeton, NJ. 345pp.
- Glassberg, Jeffrey, 1999. *Butterflies through Binoculars: The East*. Oxford University Press, New York and Oxford. 242 pp.
- Glassberg, J., M. C. Minno, J.C. Calhoun, 2000. *Butterflies through Binoculars, A Field, Finding & Gardening Guide to Butterflies in Florida*. Oxford University Press, New York, NY, 242 pp.
- Emmitt, Randy, 2005. *Butterflies of the Carolinas and Virginias, Interactive CD*, Metalmark Press.
- Harris, L. Jr., 1972. *Butterflies of Georgia*. University of Oklahoma Press, Norman, OK. 326 pp.
- Howe, William H., 1975. *The Butterflies of North America*. Doubleday and Company, Inc., Garden City, NY, 631 pp.
- Klots, A. B., 1951, fifth printing 1969. *A Field Guide to the Butterflies*. Houghton Mifflin Co., Boston, MA. 349 pp.
- Lambremont, Edward Nelson, 1954. *The Butterflies and Skippers of Louisiana*, Tulane Studies in Zoology, Vol. 1, No. 10.
- Lambremont, Edward Nelson and Gary Noel Ross, 1963. An Annotated Supplement to the State List of Louisiana Butterflies and Skippers, *Journal of Lep. Soc.*, Vol. 17, pp. 148-158.
- Lambremont, Edward Nelson and Gary Noel Ross, 1965. New State Records and Annotated Field Data for Louisiana Butterflies and Skippers. *Journal of Lep. Soc.*, Vol. 19, pp. 47-52.
- Lockwood, Michael, 2003. REPORTS OF STATE COORDINATORS: Louisiana. *Southern Lepidopterists' News* 25(2): 60-1.
- Mather, Bryant, 1994. Field Checklist Butterflies of Mississippi.
- Mather, B. and K. Mather, 1958. *The Butterflies of Mississippi*. Tulane Studies in Zoology. 6:62-109.
- Opler, Paul A., Kelly Lotts, and Thomas Naberhaus, coordinators. 2010. *Butterflies and Moths of North America*. Bozeman, MT: Big Sky Institute. <http://www.butterfliesandmoths.org>
- Opler, P.A. and Vichai Malikul, 1984. *Butterflies East of the Great Plains*. Houghton Mifflin Co., Boston MA. 486 pp.
- Pelham, J.P., 2008. A Catalogue of the Butterflies of the United States and Canada, *The Journal of Research on the Lepidoptera*. 40:91.
- Pyle, Robert M., 1981. Fifth printing 1990. *The Audubon Society Field Guide to North American Butterflies*. Alfred A. Knopf, Inc., New York, NY. 924 pp.
- Wauer, Roland H., 2006. *Finding Butterflies in Texas, A Guide to the Best Sites*. Johnson Books, a division of Big Earth Publishing, Boulder CO, 327 pp.



Crape myrtle "Natchez White" tree as living sculpture in winter.



Petunia "Tidal wave" in pot between front walkways.

Photos from the Garden of Gary N. Ross during the Spring of 2013 (Baton Rouge, LA).

REARING *ATLIDES HALESUS*

BY

DANIEL M. HYMAN

It has been a long time dream come true to raise *Atlides halesus*. I can still remember the first time I came across this butterfly in my backyard in Winter Park, Florida, after a terrible thunderstorm. I knew it would become my passion to hunt for this beautiful metallic blue butterfly. It wasn't until eighteen years later that I finally got my chance to raise this species. About eleven years ago I ended up stumbling across the secret to this species when I saw a female on some mistletoe, which I didn't know was mistletoe at the time. I was able to capture a couple of females and obtain many ova and ended up with dozens of flawless specimens this way. I have improved my techniques for raising this species over the years and decided it was time to share my knowledge of mass rearing this species with the rest of the lepidoptera enthusiasts.



In central Florida I have noticed that the first brood begins emerging in late January to early February. The adults will be feeding on the nectar of wild cherry blossoms as well as blossoms of mulberry. Once I am able to capture three to four females I will transport them in a plastic jar vented on top with a screen. I have discovered that plastic containers with snap on lids seem to work the best. In order to keep the females calm while I am transporting them it's best

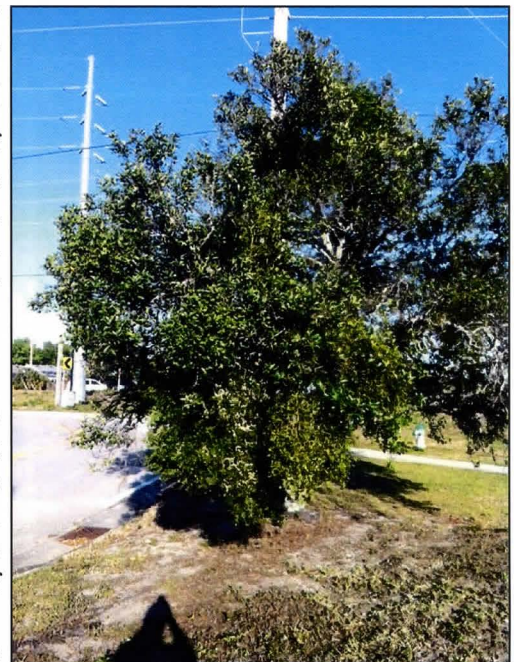
to put a few blossoms of the wild cherry into the jar. I then transfer the females to an eighteen inch square mesh cage. In the center of the cage I place a tupperware container filled with distilled water and insert a cluster of fresh mistletoe. The mistletoe will stay fresh for approximately five to six days. On the top of the mistletoe I place 2x4 inch strips of paper towel which I have soaked in fruit punch gatorade. I have discovered that the females enjoy the gatorade and they will soon begin to lay eggs like crazy after feeding. Using this method I have obtained 417 eggs from four females in this one cage. In my opinion these are pretty impressive results.



Once the eggs hatch the real fun begins. Keeping enough mistletoe to feed this many larvae can prove to be a difficult challenge. I have noticed that there are certain types of oaks in the central Florida area that tend to grow low to the ground and contain huge clusters of

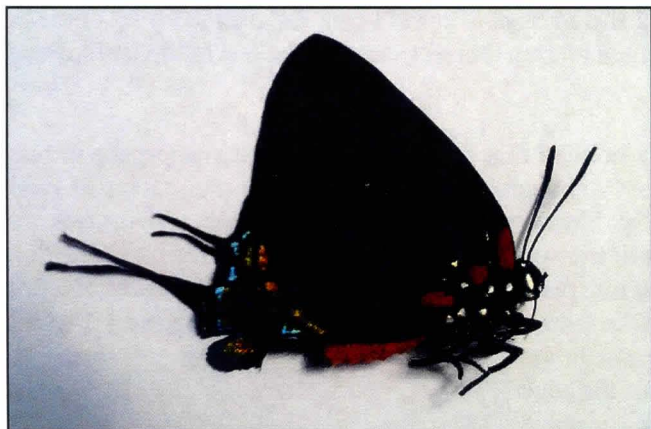
mistletoe. Mistletoe tends to

grow high in most trees so being able to locate it within hands reach was a great find. I have included a picture of one of the trees that is within five minutes of my home.



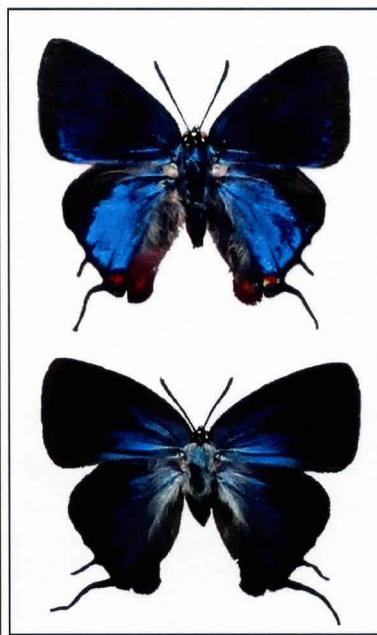
After five days I release the females back into the wild. You will need to collect all the eggs from the leaves in

your cage and put them in a large tupperware container with fresh mistletoe. You will start to see the larvae emerging in a few days. Once the larvae arrive I put five of them in a 1 ounce soufflet cup with fresh mistletoe leaves. Once the larvae reach the 3rd instar I place the larvae, again five per container, in a 5 oz soufflet cup with fresh mistletoe leaves. It is very difficult to keep the mistletoe fresh and I have found that this transfer method is very effective in keeping the leaves fresh and the larvae healthy. You will need to clean the containers and change out the mistletoe leaves every two to three days. Once I notice that the caterpillar has spun his safety belt on a leaf I remove it from



the 5 oz soufflett cup and transfer it to a flat container until it turns into a hardened pupae. This is extremely important as the larvae WILL eat the pupating caterpillar.

After all larvae have turned into pupae, I place them in an emerging box which is a cardboard box with a plexiglass flip up door on it. I place all the pupae on double sided sticky tape on a piece of cardboard box upside down at a 30 degree angle. I mist the pupae with water once a day every four days to prevent them from drying out. While you are misting them they will actually chirp at you as they do not like being disturbed. They actually will make an audible



sound! It is my belief they use this in the wild to ward off any potential predators.

You will notice the butterflies starting to emerge in exactly 2 weeks usually around 3:00 to 4:00 p.m. in the afternoon. At this time you can either release your hairstreaks back into the wild or if you choose to add to your lepidoptera collection I recommend processing them using a syringe of rubbing alcohol injecting it into the thorax from underneath the specimen's body, or any other method you would think is best.

CITHERONIA REGALIS (FABRICIUS, 1793)(LEPIDOPTERA: SATURNIIDAE) IN LOUISIANA

BY

VERNON ANTOINE BROU JR.

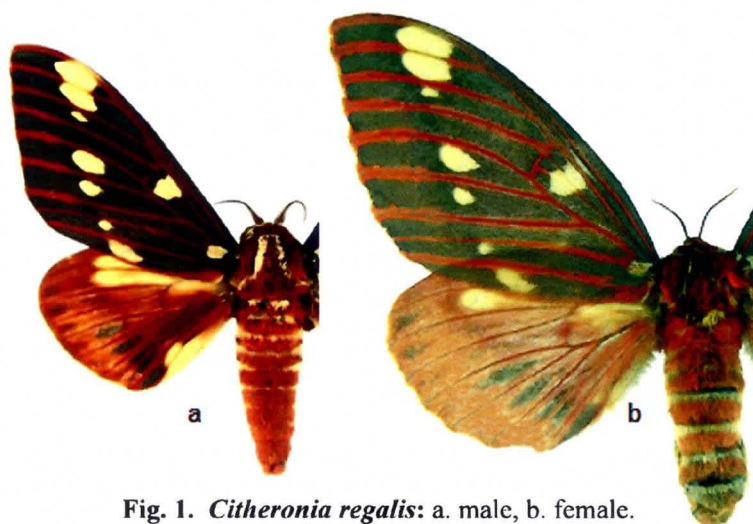


Fig. 1. *Citheronia regalis*: a. male, b. female.

The large moth *Citheronia regalis* (Fabricius, 1793) (Fig. 1) can be found across Louisiana especially in areas which are heavily forested. Covell (1984) listed the range of *regalis* to include "Massachusetts to Florida, west to Kansas and Texas". Covell also stated that *regalis* occurs June through September, has one brood, and occurs more commonly in the south.

In Louisiana, *C. regalis* has two annual broods, the initial brood peaking early May and the second brood peaks about twelve weeks later at the end of July (Fig. 2). Ferguson (1971) postulated the existence of a second brood in the deep south based on dates of capture (May

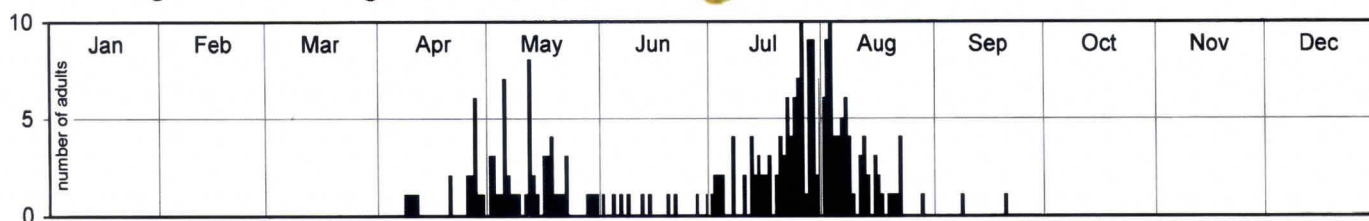


Fig. 2. Adult *C. regalis* captured in Louisiana. n = 265

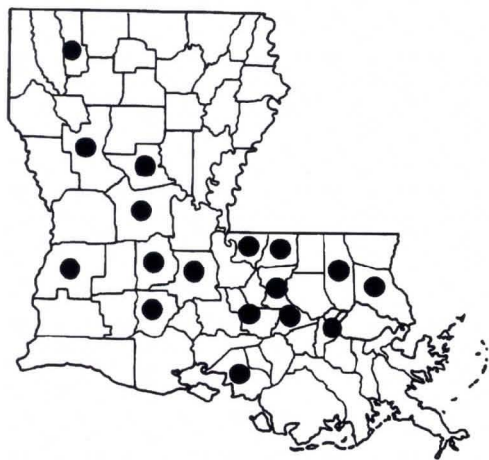


Fig. 3. Parish records for *C. regalis*.

through September) in areas, e.g., Texas to Florida. Ferguson went on to surmise in these same Gulf States that the interval between the initial brood and a possible second brood "would mean at least two months between generations". Indeed, that assumption was correct.

C. regalis was first reported in the state of Louisiana by von Reizenstein (1863). The parish records are illustrated in Fig. 3.

Literature Cited

- Covell, Jr., C.V., 1984. *A Field Guide to the Moths of Eastern North America*. The Peterson Field Guide Series No. 30. Houghton Mifflin Co., Boston, xv + 496 pp., 64 plates.
- Ferguson, D.C., in Dominick, R.B. et al., 1971. *The Moths of America North of Mexico*, fasc. 20.2A, Bombycoidea (in part), E.W. Classey Limited & R.B.D. Prod. Inc., London, 153pp., 11 plates.
- von Reizenstein, L., 1863. *Catalogue of the Lepidoptera of New Orleans and its vicinity*. Isaac T. Hinton. New Orleans, 8pp.

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APOLOGIES TO ARMINIUS!

BY

JOHN V. CALHOUN¹

In my recent article about the pioneer Georgia artist-naturalist John Abbot (1751 – c.1840) (Calhoun, 2013), I referred to the son of Augustus Gottlieb Oemler (1773-1853) as Augustus Oemler. This was an unfortunate error, which I noticed too late for correction. Augustus G. Oemler's son actually possessed the very distinctive name of Arminius, possibly in reverence to the Germanic chieftain Arminius (c.17 BC – 21 AD). So unusual was his name that census takers were flummoxed. In the 1860 census he was recorded as "Oxemus Oemler", while in 1880 he was listed as "Americus Oemler".

Arminius' life was reviewed in detail by Towler ([1990]). A portrait of a very young Arminius, attributed to the American neoclassicist painter John Vanderlyn, can be viewed at the website of The Frick Collection (<http://www.frick.org/>). Born in Savannah, Georgia on 12 September 1827, Arminius attended school in Germany and studied medicine in New York. He practiced as a medical doctor in his hometown of Savannah, but his health was affected by the "sympathies" of the job. He subsequently owned farmland near Savannah and published the book *Truck-Farming at the South* (Oemler, 1883). He also actively promoted the oyster industry in Georgia.

In 1856, Arminius married Elizabeth P. Heyward of South Carolina. A few years later, he presented a small collection of German butterflies to the Elliott Society of Natural History, Charleston, South Carolina (Anonymous, 1859). Although a resident of the Confederacy, Arminius disagreed with the concept of slavery. He lived for many years on Wilmington Island, Georgia, and died of "cerebral apoplexy" (stroke) on 8 August 1897. His papers are preserved at the Georgia Historical Society in Savannah.

I am not the first to inadvertently refer to Arminius as Augustus. In a letter dated 27 August 1887, a Savannah resident by the name of William J. Maser addressed Arminius as "Aug." (*i.e.*, Augustus). Maser's letter was sent in response to a notice in the Savannah Morning News in which Arminius requested information about John Abbot. Arminius was assisting the entomologist Samuel H. Scudder, who was preparing a biography of Abbot (Scudder, 1888). Arminius forwarded Maser's letter to Scudder and it is now preserved in the Houghton Library, Harvard University.

The confusion regarding Arminius' name is understandable. Not only was his father named Augustus, his son also was named Augustus Oemler (1857-1927). Like Arminius, the younger Augustus was born in Savannah and worked in the oyster business. On behalf of all who have bungled his name, I offer sincere apologies to Arminius!

Literature Cited

- Anonymous, 1859. [Donation of butterfly specimens by A. Oemler]. *Proc. Elliott Soc. Nat. Hist.* 1:2.
 Calhoun, J. V., 2013. Remarks about the life and death of John Abbot (1751-c.1840). *So. Lepid. News* 35:44-52.
 Oemler, Arminius, 1883. *Truck-farminig at the south. A guide to the raising of vegetables for northern markets*. Orange Judd Co., New York. 270 pp.
 Scudder, S. H., 1888. John Abbot, the Aurelian. *Can. Entomol.* 20:150-154 (reprinted in *Ann. Rpt. Entomol. Soc. Ontario* 19:48-50).
 Towler, W. H., Jr., [1990]. *Arminius Oemler (1827-1897)*. Unpubl. Armstrong Atlantic St. Univ. 13 pp. (available at <http://www.library.armstrong.edu/oemler.pdf>).

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 Florida Museum of Natural History, University of Florida, Gainesville, Florida)

THE *EUTHYATIRA* AND *PSEUDOTHYATIRA* OF LOUISIANA (LEPIDOPTERA, THYATIRIDAE)

BY
VERNON ANTOINE BROU JR.

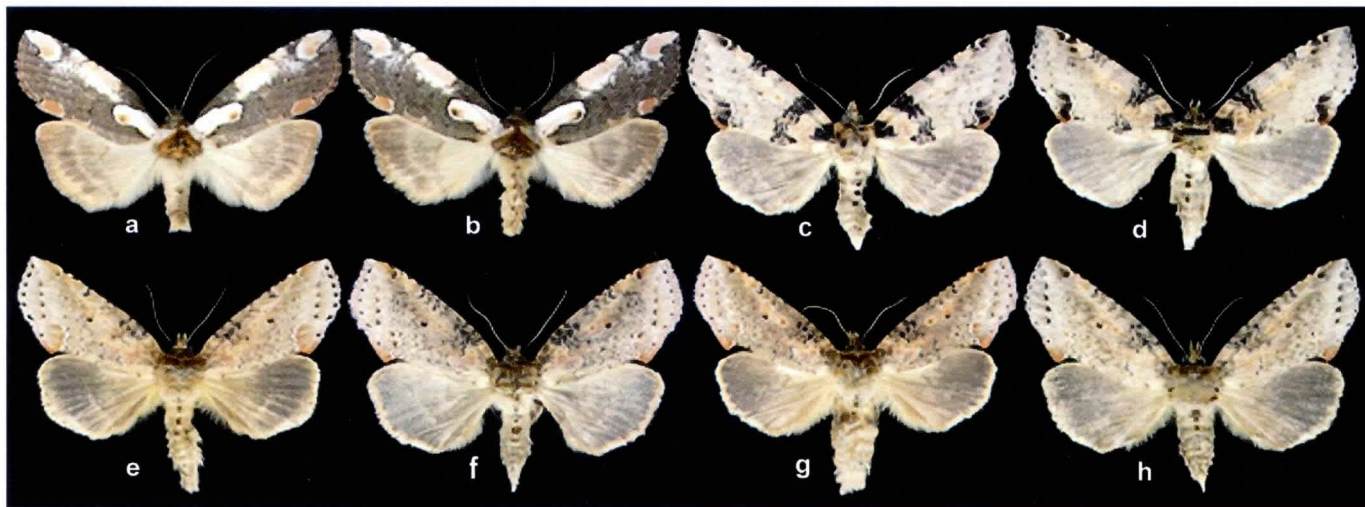


Fig. 1. *Euthyatira pudens*: a. male, b. female.
Pseudothyatira cymatophoroides: males. c, e, g, females. d, f, h.

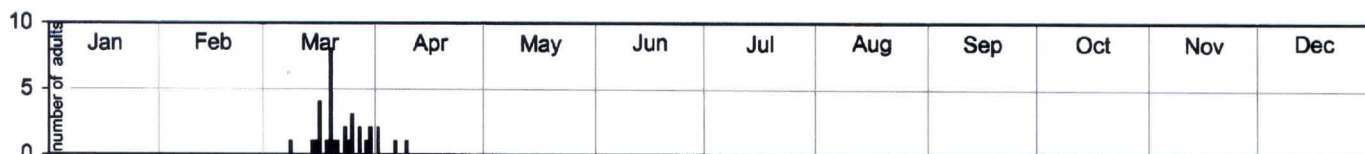


Fig. 2. Adult *E. pudens* captured in Louisiana. n = 33

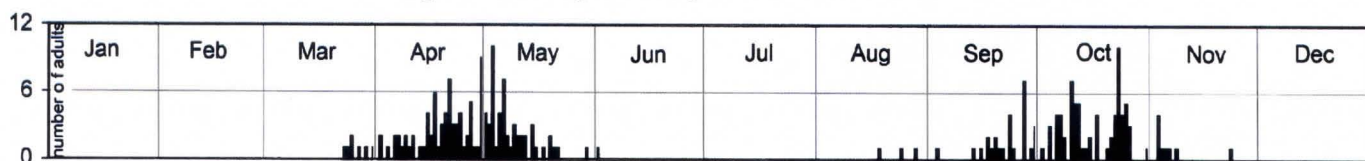


Fig. 3. Adult *P. cymatophoroides* captured in Louisiana. n = 237

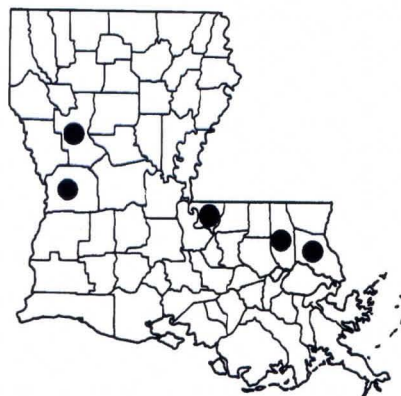


Fig. 4. Parish records for
E. pudens.

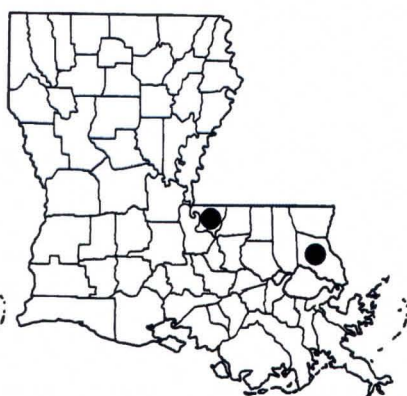


Fig. 5. Parish records for
P. cymatophoroides.

specimens I sent to him earlier from West Feliciana Parish.

E. pudens is usually found within Louisiana in areas where "dogwood" trees abound. This species has a single annual brood peaking in late March (Fig. 2). The known parish records are illustrated in Fig. 4.

P. cymatophoroides has two rather expansive annual broods, the first peaking the end of April - beginning of May,

Ferguson (1983) addressed the on again - off again species status of *Pseudothyatira cymatophoroides* Guenée (Fig. 1e-h), and *Pseudothyatira epultrix* (Grote) (Fig. 1c-d), and also similar species status involving *Euthyatira pudens* Guenée (Fig. 1a-b), and *Euthyatira pennsylvanica* J.B. Smith. This author listed the range for *cymatophoroides* to include: New Foundland to British Columbia, south to northern California, Maryland, West Virginia, Kansas, to the Appalachians to North Carolina, White Mountains of Arizona, and added Louisiana based upon

and the second peaking around mid-October (Fig. 3). This species is taken in ultraviolet light traps, but by far, most specimens taken in this study were captured using fermenting fruit bait traps in which the moths moved from feeding on the bait, upward into a screened enclosure or an enclosed collection chamber. The parish records are illustrated in Fig. 5.

Literature Cited

Ferguson, D.C. , 1983. On the status of *Pseudothyatira epultrix* (Grt.) and *Euthyatira pennsylvanica* J.B. Smith (Thyathridae). *Jour. Lepid. Soc.* 37 (2): 179-180.

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

BUTTERFLIES WORTH KNOWING ⁽¹⁾

THE CYNTHIA MOTH AND THE COCOON FROM WHICH IT CAME

BY CLARENCE M. WEED



From a photograph from life by A.H. Verrill.

"The characteristic features that distinguish a moth from a butterfly are well illustrated in the plate....which shows one of the largest and most beautiful moths in the world. It is the Cynthia moth. As may be seen the newly emerged moth is resting upon the silken cocoon in which it spent its period as a pupaThis cocoon was attached by the caterpillar to the twig from which it hangs at the time it spun the cocoon. The feathered antennae, the hairy legs, the thick thorax, and large abdomen - all show very clearly in this side view of the moth. As will be seen the wings are large and very suggestive of those of a butterfly and have the characteristic eye-spots toward the tip and the crescent marks in the middle, which are so often found on the wings of the larger moths." ⁽¹⁾ (page 14)

"The *Ailanthus* silkmoth was introduced from China in the late 1800s in an attempt to establish a silk industry in the eastern United States. Its current distribution is spotty along the Atlantic coast from Connecticut to Georgia and west to northern Kentucky." ⁽²⁾

"The *Ailanthus* silkmoth (*Samia cynthia*) is a saturniid moth, used to produce silk fabric but not as domesticated as the silkworm, *Bombyx mori*...The common name 'Ailanthus silkmoth' refers to the host plant *Ailanthus*." ⁽³⁾

References

- 1) Weed, Clarence M., 1925. *Butterflies Worth Knowing*, Little Nature Library, Doubleday, Page & Company for Nelson Doubleday, Inc., The Country Life Press, Garden City, N.Y.
- 2) *Butterflies and Moths of North America*, <http://www.butterfliesandmoths.org/species/Samia-cynthia>
- 3) *Samia cynthia*. http://en.wikipedia.org/wiki/Samia_cynthia

COMMON STREAKY - SKIPPER (*CELOTES NESSUS*) LIFE HISTORY BY BERRY NALL

Common Streaky-Skippers were abundant during March, 2010, and it was not hard to locate caterpillars on Indian Mallow (*Abutilon fruticosum*). One had only to look for leaf shelters such as those pictured to the right. During this time I was also able to locate an egg and raise one of those caterpillars to maturity.

The caterpillar emerged from the egg on March 29. It grew *very* slowly. The early instar caterpillars appear to prefer to eat inside the shelter (see 7-IV-2010 picture), scraping the surface of the leaf. This certainly protects them in the wild, but *A. fruticosum* does not keep well; this makes it more difficult to care for the slow-growing caterpillar!

The caterpillar took 34 days to pupate. This is a very long time for a caterpillar to survive. Not only do they need to escape predators and parasites, they also have to deal with humans using lawn mowers! When the skippers were most active, I had to move several caterpillars to plants that would not go under the blade.

I first collected *nessus* caterpillars in the fall of 2009. Two of these went into diapause. They simply stayed in the dried-up leaf shelter. When I saw Streaky-Skippers were active in the spring, I began to occasionally offer food to my two caterpillars. However, they never ate; eventually they both pupated and successfully emerged as adults. Those caterpillars were probably 6 months old when they finally pupated. (See the last three pictures at the end of the article.)

The caterpillar grew slowly, finally pupating on April 14. The adult butterfly emerged 9 days later. The journey from egg to adult took 45 days.



Leaf shelters made by first-instar caterpillars



Egg (27-III-2010)



Egg showing caterpillar
(28-III-2010)

Facial views



Recently-emerged
caterpillar (29-III-2010)



1-IV-2010



Face of Common Streaky-
Skipper caterpillar



Chrysalis face



Leaf shelter is pulled up here to show caterpillar is eating inside shelter (7-IV-2010)



18-IV-2010



26-IV-2010, just before final molt



3-V-2010



4-V-2010, caterpillar is prepupal



Chrysalis, 4-V-2010



Fresh Common Streaky-Skipper, 12-V-2010



Caterpillar beginning diapause, 5-XI-2009



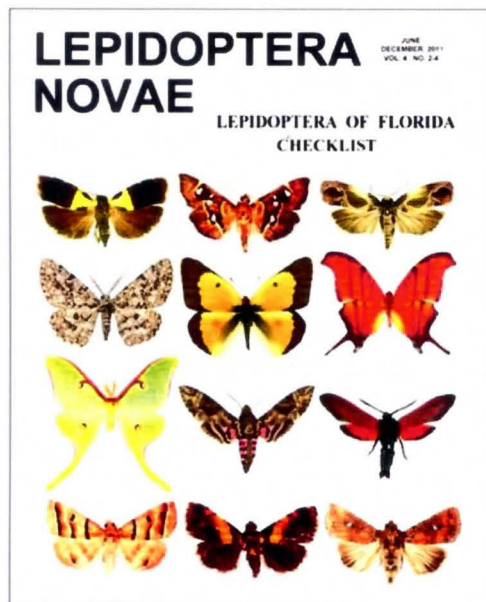
3-III-2010, caterpillar still in diapause



Fresh skipper from diapausal caterpillar, 2-IV-2010

[The SL Society and the Editor thank Mr. Berry Nall for allowing us to reprint his life history of the Common Streaky-Skipper. The original publication can be seen at http://leps.thenalls.net/content2.php?ref=Species/Pyrginae/nessus/life/nessus_life.htm

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



John Heppner sends in the following ad:

LEPIDOPTERA OF FLORIDA CHECKLIST

142pp, 1 color plate (plus color cover). 8-1/2 x11 inches. \$47.50 postpaid (in USA). New updated and revised checklist to all Florida moths and butterflies, all 3002 species, by J. B. Heppner. Includes new references and species described since the 2003 Florida Lepidoptera catalog. Double issue from Vol. 4, *Lepidoptera Novae*. Orders to: Lepidoptera Novae, P.O. Box 15718, Gainesville, FL 32604. lepnovae@aol.com Tel: (352) 373-5630. Checks payable to: Lepidoptera Novae.

DEFINITIONS:

*Prognathous*¹ - having jaws that project forward to a marked degree; having protrusive jaws.

*Hypognathous*² - having the lower jaw that protrudes beyond the upper jaw; protruding lower jaw.

Sources

1) <http://www.thefreedictionary.com/prognathous>

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

FIRST LOUISIANA STATE RECORD OF BORDERED PATCH BY JEFF TRAHAN

On October 21, 2012, Rosemary Seidler and I went to Eddie D. Jones Nature Park in southwest Caddo Parish in northwest Louisiana to continue an ongoing survey of the butterflies of Caddo Parish.

Eddie Jones Park is located on Mike Clark Road just off of State Highway 789 in Keithville, LA. The park is managed as an adventure park with miles of mountain biking, hiking, and horseback riding trails. There are a variety of habitats including hardwood and pine forests, open fields, hills and streams. There is a large bottom area with acres of switch cane. This park is probably the very best publicly accessible location in northwestern Louisiana to find butterflies.

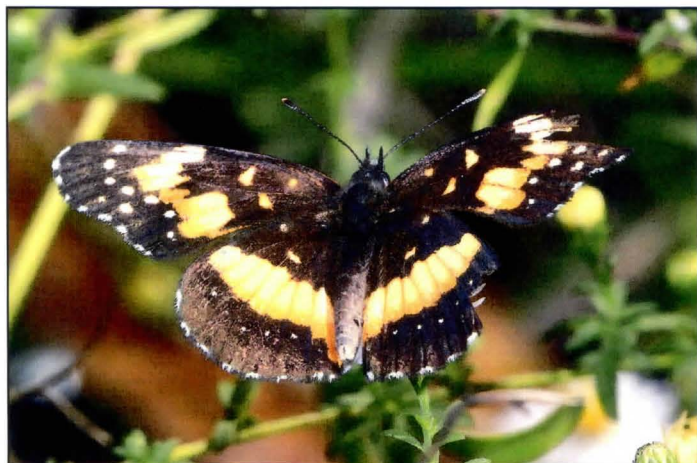


Fig. 1. Bordered Patch (*Chlosyne lacinia*) observed October 21, 2012, at Eddie Jones Park, Caddo Parish, LA.

The year 2012 was a banner year for butterflies in this part of Louisiana. In the spring there were so many butterflies, they could hardly be counted. Fall was also quite good. On this Sunday afternoon in October, we tallied an unprecedented total of 36 species at the park. There were plenty of pearl crescents, gulf fritillaries, gemmed satyrs, common buckeyes and little yellows. While doing this survey, we spotted one individual butterfly that was quite different, flying among and getting nectar from the white aster flowers that bloom in this area in late fall. I immediately identified it on the wing as a bordered patch (*Chlosyne lacinia*). When it finally landed on an aster flower, I was able to take photos of it, one of which is included in this article. See Fig. 1.

The range of bordered patch includes Texas, New Mexico, Arizona, Oklahoma, Arizona and Kansas (Brock and Kaufman, 2003). According to Herschel Raney's web pages (Raney, 2013) documenting the butterflies of Arkansas, there are only three records of bordered patch in Arkansas all of which occurred in 2007. The website Butterflies and Moths of North America (2013) show records of this species as far north as Nebraska, Missouri, Iowa, and Minnesota, but none in Louisiana. This species appears to stray north from Texas, but not east. As far as I can determine, this is the first record of *Chlosyne lacinia* in Louisiana.

References

- Brock, J. and K. Kaufman, 2003. *A Field Guide to Butterflies of North America*. Houghton Mifflin Company, page 188.
 Butterflies and Moths of North America (BAMONA), 2013, <http://www.butterfliesandmoths.org/species/Chlosyne-lacinia>
 Raney, H., 2013. *Arkansas Butterflies*. <http://www.hr-rna.com/RNA/Butterfly%20main.htm>
 Trahan, J., 2012, Reports of State Coordinators, Louisiana, Michael Lockwood coordinator. *Southern Lepidopterists' News* (Vol. 34:4), page 242.
 Trahan, J., 2012, Zone 9: Southeast (Louisiana), Brian G. Scholtens coordinator. In 2012 Season Summary of News of the Lepidopterists' Society, Vol. 55 (Supplement S1), page 131.

DEFINITION:

*Alveolate*¹ - having a honeycombed surface; resembling the deep pits of a honeycomb.

Source

- 1) <http://www.thefreedictionary.com/alveolate>

SAMIA CECROPIA (LINNAEUS, 1758) (LEPIDOPTERA: SATURNIDAE) IN LOUISIANA

BY
VERNON ANTOINE BROU JR.

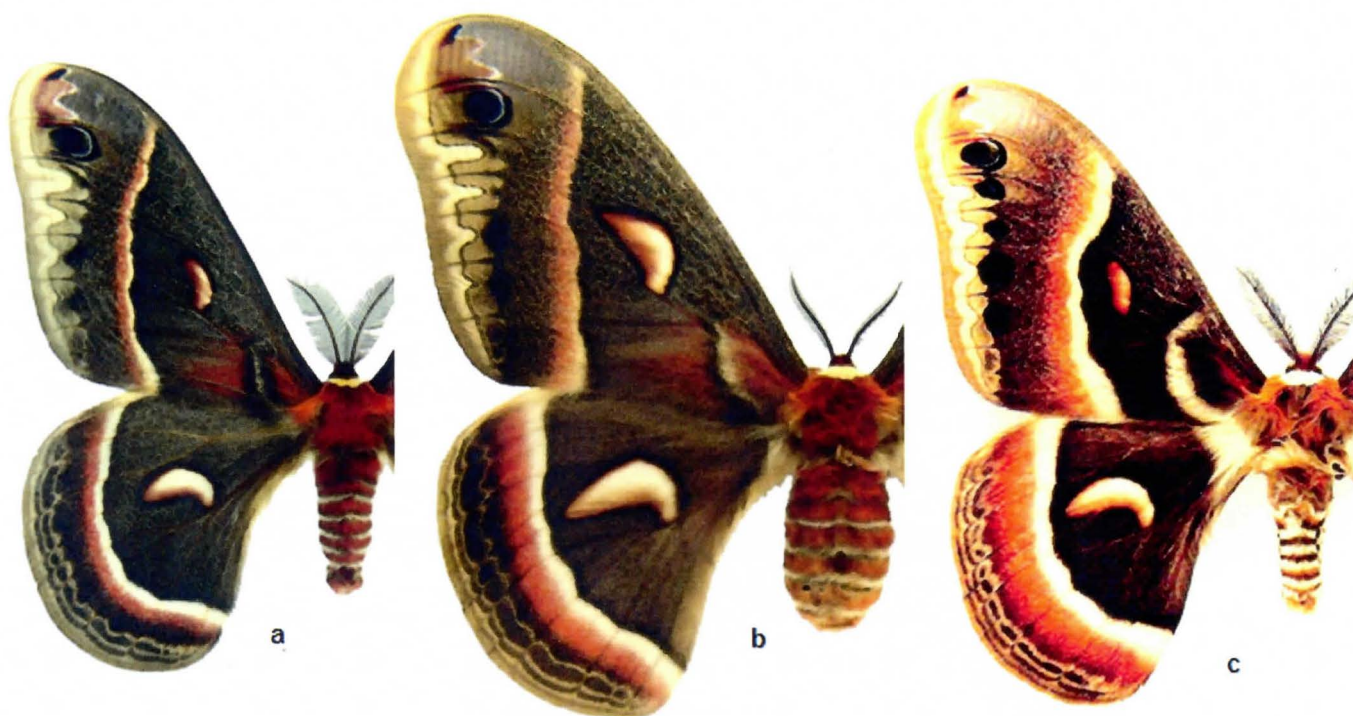


Fig. 1. *Samia cecropia*: males (a, c), female (b).

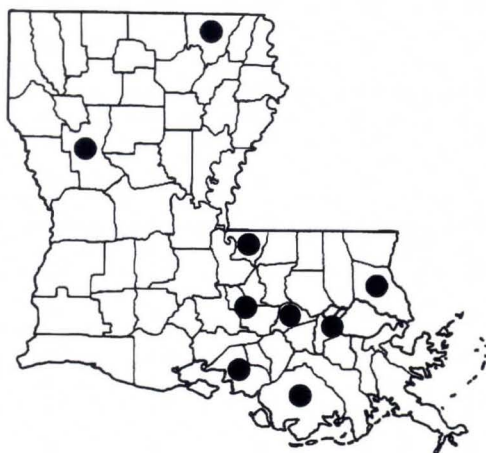


Fig. 2. Parish records for *S. cecropia*.

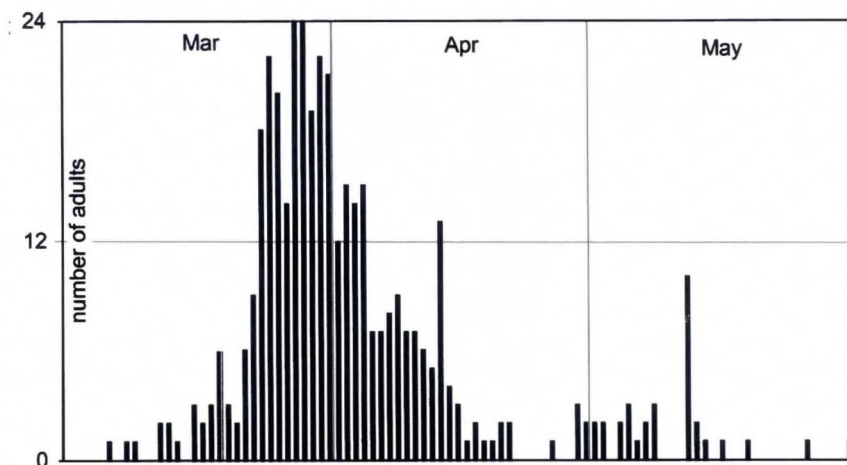


Fig. 3. Adult *S. cecropia* taken in Louisiana. n = 415

Our largest species of moth in the state of Louisiana is *Samia cecropia* (Linnaeus) (Fig. 1). This species was reported by Ferguson (1972) to occur "throughout almost the entire U.S. east of the Rocky Mountains, across southern Canada from Nova Scotia to Alberta, and in the states of Utah and Washington". Fig. 1a and 1b are the normal appearing phenotypes for males and females. Fig. 1c illustrates a unique male captured in an ultraviolet light trap at the *Abita entomological study site and displays quite unusual coloration unlike any illustrated previously for this species. No other specimen like Fig. 1c has been seen in 31 years of light trapping at the same location. I have taken *cecropia* in only nine parishes, though no doubt it will be found in most, if not all 64 parishes (Fig. 2). On a number of occasions I have placed freshly emerged females in outdoor cages during late March. Activity by males of this species remains mostly quiescent from dusk until about 0300 hours, the time when hoards of male *cecropias* descend upon the unmated females in an amazing frenzied flight. While at the same time these large numbers of males are attracted to virgin females, very few are captured at these times in a series of seven light traps placed in the surrounding area and operating continuously year round from dusk to dawn.

Ferguson (1972) states *cecropia* has only one brood throughout its range, though he further touched on the possibility of the existence of two indistinguishable sibling species. Ferguson stated that (C.L. Remington, pers. comm.) noted in the Midwest, there are two emergence periods separated by a two or three week interval. Though, neither of these authors presented any factual data analysis backing up this supposed two or three week interval period between broods. Likewise in Louisiana, there appears to be bimodal emergence peaks in the phenology graphing of actual adult captures via light traps, though that interval in Louisiana is in the neighborhood of six weeks (Fig. 3).

S. cecropia was first reported to occur in Louisiana by von Reizenstein (1863).

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

Literature Cited

- Ferguson, D. C., in Dominick, R. B. *et al.*, 1972. *The Moths of America North of Mexico*, fasc. 20.2B, Bombycoidea (in part), E.W. Classey Limited & R.B.D. Prod. Inc., London, 275 p., 22 pl.
- von Reizenstein, Ludwig, 1863. *Catalogue of the Lepidoptera of New Orleans and its vicinity*. Isaac T. Hinton. New Orleans, 8pp.

VITACEA POLISTIFORMIS HARRIS, 1854 (LEPIDOPTERA: SESIIDAE) IN LOUISIANA

BY
VERNON ANTOINE BROU JR.

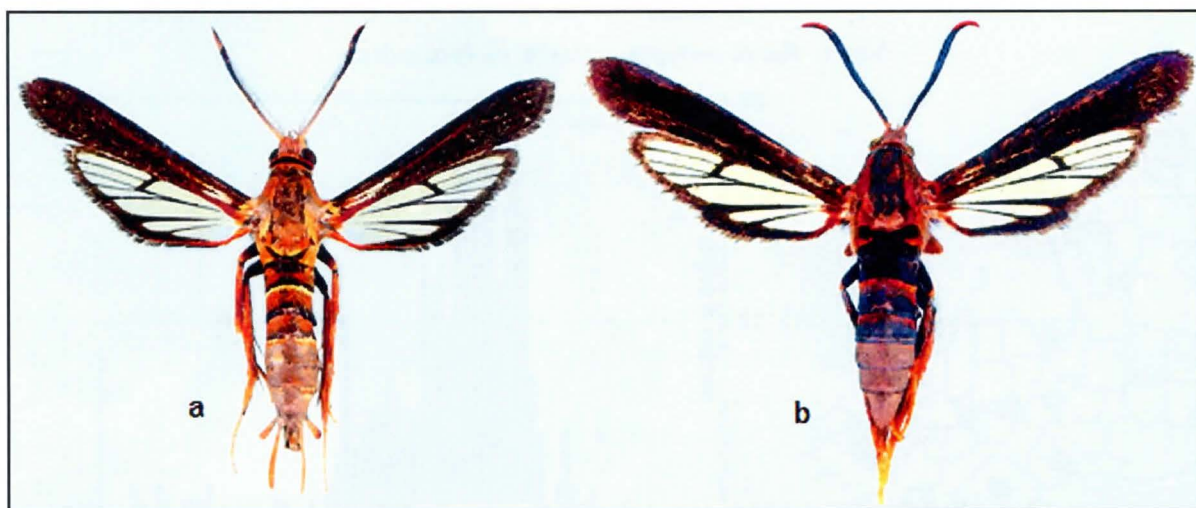


Fig. 1. *Vitacea polistiformis*: a. male, b. female.

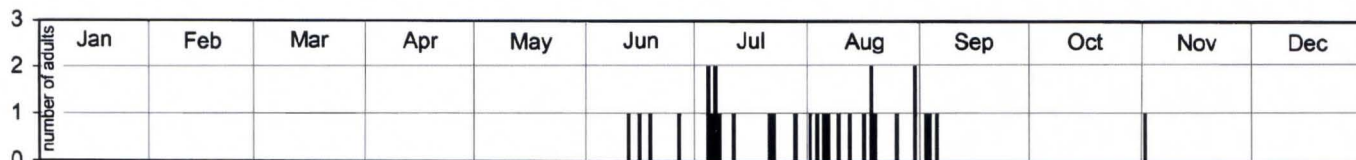


Fig. 2. Adult *Vitacea polistiformis* captured near Abita Springs, Louisiana. n = 31

The grape root borer moth *Vitacea polistiformis* Harris (Fig. 1) has been captured infrequently over the past 27 years at the Abita entomological study site. The majority of the specimens noted in Fig. 2 were captured using ultraviolet light traps, the lesser quantity using sesiid pheromone traps, though not for the lack of trying using pheromones 24 hours per day, 365 days each year, over dozens of years. Despite using several commercial formulations of grape root borer lures for many years, none were very effective at attracting this species. At the *Abita entomological study site, wild *Vitis* species, the reported larval host, are quite common and occurs everywhere, while in the

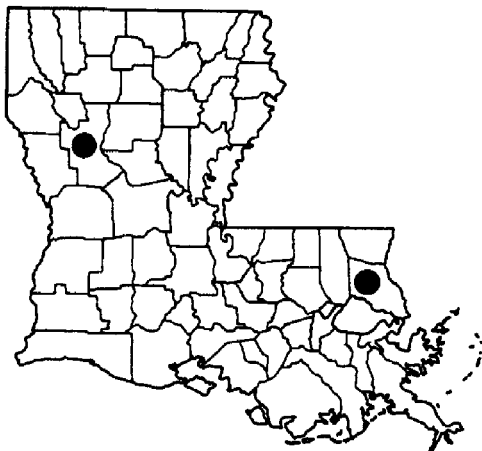


Fig. 3. Parish records.

northwestern areas of the state a different *Vitis* (fox grape) species abounds.

Eichlin and Duckworth (1988) report *polistiformis* occurs in the Atlantic and Gulf Coastal Plains from New York, south to Florida, and west to Texas, the Appalachian Plateaus, ridges and valleys in Pennsylvania, West Virginia and North Carolina, the central lowlands of the Midwest in Illinois, Indiana, and Michigan.

V. polistiformis is reportedly a wasp mimic of the genus *Polistes*. *Polistes* wasps abound everywhere in Louisiana in considerably abundant populations, flying among grasses and other low vegetation and trees of all sizes searching for larvae of other insects. These wasps are commonly called *paper wasps* due to their bothersome paper thin nest habitually found on eaves and other sun and rain protected areas on man-made structures and among any low plants, bushes, hedges,

and at a variety of heights in trees, with canopy sun and rain protected areas.

I can attest to the very real similarity of the moth to the wasp, as I was walking closely to a large clump of grape vines in early September, precisely at noon in the bright sunshine, a female *polistiformis* flew up from the base of a tree near the ground, directly at my face. This moth appeared to be a paper wasp in the one-two second frenzied encounter, and I swatted it to the ground with my bare hand. The moth immediately flew up at me again, and I swatted it down again. Taking a better look as it remained on the ground in a stupefied and acquiescent state, I immediately picked it up and it now resides in my collection as a good quality example of an infrequently encountered female *polistiformis*.

In Louisiana, adult *polistiformis* have been collected from mid-June to early September (Fig. 2). The parish records are illustrated in Fig. 3.

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

Literature Cited

Eichlin, T.D. and W.D. Duckworth, 1988. Sesiodea: Sesiidae. In Dominick, R.B. *et al.* (Eds), *The Moths of America North of Mexico*. Fasc.5.1 Washington: Wedge Ent. Res. Found. 176pp.

MANY, MANY THANKS TO THE FOLLOWING DONORS WHO CONTRIBUTED TO THE SLS SOCIETY

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BRUCE W. DIXON (1938 - 2013)



Bruce W Dixon (November 3, 1938 - February 20, 2013)

Bruce Dixon was born in Pittsburgh, Pennsylvania, and died suddenly there in February, 74 years later of blood poisoning from an infected gall bladder. As a teenager he came under the influence of John Bauer at the Carnegie Museum and accompanied him on trips to bait and collect Lepidoptera throughout Pennsylvania and the surrounding states. This interest, once kindled, continued throughout his life.

He attended the University of Pittsburgh on a Greek and Latin scholarship and upon graduation, veered from pursuing a doctorate in chemistry to enter medical school. He graduated from the University of Pittsburgh School of Medicine, did his internship at Duke University Medical School, returned to Pittsburgh for his residency followed by two years in Viet Nam as an Air Force Doctor. Bruce became the chief resident in Internal Medicine at Duke University in 1970 where we met and had two field trips before I left for the Marine Biology Laboratory in Beaufort, NC. He returned to a faculty position at Pittsburgh in 1975 where he became an outstanding teacher and diagnostician. He began to consult for the Health Department of Allegheny County (which includes Pittsburgh) in 1979 on sexually transmitted diseases and in 1992 at the demand of the University Chancellor, became the head of the Health Department where he continued under a joint appointment for 20 years. Bruce lectured on community health issues, was interviewed by Barbara Walters for the news program 60 minutes, and became a champion of Pittsburgh's disadvantaged and downtrodden. He also became an expert on drug

abuse treatment, anthrax poisoning, and viral epidemics.

In 2008 he called me saying it was time to begin collecting again and we made 4-6 trips per year thereafter to places in North Carolina that we thought harbored unusual and interesting skipper butterflies. In Pittsburgh they spoke of the humble but brilliant physician who always wore hush puppies, khakis, a white shirt with French cuffs, a tie and black jacket. He wore exactly the same thing in the field with me, on occasion pulling on hip waders when we collected ditches which had as many cottonmouths as skippers. He knew every good collecting place in North Carolina, in Pennsylvania and in between. He forgot nothing. He remembered every road we collected in 1970, where the buttonbush and pickerel weed grew, where the foodplants were and which species used them and when they were on the wing. Once stopped by a state trooper, it took him about 2 minutes of conversation before it became apparent he had doctored the trooper's mother while at Duke, and off we went.

He knew no strangers. He collected skippers because he loved the challenge and activity, the planning and the hunt. He lamented habitat loss and championed conservation efforts. Over the years Bruce accumulated an excellent collection of eastern U. S. skippers which will reside at the Carnegie Museum as an indication of skipper abundance during his lifetime. He had a collection of vintage cars which he restored and documented each car's interesting history. When the mansion designed by Frederick Osterling and previously owned by the former President of U. S. Steel, Charles Schwab, was found in decay along with its neighborhood, Bruce bought it, restored it to much of its former glory, and offered it for the use of charities. He did most of the plumbing, electrical and landscaping work himself. He never married which was probably a good thing because his work habits were legendary. I finally asked him why he always wore a coat and tie in the field. His response was simple, he had never been refused permission to collect whenever he was so dressed! He was generous to a fault and he was a legend wherever he went, brilliant and humble to the end and no doubt in a coat, white shirt with French cuffs, tie, khakis and hush puppies.

Obituary sent in by Bo Sullivan.

BRUCE DIXON: A REMEMBRANCE

I met Bruce Dixon six years ago and it did not take long to learn what a wonderful person he was. I met him as I walked along a trail at Buzzard Swamp in the Allegheny National Forest. It was a hot, humid day and he came walking toward me wearing a long sleeve, white, dress shirt with a black tie and was carrying a net. Despite the outfit, which I later found out was just about all he wore, it was pretty clear he was collecting insects, I figured probably butterflies, and that was what I was out photographing carrying along my tripod and camera. We introduced ourselves to each other and talked for some time. We have kept in touch ever since.

Bruce more than anything loved to tell of locations where his beloved Hesperids could be found. He once directed me to an intersection of two small roads, adjacent to a swampy area, where *Euphyes dukesi* could be found. Another time we met in a wet field along the Blue Ridge Parkway where he said *Euphyes bimacula* could be found. While there he told me it was in 1953 when he was a teenager that he accompanied members of the Carnegie Museum of Natural History staff and they had discovered the colony which was still present. In 1955, while still a teenager, he authored the subspecies *Epargyreus clarus huachuca*.

Bruce was kind, generous, and a very concerned individual. He cared about all aspects of the Allegheny Co. Health Dept. where he was director until just before his death. I will always remember and miss him.

Sent in by Jim Monroe.

FAMOUS BUTTERFLY QUOTES

"Float like a butterfly, sting like a bee."

Muhammad Ali

"Just living is not enough," said the butterfly, "one must have sunshine, freedom and a little flower."

Hans Christian Andersen

"We kill all the caterpillars, then complain there are no butterflies."

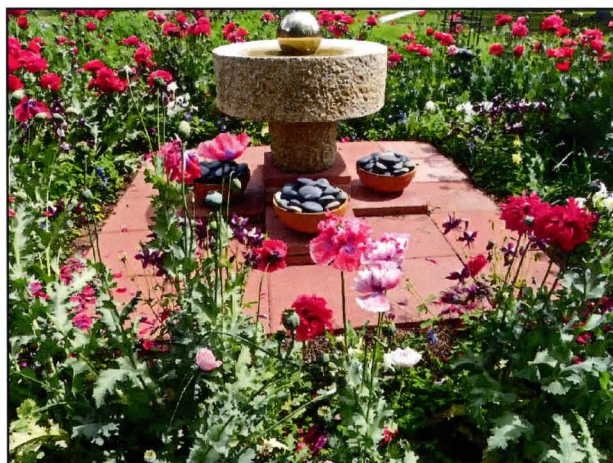
John Marsden

"Just when the caterpillar thought the world was over, it became a butterfly."

Proverb



Overview of front garden
(red opium poppies dominate).



Granite birdbath in central front garden.
Flowers are red opium poppies and columbines.

Photos from the Garden of Gary N. Ross during the Spring of 2013 (Baton Rouge, LA).

ANAEA ANDRIA SCUDDER (1875) (LEPIDOPTERA: NYMPHALIDAE)
IN LOUISIANA
BY
VERNON ANTOINE BROU JR.



Fig. 1. *Anaea andria*: males, a, c. females, b, d, e.

The nymphalid butterfly *Anaea andria* Scudder (Fig. 1) occurs throughout the state, but never encountered in great numbers, most often only seen as singletons. The type locality was not stated by Scudder (1875). *A. andria* was listed by Hine (1906) in Cameron Parish, Montgomery (1932) in Madison Parish, Johnson and Comstock (1941) in Rapides Parish, Jung (1950) in the New Orleans area, Lambremont (1954) in ten other parishes, and Ross and Lambremont (1963) in three additional parishes. Johnson and Comstock (1941) described the "summer form" (Fig. 1a, b) as "floraesta". This form usually occurs in July in southern Louisiana and usually has more blunted forewing apex and hindwing tail and duller coloration in both sexes. In southeastern Louisiana, *andria* occurs continually from early March to early December and appears to have five annual broods at approximate 54-day intervals (Fig. 2). The fifth and most consistently populated brood peaks in October.

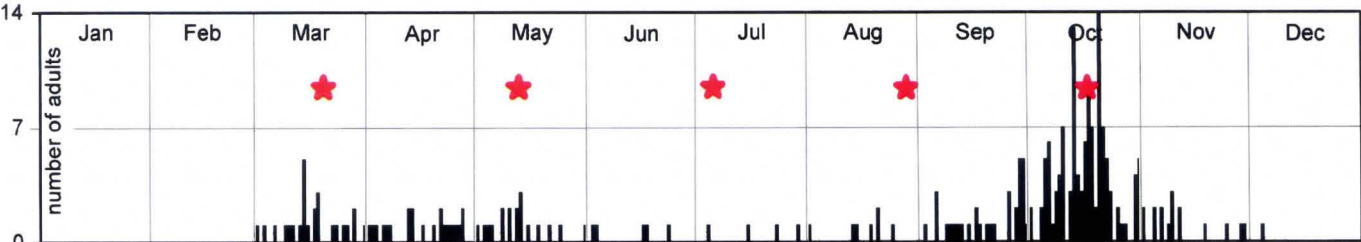


Fig. 2. Adult *Anaea andria* captured at the *Abita study site. n = 249

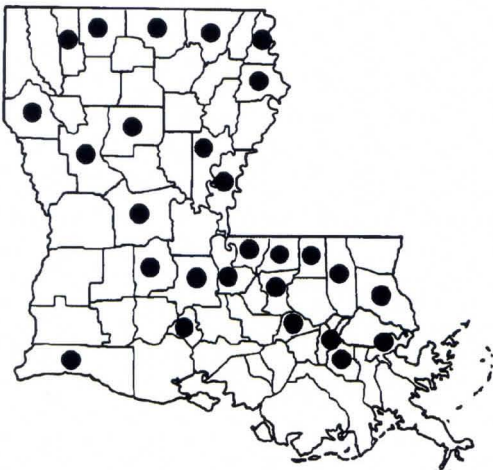


Fig. 3. Parish records for *Anaea andria*.

This species is commonly known as the "goatweed butterfly" and Lambremont (1954) stated the larvae have been reported many times in literature to feed on *Croton capitatus* Michx. Riley (1988a, 1988b) reports *capitatus* as the primary hostplant on the Gulf Coast. Riley (1980) reported the foodplants in central Missouri include *capitatus* and *Croton monanthogynus* Michx.

A. andria was not reported by Brou (1974) in light trap samples from St. John the Baptist Parish, though *andria* does occur there. Except for two specimens taken in light traps, all of the captures reported in Fig. 2 were taken in fermenting fruit bait traps at the *Abita study site. Illustrations and instructions on how to construct these bait traps were published by Brou (1992).

Klots (1951) reported *andria* has two broods which overlap and adults occur in early April.

I thank Thomas J. Riley who most kindly provided information, data, and/or comments on this investigation.

*Abita entomological study site: sec.24, T6S, Range 12 East, 4.2 miles northeast of Abita Springs, St. Tammany Parish, Louisiana.

Literature Cited

- Brou, Vernon A., 1974. Butterflies taken in light traps. *Jour. Lepid. Soc.* 28:331.
 Brou, Vernon A., 1992. Extended duty bait trap designed for continual year-round use. *South. Lepid. News* 14:4-6.
 Hine, J. S., 1906. A second contribution to the entomology of the region of the Gulf Biologic Station, Bull. Gulf Biol. Sta. 6.
 Johnson, F. and W.P. Comstock, 1941. *J. New York Ent. Soc.* 49: 303.
 Jung, R. C., 1950. An annotated list of the Lepidoptera of the New Orleans area. *Proc. Louisiana Acad. Sci.* 13: 46-47.
 Klots, A.B., 1951. *A field guide to the butterflies of North America East of the Great Plains*. Boston: Houghton Mifflin. 349 pp. 40 pl.
 Lambremont, E. N., 1954. The butterflies and skippers of Louisiana. *Tulane Studies Zool.* 1:125-164.
 Montgomery, Robert W., 1932. Records of Louisiana Butterflies. *Ent. News* 43:182.
 Riley, T. J., 1980. Effects of long and short-day photoperiods on the seasonal dimorphism of *Anaea andria* from central Missouri. *Jour. Lep. Soc.* 34 (4), 330-337.
 Riley, T. J., 1988a. The effect of larval photoperiod on mating and reproductive diapause in seasonal forms of *Anaea andria*, *Jour. Lep. Soc.* 42 (4), 263-268.
 Riley, T. J., 1988b. Effect of larval photoperiod on incidence of adult seasonal forms in *Anaea andria*. *Jour. Kansas Entomol. Soc.* 61 (2), 1988, 224-227.
 Ross, G. N. & E.L. Lambremont, 1963. An Annotated Supplement to the State List of Louisiana Butterflies and Skippers. *Jour. Lepid. Soc.* 17:148-158.
 Scudder, S. H., 1875. *Bull. Buffalo Soc. Nat. Sci.* 2: 248.

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

POEMS AND QUOTES ABOUT BUTTERFLIES

*The toad beneath the harrow knows,
 Exactly where each tooth-point goes,
 The butterfly upon the road,
 Preaches contentment to that toad.*

Rudyard Kipling — British author, poet and nobel prize winner (1865 - 1936).

*May the wings of the butterfly kiss the sun
 And find your shoulder to light on,
 To bring you luck, happiness and riches
 Today, tomorrow and beyond.*

Irish Blessing

"The least thing upset him on the links. He missed short putts because of the uproar of butterflies in the adjoining meadows."

P.G. Wodehouse — English humorist (1881 - 1975)

"Happiness is a butterfly, which when pursued, is always just beyond your grasp, but which, if you will sit down quietly, may alight upon you."

Nathaniel Hawthorne — American novelist and short story writer (1804 - 1864).

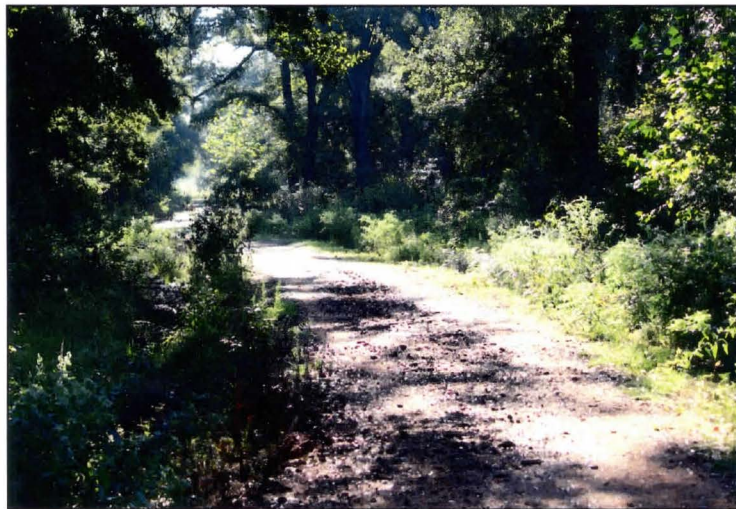
"What's a butterfly garden without butterflies?"

Roy Rogers (aka Leonard Franklin Slye) — American cowboy actor and singer (1911 - 1998).

BUTTERFLIES OF LICK CREEK PARK, BRAZOS CO., TEXAS

BY
RO WAUER

From June 2010 through December 2012, I made 92 visits to Lick Creek Park to survey the butterfly fauna; each visit lasted 2.5 to 4 hours. These included 4 in January, 6 in February, 9 in March, April, and May, 10 in June, 8 in July, 10 in August and September, 9 in October, 3 in November, and 5 in December. A total of 75 species (Table 1) were recorded on the 92 surveys. As few as one species was found on August 10 and 19 and September 1 in 2011, and as many as 33 species were recorded on May 13, 2011.



Lick Creek Park trail (September 25, 2010)



Lick Creek Park, along Iron Bridge Trail (May 8, 2012)

and Striped hairstreaks; Henry's Elfin, and Little Wood-Satyr. Three species were recorded only in late summer and or fall: Mazans Scallopwing, Julia Heliconian, and Zebra Heliconian. An additional 11 species were recorded only on one or two occasions: Confused Cloudywing, Brazilian Skipper, Whirlabout, Northern Broken-Dash, Broad-winged Skipper, Spicebush Swallowtail, Banded Hairstreak, Soapberry Hairstreak, Marine Blue, Red-spotted Purple, and Bordered Patch.

It is likely that Julia and Zebra Heliconians, as well as Brazilian and Broad-winged Skippers, and Spicebush Swallowtail are vagrants only.

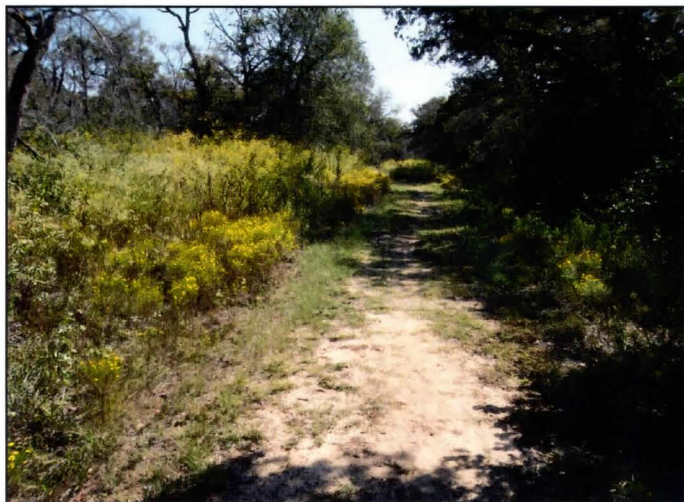
Also of interest were the numerous species that exhibited major population explosions; Table 1 included numerous high numbers and dates. Most impressive were the 25+ Celiass's Roadside-Skippers on August 25, 65+ Clouded Skippers on July 4, 22 Southern Broken-Dashes on September 27, 50+ Dainty Sulphurs on May 13, 75+ Little

Lick Creek Park covers 515 acres along the eastern edge of College Station, Texas. The vegetation is a post oak savannah association that contains an oak-hackberry woodland, alluvial forest, sandy prairies, and oxbow meadows. The meandering Lick Creek is a tributary of the Navasota River. The park serves as a valuable study site for nearby Texas A&M University, and various projects have produced an excellent database for most of the flora and fauna.

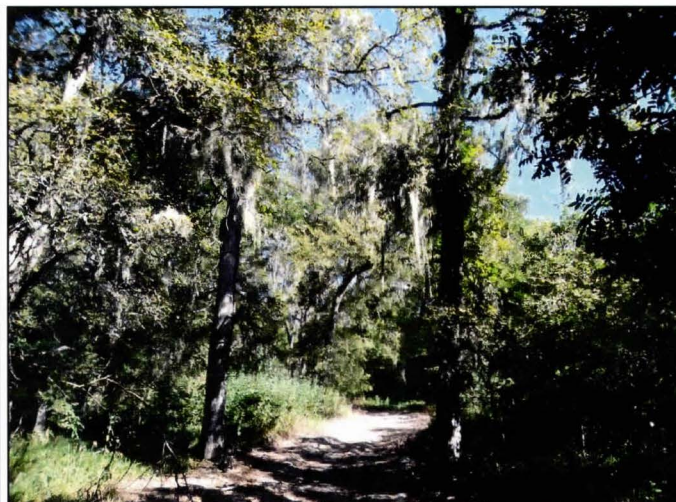
Butterfly surveys were rather sporadic over the years, although my more recent visits have provided a much better understanding of the butterfly fauna. My data exhibit varied populations over the 12-months with the lowest numbers in January and most of February, but increasing by late February and March. Numbers peak during late March until late May and then the numbers fall off in June and most of July. There is second increase from late July until late September, after which numbers gradually decline through December into January.

The 15 most common species during the study period included Little Yellow (recorded on 56 visits), Common Buckeye (56), Clouded Skipper (54), Gray Hairstreak (47), Horace's Duskywing (44), Silvery Checkerspot (44), Dainty Sulphur (43), Question Mark (41), Celiass's Roadside-Skipper (40), Dun Skipper (40), Common Checkered-Skipper (37), Black Swallowtail (37), Pearl Crescent (36), Sleepy Orange (35), and Variegated Fritillary (on 35 visits).

Nine of the 75 species were recorded only during springtime: Juvenal's and Wild Indigo Duskywings; Falcate Orangetip; Banded, Northern Oak, Soapberry



Lick Creek Park, Butterfly Alley (October 4, 2012)



Lick Creek Park, Raccoon Run Trail (September 5, 2012)

Yellows on June 4, 40 Orange Sulphurs on April 18, 21 Falcate Orangetips on Feb. 14, 22 Northern Oak Hairstreaks on April 9, 75+ Red-banded Hairstreaks on Oct. 3, 30+ Reakirt's Blue on May 26, 60+ Variegated Fritillaries on April 24, 200+ Question Marks on March 31 and again on April 9, 50+ Common Buckeyes on May 13, 250+ Silvery Checkerspots on March 29, 30+ Pearl Crescent on August 3, and 30+ Little Wood-Satyr's on April 5.

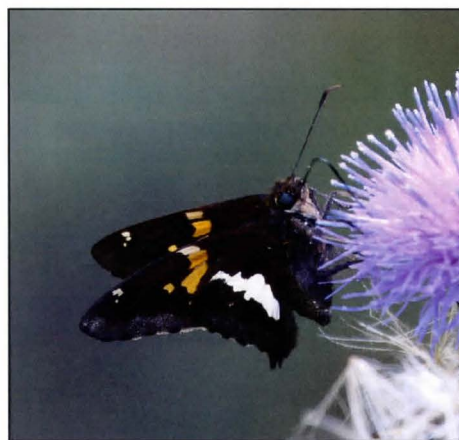
Table 1

The (number of times recorded) and periods of dates when recorded, as well as pertinent [high numbers/dates], are included below. The order of listing and scientific names are derived from Jonathan P. Pelham's "*A Catalogue of the Butterflies of the United States and Canada*" (2009).

Silver-spotted Skipper (*Epargyreus c. clarus*): (3) Mar. 29, May 26 & July 3
 Southern Cloudywing (*Thorybes bathyllus*): (4) April 1, June 22 & 28 & July 20
 Northern Cloudywing (*Thorybes p. pylades*): (14) Mar. 18-Sept. 20 [16/July 14]
 Confused Cloudywing (*Thorybes confusus*): (2) April 5 & Aug. 24
 Mazans Scallopwing (*Staphylus mazans*): (3) Sept. 18 & 27 & Oct. 10
 Juvenal's Duskywing (*Erynnis j. juvenalis*): (10) Feb. 29-Apr. 12
 Horace's Duskywing (*Erynnis horatius*): (44) Feb. 23-Oct. 22 [14/May 1]



Northern Broken-Dash (June 1, 2010)



Silver-spotted Skipper (May 26, 2011)

Funereal Duskywing (*Erynnis funeralis*): (17) Mar. 11-Oct. 16
 Wild Indigo Duskywing (*Erynnis baptisiae*): (4) Mar. 6, 15, 23 & 29
 Common Checkered-Skipper (*Pyrgus c. communis*): (37) Feb. 14-Nov. 3
 Brazilian Skipper (*Calpodus ethius*): (1) July 2
 Ocala Skipper (*Panaquina o. ocala*): (10) July 14-Nov. 7
 Common Roadside-Skipper (*Amblyscirtes vialis*): (4) Mar. 29, Apr. 1 & 12 & May 31
 Celia's Roadside-Skipper (*Amblyscirtes celia*): (40) Mar. 23-Oct. 16 [25+/Aug. 6]
 Bell's Roadside-Skipper (*Amblyscirtes belli*): (10) Mar. 22-Sept. 10
 Eufala Skipper (*Lerodea e. eufala*): (12) May 26-Nov. 6
 Clouded Skipper (*Lerema accius*): (54) Mar. 11-Nov. 28 [65+/July 4]

Fiery Skipper (*Hylephila p. phyleus*): (20) Mar. 6-Nov. 4
 Whirlabout (*Polites vibex*): (1) May 4
 Southern Broken-Dash (*Wallengrenia o. otho*): (27) May 8-Oct. 31 [22/Sept. 27]
 Northern Broken-Dash (*Wallengrenia egermet*): (2) May 29 & June 1
 Sachem (*Atalopedes campestris huron*): (16) Apr. 5-Nov. 9
 Broad-winged Skipper (*Poanes v. viator*): (1) Oct. 19
 Dun Skipper (*Euphyes vestries metacomet*): (40) Mar. 15-Nov. 6 [24/July 4]



Spicebush Swallowtail
(July 23, 2012)



Northern Oak Hairstreak
(April 9, 2012)



Striped Hairstreak
(May 4, 2011)

Pipeline Swallowtail (*Battus p. philenor*): (35) Feb. 9-Nov. 9
 Black Swallowtail (*Papilio polyxyenes asterius*): (37) Feb. 19-Nov. 6 [10/Mar. 6]
 Giant Swallowtail (*Papilio cresphontes*): (23) Mar. 14-Dec. 7 [9/Aug. 31]
 Eastern Tiger Swallowtail (*Papilio g. glaucus*): (16) Feb. 28-Sept. 28
 Spicebush Swallowtail (*Papilio troilus*): (2) July 23 & Aug. 31

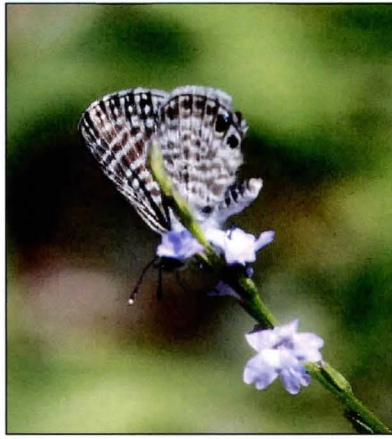
Dainty Sulphur (*Nathalis iole*): (43) Jan. 5-Dec. 29 [50+/May 13]
 Little Yellow (*Pyrisitia l. lisa*): (56) Jan. 5-Dec. 12 [75+/June 4]
 Sleepy Orange (*Abaeis nicippe*): (35) Jan. 5-Nov. 6 [8/Dec. 7]
 Orange Sulphur (*Colias eurytheme*): (28) Nov. 3-June 22 [40/Apr. 18]
 Southern Dogface (*Xerene c. cesonia*): (5) Apr. 20, May 4, June 1 & 22 & Nov. 4
 Cloudless Sulphur (*Phoebis s. sennae*): (45) Feb. 22-Dec. 29 [20/July 23]
 Large Orange Sulphur (*Phoebis a. agarithe*): (3) Mar. 31, April 4 & Oct. 17
 Falcate Orangetip (*Anthocharis midea texana*): (10) Feb. 14-Apr. 4 [21/Feb. 14]
 Checkered White (*Pontia protodice*): (15) Mar. 23-June 19 & Dec. 7 [22/May 13]

Great Purple Hairstreak (*Atlides h. halesus*): (3) May 1 & Oct. 11 & 22 [3/May 1]
 Banded Hairstreak (*Satyrrium c. calanus*): (1) Apr. 18
 Northern Oak Hairstreak (*Satyrrium favonius ontario*): (6) Apr. 9-May 1 [22/Apr. 9]
 Soapberry Hairstreak (*Phaeostrymon alcestis*): (1) April 24
 Striped Hairstreak (*Satyrrium liparops*): (1) May 4
 Henry's Elfin (*Callophrys h. henrici*): (9) Feb. 2-Apr. 5
 Red-banded Hairstreak (*Calycopis cecrops*): (33) Feb. 21-Nov. 28 [75+/Oct. 3]
 Dusky-blue Groundstreak (*Calycopis isobea*): (12) Apr. 4-Nov. 4 [30+/Oct. 3]
 Gray Hairstreak (*Strymon melinus franki*): (47) Feb. 14-Nov. 6 [18/May 1]
 Marine Blue (*Leptotes marina*): (1) May 26
 Eastern Tailed-Blue (*Cupido c. comyntas*): (4) Mar 29 & April 1, 5 & 20
 Ceraunus Blue (*Hemiargus ceraunus astenidas*): (4) Aug. 28, Sept. 27, Oct. 25 & 31 [5/Oct. 25]
 Reakirt's Blue (*Echinargus isola*): (8) Mar. 23-May 31 & Nov. 6 [30+/May 26]

American Snout (*Libytheana carinenta bachmani*): (14) Feb. 2-Dec. 18 [70+/Oct. 12]
 Monarch (*Danaus p. plexippus*): (22) Mar. 14-June 1 & Sept. 28-Oct. 22 [23/Mar. 23 & 23/Oct. 23]
 Queen (*Danaus gilippus*): (14) Apr. 24 & Aug. 31-Dec. 18 [20+/Oct. 22]
 Red-spotted Purple (*Limenitis a. arthemis*): (1) June 1
 Gulf Fritillary (*Agraulis vanillae incarnata*): (55) Jan. 11-Dec. 12 [40+/Aug. 3 & 40+/Aug. 6]
 Julia Heliconian (*Dryas iulia*): (3) Sept. 10 & 28 & Oct. 11
 Zebra Heliconian (*Heliconius charithonia vazquezue*): (3) Aug. 31 & Sept. 5 & 24
 Variegated Fritillary (*Euptoieta claudia*): (35) Jan. 27-Nov. 28 [60+/Apr. 24]
 Hackberry Emperor (*Asterocampa celtis antonia*): (26) Mar. 31-Nov. 9 [8/May 8]
 Tawny Emperor (*Asterocampa c. clyton*): (7) May 1-Nov. 4



Ceraunus Blue (August 28, 2012)



Marine Blue (May 26, 2011)

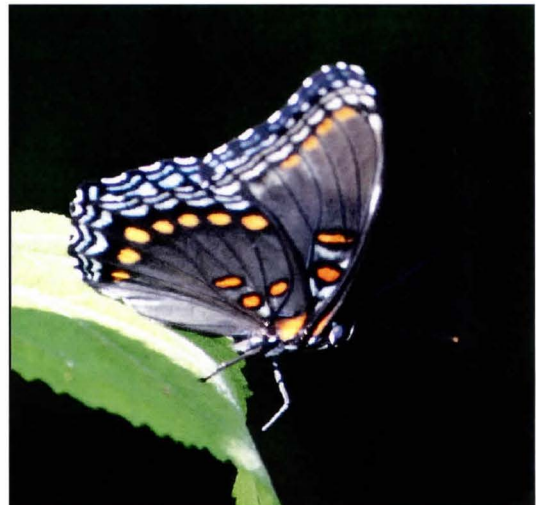


Reakirt's Blue (May 5, 2011)

American Lady (*Vanessa virginiensis*): (20) Feb. 29-Nov. 28 [22/May 13]
 Painted Lady (*Vanessa cardui*): (8) Feb. 23-May 14 & Oct. 28-Dec. 18
 Red Admiral (*Vanessa atalanta rubria*): (27) Aug. 31-June 1 [8/Mar. 23]
 Mourning Cloak (*Nymphalis a. antiopa*): (5) Feb. 19, Mar. 6, Apr. 9, 18 & 20 [3/Apr.20]
 Question Mark (*Polygonia interrogationis*): (41) Jan. 27-Nov. 28 [200+/Mar. 31 & 200+/Apr. 9]
 Common Buckeye (*Junonia c. coenia*): (56) Jan. 11-Dec. 21 [50+/May 13]
 Silvery Checkerspot (*Chlosyne n. nycteris*): (44) Mar. 6-Nov. 6 [250+/Mar. 29]
 Bordered Patch (*Chlosyne lacinia adjutrix*): (2) Sept. 24 & Nov. 5
 Phaon Crescent (*Phycoides p. phaon*): (17) Mar. 23-Nov. 28
 Pearl Crescent (*Phycoides t. tharos*): (36) Mar. 19-Dec. 7 [30+Aug. 3]
 Goatweed Leafwing (*Aeneas andria*): (20) Mar. 3-Nov. 28 [18/Oct. 4]
 Gemmed Satyr (*Cyllopsis g. gemma*): (12) Feb. 23-June 1 & Sept. 17-Dec. 22 [10/June 1]
 Carolina Satyr (*Hermeuptychia sosybius*): (11) Mar. 18-June 24 & Oct. 17-Nov. 4
 Little Wood-Satyr (*Megisto c. cymela*): (11) Mar. 23-May 17 [30+Apr. 5]



Julia Heliconian (September 28, 2012)



Red-spotted Purple (June 1, 2010)

Four additional species were recorded at Lick Creek Park in 2013, after the June 2010 to December 2011 surveys. Those four species include: Hayhurst's Scallopwing (*Staphylus hayhurstii*) and Least Skipper (*Ancyloxypha numitor*), both on April 14, and Swarthy Skipper (*Nastra lherminier*) and Little Glassywing (*Pompeius verna*), both on May 1.

Another six species have been reported over the years at Lick Creek Park that I did not record: Long-tailed Skipper (*Urbanus p. proteus*), Southern Skipperling (*Copaeodes maxima*), Juniper Hairstreak (*Callophrys gryneus castalis*), Spring Azure (*Celestrina ladon*), Viceroy (*Limenitis a. archippus*), and Gorgone Checkerspot (*Chlosyne g. gorgone*). All are included in "An inventory of the Butterflies (Lepidoptera: Hesperioidea & Papilionoides) of Lick Creek Park, College Station, Texas" - http://insects.tamu.edu/tamuinsectcollection/lick_creek_park/butterflies/ maintained by Ed Riley, Dept. of Entomology, Texas A&M University.

EUDOCIMA TODDI (ZAYAS, 1965) (LEPIDOPTERA: EREBIDAE) A RARE AND ENDEMIC SPECIES OF CUBA

BY

VERNON ANTOINE BROU JR. AND RAYNER NÚÑEZ ÁGUILA

We illustrate for the first time, images of both male and female of *Eudocima toddi* (Zayas). This species is the rarest of the genus of New World *Eudocima*. It appears that only two known specimens of *toddi* presently exist, the Holotype female (Fig. 1a) and the Allotype male (Fig. 1b). The Holotype was captured at light in August 1960 at La Gran Piedra, Oriente Province (Fig. 2), and the male was collected in March 1976 at the same locality.

Fig. 1a. *Eudocima toddi* (Zayas) ♀ HolotypeFig. 1b. *Eudocima toddi* (Zayas) ♂ AllotypeFig. 2. Type locality of *E. toddi* in Cuba.

New World, only two quite different looking species, *Eudocima proculus* (Cramer) and *Eudocima tyrannus* (Guenée) exhibit a submarginal hindwing band, as similarly found on *toddi*.

The type specimen of *toddi* has remained in the private collection of the late Fernando de Zayas Muñoz (1912-1983). This noted Cuban entomologist spent his entire lifetime, collecting, studying and reporting on the diverse insect life in Cuba. Currently the Zayas collection of approximately 80,000 specimens remains in his home under the care of his daughter and granddaughter in Havana, Cuba. The Allotype specimen is deposited in the collection at the Institute of Ecology and Systematics, Havana. Drawings of the male genitalia were illustrated by Alayo and Valdés (1980), but the genitalia slides appear to be lost.

The more recent specimen of *toddi* mentioned by Fontenla and Vázquez (1988) was incorrectly identified by these authors and is also deposited at the Institute of Ecology and Systematics, Havana, catalogue number 7,516,141. That specimen illustrated in Fig. 3 of this publication, is in fact a male *Eudocima serpentifera* (Walker), a species new to Cuba (Núñez & Barro, 2012). The collection locality listed by Fontenla & Vázquez (1988) is in western Cuba, almost 1000 km away from the type locality of *toddi*, and is a very different habitat, a Citrus plantation (Fig. 3a). The type locality of *toddi* is mostly covered by rainforest and pine forest (Fig. 2).

Fontenla and Vázquez (1988) partially described the wing pattern of their specimen which does not match that found on *toddi*. These authors state that their specimen captured in 1975 at Guane, Pinar del Rio Province "differs in coloration and exhibits a dark wavy shaped M band and does not have a submarginal band, but marginal and relatively wide from the inner margin near the anal angle".

No specimens of *toddi* were found in the collections of the Natural History Museum London, National Museum of

Natural History (Smithsonian), The Natural History Museum of Los Angeles County, nor the Florida State Collection of Arthropods. Collectors in neighboring Florida, Bahamas, Turks and Caicos, Jamaica, Haiti, and the Dominican Republic should be on the lookout for this rarely encountered species.



Fig. 3. *Eudocima serpentifera* (Walker) ♂
specimen data: Cuba, Pinar del Río, Empresa de Cítricos Guane,
21/X/1975, col. L. Vázquez, piercing on orange fruit,
CZACC 7.516141

Fig. 4. *Eudocima apta* (Walker) ♀
specimen data: Cuba, Habana, Santiago de Las Vegas, Jul/1956,
col. F. de Zayas, CZACC 7.510759



Fig. 3a.



Fig. 4a.

We illustrate a female specimen of *Eudocima apta* (Walker) (Fig. 4) deposited in the collection at the Institute of Ecology and Systematics, Havana. The map location for this specimen is illustrated in Fig. 4a. This Cuban specimen of *apta* exhibits the wide black outer hindwing marginal band, characteristic of *apta* and not *Eudocima materna* (Linnaeus), the Old World species.

We were very much surprised to locate the Holotype specimen in what appears to be pristine condition now 53 years after its capture, still in the Zayas private collection. The remarkable image in Fig. 1a was taken in April 2013. Additionally, found in the Zayas private collection were two more specimens of *apta*, though one specimen was labeled only Cuba and the other labeled only with the collector's name, C. T. Ramsden. Also, a fourth specimen of *apta* is in the Universidad de La Habana with label data: CUBA. Isla de la Juventud, Punta Francés, Estación Biológica, luz fluorescente, coll: E. Fonseca 03/Abril/2013.

To summarize, in this investigation, we report on three species of the genus *Eudocima* Billberg currently known to occur in Cuba: *apta* (4 specimens), *serpentifera* (1 specimen), and *toddi* (2 specimens).

We thank the following individuals for their assistance: Robert Borth, Aaron J. Cavosie, Julian Donahue, James Hayden, John Heppner, Martin Honey, Debbie Matthews Lott, Bob Patterson, Alberto Zilli, and in particular members of the Zayas family: Eloina Ruiz and Mairene Acuna de Zayas.

Literature Cited

- Alayo D., P. and E. Valdés, 1980. *Notas sobre Lepidopteros de Cuba III Novedades de la Familia Noctuidae*. Poyeana, no. 198, la Habana, Cuba.
- de Zayas, F., 1965. *Dos nuevas especies de insectos cubanos de los ordenes Lepidoptera (Noctuidae) y Orthoptera (Tettigonidae)*. Poyeana, series A no. 5, la Habana, Cuba.
- Fontenla J. L. and L. Vázquez, 1988: Nueva localidad y algunos datos sobre *Othreis toddi* Zayas (Lepidoptera: Noctuidae). *Miscelanea zoologica (La Habana)* 40: 2-3.
- Núñez, R. and A. Barro, 2012. *A list of Cuban Lepidoptera (Arthropoda: Insecta)*. *Zootaxa* 3384: 1–59.

JOHN KUTIS (1939 - 2011)

John Kutis, of Belleview, Florida, was well-known for his especially careful collecting and preparation of micro-moths. He was a motorcycle fan and also a dedicated naturalist, especially for Lepidoptera. He would get into unusual areas in Florida on his bike, places where collectors in cars could not get to without extensive hiking from the nearest parking area. He located some of the rarer moths in swampy areas of North Florida, where he found them to be common in such remote places at the right time of year. He found several new species in Florida, some of which have been named after him and his discoveries, such as *Diploschizia kutisi* Heppner, 1997 (Glyphipterigidae) and *Ethmia kutisi* Heppner, 1991 (Oecophoridae). He mostly collected moths in areas of northern Florida. He also collected in nearby states such as Alabama, where Richard Brown, of Mississippi, recalled some collecting evenings with him (Brown, in litt.).

He was born 26 December 1939, in Hartford, CT. In 1954, when he was 14, John's family moved to Belleview, Florida. He collected butterflies during these early years and continued his interests, including the moths. The tiny micro-moths intrigued him the most, and he would often come to Gainesville and the Florida State Collection of Arthropods (FSCA) in later years to get his new finds identified or to donate some specimens of rare moths. I first met him in this way and encouraged him to keep at it, even if we could not immediately put a name on what he brought in. It was interesting what he would find, like the two new species I named in his honor noted above, both in groups thought to be already well-known in Florida at the time.



John Kutis

Notes herein were taken in part from information sent by his sister-in-law, Charlene Kutis, and by Dr. Richard Brown (MEM), as well as from a 2009 article about John in a special issue of a Marion County magazine (*Voice of South Marion*).

John B. Heppner
McGuire Center for Lepidoptera and Biodiversity
Florida Museum of Natural History, University of Florida
Gainesville, FL 32611

He graduated from Ocala H.S. in 1957 and joined the U.S. Naval Reserve in 1958. While in the Navy, he was stationed on ships at Hong Kong, the Philippines, Borneo, Taiwan, and Vietnam. After his service years, he worked in construction in the Ocala area. Later, he opened a motorcycle repair shop and did that in between his collecting activities and motocross motorcycle racing.

His specimens of unknown moths he sent around to try and get identified, including to specialists in Washington (Smithsonian Institution, USNM) and Mississippi (Mississippi Museum of Entomology, MEM), besides the FSCA. Unfortunately, what remained of his main collection was tragically destroyed by pests a few years before he died, after which he stopped collecting, so the only remnants of his collection are at the FSCA involving two boxes of micro-moths (including a new species of Tortricidae), he left with me for identification and now housed at McGuire Center along with all other FSCA Lepidoptera. He died in Belleview on 2 February 2011.

A FIRST RECORD OF *ANOMIS EDITRIX* IN NORTH CAROLINA (WITH COMMENTS ON THE OCCURRENCE OF OTHER *ANOMIS* IN THE STATE)

BY
PARKER BACKSTROM

On October 6, 2012, I arose before dawn to check the sheets I have mounted on the back wall of my home in Chatham County, North Carolina, for moths. The sheets, illuminated by single 15 watt black light and 160 watt mercury vapor bulbs, overlook an expanse of un-manicured lawn consisting largely of centipede grass (*Eremochloa ophiuroides*) and low growing forbs. The grass edges up against second-growth woods made up primarily of tulip poplar (*Liriodendron tulipifera*), oak (*Quercus* spp.), and maple (*Acer* spp.), with smaller amounts of black cherry (*Prunus serotina*), flowering dogwood (*Cornus florida*), winged elm (*Ulmus alata*), and red cedar (*Juniperus virginiana*), among others. These woods transition into a flood plain of the Sandy Branch of Bear Creek. The diversity of moths that greeted me that morning was modest, some thirty or so generally common species including *Promalactis suzukiella*, *Eucosma similiana*, *Pyrausta acronialis*, *Grammia parthenice*, *Leucanopsis longa*, *Eumicremma minima*, *Papaipema furcata*, *Iodopepla u-album*, *Spodoptera eridania*, *Elaphria grata*, *Nephelodes minians*, and *Tricholita signata*. Seeking something a little more exciting I drove fifteen miles south to the town of Sanford, located in adjacent Lee County, where I regularly check the lighted walls of a convenience store that has proven very productive over the years. This morning could not be so categorized, though I did find the always fun-to-see *Panthea furcilla* and *Meropleon diversicolor*, the latter a species I only rarely encounter in this area.

On my return home at about 9:00 A.M., I made a brief final stop to check the walls of a service station in the Chatham County town of Goldston. It was there that I saw a moth I did not recognize. By its size and shape—narrow wings with falcate wing tip margins—it appeared to be an *Anomis*, but at first glance was not a species with which I was familiar. It did not display the overall yellowish coloration, darker antemedial, postmedial, and subterminal lines, and obvious white discal spot shown by *A. erosa*, a species I have recorded in Chatham County a number of times (Fig. 1). Rather, this moth was cool brown and faintly bicolored, being darker basally and slightly lighter proximally. I jarred it and brought it home to photograph. Comparing my results (Figs. 2 and 3) with images that appear on the Moth Photographers Group website, I determined it to be *Anomis editrix*, a species not known to occur in the eastern United States any further north than South Florida. Steve Hall and Bo Sullivan concurred with this identification and indicated that this was the first time this species has been recorded in North Carolina. Subsequent genitalic examination of the specimen by Bo confirmed the identity as *A. editrix* (although it should be noted that it is thought likely that more than one species is represented by this name).



Fig. 1. Yellow Scallop Moth
(*Anomis erosa*).



Fig. 2. Gulf Scallop Moth
(*Anomis editrix*).



Fig. 3. Gulf Scallop Moth
(*Anomis editrix*).

the Texas Lepidoptera Survey. Vernon Brou, Jr. has recorded *editrix* in Louisiana just four times over the course of more than four decades of intense collecting. There are no records of it from Mississippi, Alabama, Georgia, or South Carolina.

In the United States, *Anomis editrix* does not appear well known away from South Florida. There it can be encountered in all months of the year, though it is considered locally common to common in February and March. It has been recorded once each in Arizona and New Mexico, while in Texas it is described as “uncommon,” with eight specimens in the collection of

So just how did this individual find its way to central North Carolina? Could it have been a migrant from the south? Some members of the largely tropical genus *Anomis* exhibit northerly migrations, primarily in the fall. In the United States the most widespread member of the group, for example, *A. erosa*, occurs regularly throughout the east as far north as the Ohio Valley with scattered records as far north as Maritime Canada.

Given the relatively unworn condition of the Chatham County specimen, might it have eclosed locally? The genus is known to use members of the family Malvaceae as food plants. None of the food plants documented for use by *editrix* in South Florida, which include *Corchorus siliquosus* (slippery burr), *Triumfetta semitriloba* (Sacramento burbark), and *Malachra alceifolia* (yellow leafbract), occur in North Carolina. Another member of Malvaceae, cotton (*Gossypium* spp.), is widely grown in North Carolina. While not definitively recorded as a food plant for *editrix*, it could be used here. Given the widespread practice of cotton farming, however, that might presuppose that *editrix* would be more common in the state than it appears to be. The unworn condition of the Chatham County specimen does not necessarily mean, though, that it did eclose locally. According to Bo Sullivan some moths have been shown to ascend or be carried aloft and taken great distances by the jet stream, which may result in little obvious wear.

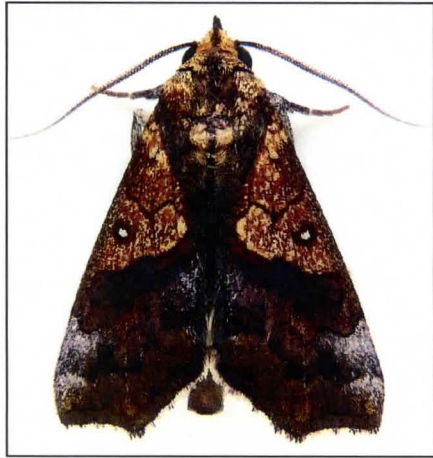


Fig. 4. Tropical *Anomis* (*Anomis flava*) (Photograph by Aaron Cavosie).



Fig. 5. Okra Leafworm Moth (*Anomis illita*)



Fig. 6. Hibiscus-leaf Caterpillar Moth (*Anomis privata*) (Photograph by J. Merrill Lynch).

The fact that *Anomis editrix* has been recorded just once in North Carolina and not at all in Mississippi, Alabama, Georgia, and South Carolina may well be an artifact of there being a relatively small number of collectors and observers rather than support the conclusion that the species is as rare in these states as the paucity of records would suggest. Given the small size and cryptic appearance of *A. editrix*, even in an area densely populated with keen observers, it might easily escape detection. That additional *editrix*, or any number of similarly “low profile” species, could be overlooked seems likely, challenging the premise of relative rarity. How rare is rare *really*? Limited observer coverage would almost certainly result in underrepresented figures for potentially widespread, or more widely spread, taxa.

The circle of light cast from a 160 watt mercury vapor bulb placed in an area with unlimited light carrying potential might draw moths from a diameter of roughly two hundred meters. The area within that circumference of light would cover approximately 31,400 square meters under ideal conditions—no buildings, trees, or other obstructions. Hypothetically then, it would take 4,010,191 mercury vapor bulbs to illuminate North Carolina’s 125,920 square kilometers of land area. If only a single specimen occurred in the state, my collection was an improbable 1 in over 4 million, thus the chances that additional *Anomis editrix* could be found seem plausible.

While *Anomis erosa* is generally uncommon in North Carolina (much less so now than it was in the 1970s), it is encountered annually. The other member of the genus that occurs with irregularity is *Anomis flava*, which is uncommon in the eastern coastal plain (Fig. 4).

Two other members of the genus have been recorded in North Carolina. James Adams collected three *Anomis illita* from the vicinity of Highlands in Macon County, in the westernmost corner of the state, on two nights of collecting from October 12-14, 2001. It has also been recorded twice away from the mountains, on October 13, 2009, and on October 9, 2012, both times in Chatham County by the author (Fig. 5). As best is known, these are the only records of this taxon for the state.

Merrill Lynch has recorded the non-native *Anomis privata* on four occasions: In Watauga County on July 6 and 17, 2011, and August 11, 2012, and in

Madison County on July 29, 2012 (Fig. 6). There are also single records from Henderson and Cabarrus counties, the latter being the only non-mountain location. The foodplant for *A. privata*, rose of Sharon (*Hibiscus syriacus*) is a common ornamental throughout the mountains so additional records can be expected.

Given the penchant for members of the genus to undergo northward migrations in the fall, the general difficulty of detecting small, non-descript moths, and the low number of collectors and astute observers, *Anomis editrix* showing up in North Carolina is not entirely surprising. This taxon should be looked for anywhere along the Gulf Coast and throughout the southeastern United States.

References

- Moth Photographers Group.** Ed. Robert Patterson, 2012. Mississippi Entomological Museum, Starkville, Mississippi. <<http://mothphotographersgroup.msstate.edu/MainMenu.shtml>>.
- Powell, Jerry A. and Paul A. Opler,** 2009. *Moths of Western North America*. University of California Press, Berkley and Los Angeles, California.
- Robinson, G. S., P. R. Ackery, I. J. Kitching, G. W. Beccaloni & L. M. Hernández,** 2012. HOSTS - A Database of the World's Lepidopteran Hostplants. Natural History Museum, London. <<http://www.nhm.ac.uk/hosts>>.
- Wagner, David L., Dale F. Schweitzer, J. Bolling Sullivan, and Richard C. Reardon,** 2011. *Owlet Caterpillars of Eastern North America*. Princeton University Press, Princeton, New Jersey.

Acknowledgements: I wish to thank the following people for generously providing information about *Anomis editrix* in their respective states of expertise: James Adams, Charles Bordelon, Vernon Brou, Jr., Richard Brown, Charles Covell, Jr., Howard Grisham, Maury Heiman, Ricky Patterson, Brian Scholtens, Jeff Slotten, John Snyder, David Wagner, Bruce Walsh, and Andy Warren. Thanks as well to Bob Patterson, Kelly Richers, and Jim Vargo for their assistance in disseminating records of *Anomis* in the United States, to James Adams for providing information about his records of *Anomis illita* in North Carolina, to Merrill Lynch for providing information about his records of *Anomis privata*, and to Aaron Cavosie for allowing me to use his image of *Anomis flava*. Finally, my thanks to Steve Hall and Bo Sullivan for their help in understanding the status and distribution of *Anomis* in North Carolina, and to Bo for kindly reviewing this article and offering critiques to help improve it.

[All photographs by the author unless otherwise noted.]

(Parker Backstrom, P.O. Box 31, Bear Creek, NC, 27207; E-Mail: dpbackstrom@embarqmail.com.)

JAMES' CHALLENGE IS ALIVE AND WELL

James Adams sends \$20.00 to our Treasury for two articles published in the March issue (2013) of the NEWS that described "first encounters": the Buck Moth article by Parker Backstrom, and the *Eudocima apta* article (State record for Vermont) by Brou, Giese, and Miller.

James' challenge continues for both "dangers of lepping" and "first encounters". Ten dollars for each up to \$100.00. Many thanks to James for his contributions in the past and in the future.

[The Editor]

NOTE:

Two prominent amateur lepidopterists died recently. Charles J. "Jack" Dempwolf of Cincinnati, OH, died May 15 and J. R. "Richard" Heitzman of Independence, MO, died May 17.

Both Jack and Richard have had serious health problems for quite some time.

Jack rediscovered *Eumaeus atala* in FL in 1959, when his parents sent him a couple of specimens they caught with their hands. The story is in Kimball 1965, but Kimball misspelled "Dempwolf" as "Dempfer." Jack served a term as president of the Society of Kentucky Lepidopterists.

Richard Heitzman was the major lepidopterist in MO, especially for moths. He and his wife Joan did a book on the Butterflies of Missouri, and he named a species of *Papilio p. asterius* complex, *P. joanae*, in honor of his wife.

Sincerest condolences to the families of these two individuals.

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 Florida report: Florida report of Lepidoptera reported, Jan. 1 – May 26, 2013.

The year started out warmer than usual. I thought everything was going to be like last year with moths and butterflies flying a month early. This was not the case beginning in early March when we had colder and wetter than normal conditions in Gainesville (can you verify when the weather changed?). It is May 12th and I have seen only three *Catocala* in my backyard light trap. My bait trap has been devoid of *Catocala* because of the frequent rain. I have seen no *Catocala clintoni* and no *Hyalophora cecropia* this year in my light trap. I usually see at least one *Cecropia* and a few *clintoni*. I had a bald faced hornet that camped out in my light trap. It was the largest one I have seen. It was in the trap for 5 days and would dive bomb me in the mornings when I opened the trap. It had good meals in there or it just liked to kill moths. I would find wings and parts of abdomens of moths writhing in the bottom of the cage. The hornet would be gone in the evening so it knew how to get in and out. Finally after the 5th day, it did not reappear.

Jeff Slotten contributed the following records for early 2013 from his home, 5421 NW 69th Lane, Gainesville, Florida 32653, on Blues Creek. Habitat: Floodplain woods with ironwood, pignut hickory, highbush blueberry, wax myrtle, chestnut, live and water oak, holly, ash, and many herbaceous plants.

The year started out warmer than usual. I thought everything was going to be like last year with moths and butterflies flying a month early. This was not the case beginning in early March when we had colder and wetter than normal conditions in Gainesville. It is May 12th and I have seen only three *Catocala* in my backyard light trap. My bait trap has been devoid of *Catocala* because of the frequent rain. I have seen no *Catocala clintoni* and no *Hyalophora cecropia* this year in my light trap. I usually see at least one *Cecropia* and a few *C. clintoni*.

Early February, 2013, *Ceratomyx satanaria* (Geometridae) was quite common in my light trap. I found two females this year and obtained some eggs and reared some individuals on Sweet Gum (*Liquidambar styraciflua*). They will overwinter in the pupal stage in cocoons. Eggs were laid on February 10th and the eggs eclosed on February 15th, 2013. The larvae pupated March 17th, 2013.

March 11: I recorded *Deidamia inscriptum* (Sphingidae), *Actias luna* (Saturniidae), *Zale lunata*, *Bellura densa*, and *Acrionicta Americana* (Noctuoidea).

On April 1 I collected a fresh *Callosamia securifera* female. Ova obtained and reared to cocoon stage May 12, 2013. *C. securifera* is the only *Callosamia* species I find in Gainesville since its hostplant, *Magnolia virginiana*, is present in the area. All three species can be found in Liberty County, Florida.

May 2: *Catocala coccinata sinuosa*: a fresh male found in the light trap.

May 4: *Nymphalis antiopa*, *Cyllopsis gemma*, *Enodia portlandia*, and several *Amphion nesus* (Sphingidae) in bait trap at the same locality)

On April 6 Barbara Woodmansee and about 20 NABA members from at least three Florida chapters met at Lower Suwannee National Wildlife Refuge, Levy Co. (near Cedar Key) for a weekend of butterfly identification and photography. Species they recorded there included the following: *Epargyreus clarus*, *Erynnis zarucco*, *Thorybes pylades*, *Amblyscirtes aesculapius*, *Euphyes pilatka*, *Polites vibex*, *Lerema accius*, *Ancyloxipha numitor*, *Problema byssus*, *Hylephila phyleus*, *Nastra lherminier*, *N. neamathla* (?), *Poanes zabulon*, *P. viator*, *P. aaroni*, *Wallengrenia egeremet*, *Battus philenor*, *Papilio glaucus*, *P. troilus*, *P. polyxenes asterus*, *P. palamedes*, *Eurytides marcellus*, *Phoebis sennae*, *Eurema daira*, *Pyrisitia lisa*, *Calycopis cecrops*, *Callophrys gryneus sweadneri*, *Libytheana carinenta*, *Junonia coenia*, *Polygonia interrogationis*, *Vanessa virginiensis*, *V. atalanta*, *Phyciodes phaon*, *P. tharos*, *Limenitis archippus*, *Agraulis vanillae*, *Heliconius charithonia*, *Danaus plexippus*, *D. gilippus*, *Hermeutychia sosybius*, *Megisto cymela*, and *Cyllopsis gemma*.

Charlie's home list of first butterfly sightings for 2013 up to May at his home in Gainesville, Alachua Co., are:

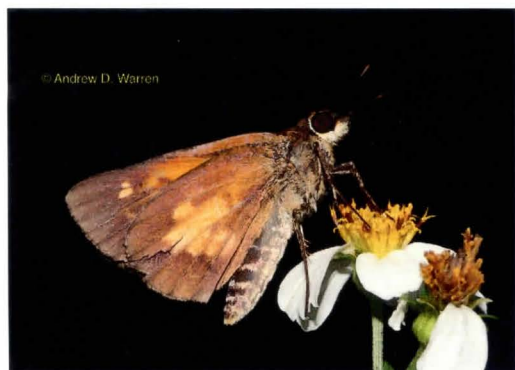
1. <i>Leptotes cassius</i>	Jan. 1, flying in back yard
2. <i>Phoebis sennae</i>	Jan. 12, nectaring on Pentas in back yard
3. <i>Agraulis vanillae</i>	Jan. 12, nectaring on Pentas in back yard
4. <i>Vanessa atalanta</i>	March 10, flying and lighting in back yard
5. <i>Calycopis cecrops</i>	March 10, lit on leaf next to tool shed
6. <i>Papilio glaucus</i>	March 17, flying in front yard
7. <i>Heraclides cresphontes</i>	March 17, flying in front yard
8. <i>Atlides halesus</i>	March 17, nectaring in viburnum tree
9. <i>Libythea carinenta</i>	March 24, in holly tree
10. <i>Danaus plexippus</i>	March 24, nectaring on Mexican sunflower
11. <i>Vanessa virginiensis</i>	March 30, perched in Viburnum tree
12. <i>Parhassius m-album</i>	April 2, in Viburnum tree
13. <i>Heliconius charithonia</i>	April 13, flying in the back yard
14. <i>Erynnis horatius</i>	May 17, on lantana blossoms in back yard
15. <i>Hylephila phyleus</i>	May 25, on lantana blossoms

Covell saw the following on Terra Ceia Island, Manatee Co., on Jan. 17: *P. sennae*, *A. monuste*, *A. jatrophae*, *A. vanillae* and *H. charithonia*. He also recorded the following along Rt. 24 near Otter Creek, Levy County, on May 17: *P. sennae*, *A. monuste*, *P. phaon* (many), *J. coenia* (several, all worn) and several fresh *L. archippus floridensis*.

He also recorded the following in Gainesville, Alachua Co. (in addition to "firsts" listed above):

P. sennae, Jan. 1, 11, 12, 19, 25, 30, Feb. 9, 20, 22, 23, March 1, 8, 9, 10, 16, 24, 26, 30, Apr. 2, 8, 10, 13, May 7, 14 and 25
Leptotes cassius, Jan. 1, May 27
Vanessa atalanta, Jan 9, Feb. 23, March 2, 8, 10, Apr. 2, 13, 14. 24, May 7, 15
Phoebis philea, Jan. 9
Pyrisitia lisa, Jan. 9, 13
Phoebus philea, Jan 9
Heliconius charithonia, Jan. 11, March 10, Apr. 8, 13, May 26, 27
Abais nicippe, Jan. 12, 30
Agraulis vanillae, Jan. 12, 19, Feb. 9, March 30, Apr. 24, May 7, 9, 26
Polygonia interrogationis, Jan. 19, 30,
Papilio polyxenes asterius, Jan. 26
Phyciodes phaon, Feb. 1
Papilio palamedes, Feb. 22, March 26

Ancyloxypha numitor, Feb. 23
Phyciodes tharos, Feb. 27,
Danaus plexippus, Feb. 27, Apr. 5, 10, 22, May 9, 10, 15, 26, 27
Papilio troilus, March 10, May 15
Abaeis nicippe, March 10,
Papilio glaucus, March 16, Apr. 2, May 4, 27
Heraclides cresphontes, March 17, Apr. 26
Libytheana carinenta, March 27, 30, May 15, 27
Leptotes cassius, March 30
Junonia coenia, Apr. 2, 6, 10, 13, May 14, 19, 27
Atlides halesus, Apr. 2
Megisto cymela, Apr. 5
Hylephila phyleus, Apr. 6, 24, 27, May 11, 19, 25, 27
Vanessa virginiensis, Apr. 8, 24, 26, May 7, 9, 10, 11, 15
Pyrgus albescens, Apr. 24
Nathalis iole, May 11
Pyrgus oleus, May 14
Calycopis cecrops, May 13, 14, 26
Pontia protodice, May 17
Erynnis horatius, May 26
Asterocampa clyton, May 27



Poanes viator (photo by Andrew Warren)

May 5 in Micanopy, Alachua Co., Covell saw a *Phoebis agarithe*.

J.D. Turner caught a *Satyrrium favonius* behind the McGuire Center in Gainesville on April 18.

Jaret Daniels reported *P. vibex*, *H. phyleus*, *E. marcellus*, *V. atalanta*, *V. virginiensis*, and *A. vanillae* on Apr. 24 in Gainesville.

Andy Warren recorded *Poanes viator*, University of Florida Campus, Lake Alice Conservation Area, Gainesville, FL, 23 & 25 May 2013. Two seen each day.

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

The contributors include James Adams (JKA or no notation). Other contributors are spelled out with the appropriate records. Most records presented here represent new or interesting records (range extensions, unusual dates, uncommon species, county records, etc.), or more complete lists for new locations/new times of year. All known new STATE and COUNTY records are indicated, and all dates listed below are 2013 unless otherwise specified.

Carbondale, I-75 exit 326, Whitfield Co., April 13:

NOCTUIDAE: *Eutelia pucherrimus*.

Calhoun, (JKA residence):

GEOMETRIDAE: *Ceratomyx satanaria*, March 22 (7 weeks later than last year). **DREPANIDAE:** *Drepana arcuata*, April 8.

Crest of Rocky Face Ridgeline, just SW of Dalton, Whitfield Co., June 1:

EREBIDAE: *Scolecocampa liburna*, *Hypsoropha monilis* (LATE), *Grammia anna* (one all black female). **NOCTUIDAE:** *Chrysanympa formosa*.

Salacoa Rd. at Salacoa Ck., 5 mi ESE of Fairmount, Bartow Co., June 9:

GEOMETRIDAE: *Trigrammia quadrinotaria*, *Metarranthis angularia*.

Morganton, Fannin Co.:

EREBIDAE: *Calyptra canadensis*, June 8. **NOCTUIDAE:** *Acronicta funeralis*, May 25.

Brasstown Bald, Towns Co., 4200', May 25-26:

SATURNIIDAE: *Actias luna* (still spring brood at this elevation). **NOCTUIDAE:** *Acronicta spinigera*, *A. funeralis*, *Malliatha concinnimacula*. **GEOMETRIDAE:** *Homochlodes fritillaria*, *H. disconventa*, *Plagodis pulveraria*, *Metarranthis hypochraria*.

Neel's Gap, border of Lumpkin and Union Cos., along hwy. 19, May 25:

ADELIDAE: *Adela caeruleella*.

DeSoto Falls area, along Hwy. 19, Lumpkin Co. (3 mi. S of Neel's Gap), May 26:

PAPILIONIDAE: *Papilio appalachiensis*, abundant.

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

April 18-19, JH and BS:

TINEIDAE: *Homostinea curviliiniella*. **MOMPHIDAE:** *Mompha bottimeri*. **BATRACHEDRIDAE:** *Homaledra sabalella*. **GELECHIIDAE:** *Chionodes aglaia*. **TORTRICIDAE:** *Argyrotaenia ivana*, *Sparganothis sulfureana* (more than 1 form). **LACTURIDAE:** *Lactura pupula*. **CRAMBIDAE:** *Hellula kempae*. **PYRALIDAE:** *Cacotherapia unicoloralis*, *Cactoblastis cactorum*. **GEOMETRIDAE:** *Tacparia zalissaria*. **NOTODONTIDAE:** *Heterocampa astarte*. **EREBIDAE:** *Gondysia smithi*. **NOCTUIDAE:** *Tripudia rectangula*, *Derrima stellata*, *Amphipoea americana*.

May 9-10, JH:

CRAMBIDAE: *Microtheoris ophionalis*, *Pococera robustella*. **LASIOCAMPIDAE:** *Tolype minta*. **GEOMETRIDAE:** *Nematocampa expunctaria*, *Nepytia semiclusaria*. **EREBIDAE:** *Hypenula cacuminalis*.

June 12, 2012, JH:

GEOMETRIDAE: *Pimaphera sparsaria*.

Piedmont NWR, Jones Co., May 10, Saunders Pinckard, selected species from a bigger list:

NYMPHALIDAE: Silvery Checkerspot (*Chlosyne nycteis*). **HESPERIIDAE:** Hoary Edge (*Achalarus lyciades*), Southern Skipperling (*Copaeodes minimus*), Bell's Roadside Skipper (*Amblyscirtes belli*) (possibly COUNTY), Swarthy Skipper (*Nastra lherminier*).

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

Mississippi: Rick Patterson, 400 Winona Rd., Vicksburg, MS 39180, E-Mail: rpatt42@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

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

Brian sends in the following records for South Carolina:

Newly recorded moth records from Congaree National Park from 2010. Collectors are Brian Scholtens, Joe Culin, John Snyder, Tom Smith and Theresa Thom.

From 19-20 Mar 2010; leg. Joe Culin, John Snyder, Brian Scholtens, Tom Smith:

Cydia rana (Fbs.) – probable record (State record)

Eupithecia swetti Grossb. – confirmed by dissection

From 23 Apr 2010; Brian Scholtens:

Cydia laricana (Bsk.) – confirmed by dissection (State record)

From 14 May 2010; Joe Culin:

Acronicta laetifica Sm.

Olethreutes permundana – confirmed by dissection (State record)

From 12 Jun 2010; leg. Joe Culin:

Argyria auratella (Clem.)

Marasmia cochrusalis (Wlk.)
Lobocleta ossularia (Gey.)
Glyphidocera lactiflosella (Cham.)
Spodoptera latifascia (Wlk.)
Baileya australis (Grt.)
Datana integerrima G. & R.

From 16 Jul 2010; leg. Joe Culin:

Mellilla xanthometata (Wlk.)
Schizura leptinoides (Grt.)

From 13-14 Aug 2010; leg. Joe Culin:

Anania plectilis (G. & R.) – formerly *Phlyctaenia coronata tertialis*, now recognized as separate from European species
Heliothis virescens (F.)
Amolita fessa Grt.
Euclea nanina Dyar
Synanthedon rubrofascia (Hy. Edw.)

From 07 Sep 2010; leg. Theresa Thom:

Datana robusta Stkr. (Notodontidae)
Tinea pellionella (L.) (Tineidae)
Grapholita prunivora (Walsh) (Tortricidae) (State record)

From 17-18 Sep 2010; leg. Brian Scholtens:

Eucosma floridana Kft. (State record)
Stagmatophora wyattella B. & Bsk. (State record)
Dichomeris aglaia Hodges (State record)
Caloptilia bimaculatella (Ely)
Calledapteryx dryopterata Grt.

From 30 Sep 2010; leg. Theresa Thom:

Pandemis limitata (Rob.)

From 15 Oct 2010; leg. Joe Culin, John Snyder, Brian Scholtens:

Leucania calidior (Fbs.)

From 21 Oct 2010; leg. Theresa Thom:

Tolype velleda (Stoll)

From 26 Oct 2010; leg. Theresa Thom:

Leptostales pannaria (Gn.)
Eucoptocnemis fimbriaris (Gn.)

Tennessee: John Hyatt, 233 Park Ridge Court, Kingsport, TN 37664, E-Mail: jkshyatt@aol.com

John sends in the following observations: *Poanes viator*, April 19, Darien, McIntosh Co., Georgia, is a somewhat early record I just observed. Spring is in general quite late, both in Georgia and in the Appalachians of east Tennessee.

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

Ed sends in the following report for the Spring of 2013:

Most of Texas has had a cool, fairly dry spring except for areas of central and east Texas, where there has been episodic rain associated with frontal systems.

The first section is a report of a collecting trip by Knudson and Bordelon to northeast TX during the first week of

June. Our goal was *Catocala*, of which we managed to get 23 species. Unfortunately some of the species we hoped for, such as *C. sappho*, *C. judith*, *C. delilah*, and *C. miranda* did not show up.

Locality and date codes: M = Morris Co., TX Daingerfield SP, 2-4-VI-13; H= Hopkins Co., TX, Cooper Lake SP, 5,6-VI-13; A= Anderson Co., TX, Gus Engeling WMA, 7-VI-13 (permits required). (a) = abundant, (c) = common, (u) = uncommon. The *Catocala* were mainly at bait.

EREBIDAE: *Catocala innubens* H, (a); *C. epione*, MHA (a); *C. consors* A (c); *C. muliercula* M (u); *C. ilia* MHA (c); *C. umbrosa* MHA (u); *C. illecta* H (u); *C. messalina* A (u); *C. andromedae* HA (u); *C. gracilis* MH (u); *C. coccinata* M (u); *C. ultronia* MH (a); *C. grynea* HA (c); *C. alabamiae* (including form *olivia*) MH (c); *C. grynea* HA (u); *C. clintoni* M (u); *C. similis* MHA (u); *C. minuta* (including form *parvula*) H (u); *C. micronympha* MHA (c); *C. connubialis* (mostly form *cordelia*) MHA (c); *C. amica* MHA (a); *C. lineella* MHA (c); *C. jair* MH (u). Other erebids of interest: *Spiloloma lunilinea* H (u); *Pseudanthracia coracias* A (u); and *Zale confusa* M (u).

NOCTUIDAE: *Xanthopastis timais* M (u); *Cosmia calami* MH (c); *Callopietria mollissima* A (u); *Acronicta betulae* M (u); *Sympistis kappa* H (u)

GEOMETRIDAE: *Tetraxis crocallata* MH (u); *Nepytia semiclusaria* M (c).

One interesting record from Harris Co., TX, Houston 12-30-V-13 was *Erechthias minuscula* (Caribbean Scavenger Moth)(Tineidae). This probably is the first Texas record. Two specimens of *Litoprosopus futilis*, (Erebidae) were found in a bait trap in Jefferson Co., TX, Beaumont, in mid May, by Charles Bordelon.

Many of you have probably heard of the new US record of *Polygonia haroldii*, a Mexican species (apparently a vagrant) that showed up in the Davis Mts of TX this May. We also have an apparent "new" hairstreak from Texas, *Ministrymon janevicroy*, described by Glassberg (from older specimens in various collections). It differs from the very similar *M. azia*, by having light green-colored eyes and coarse texture on the gray ventral HW scales.

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

Harry sends in the following report for 2012. (It is the Editor's fault for this report being late. Somehow I misplaced it when originally sent to me by Harry.)

NOTE: Reports based on mix of reliable sight reports, photographs, net/release, captures and breeding. COUNTY records are in all-capital letters.

Following the mildest winter on record in northern Virginia, spring arrived full-force in 2012, one month early, during the last week of February without any subsequent arctic outbreaks. Most butterfly species emerged 3-4 weeks earlier than normal, thus allowing for one additional seasonal brood in multivoltine species.

PAPILIONIDAE:

Battus philenor – Frederick Co.: Gore, Old Knob, 3/22/12 (unusually early for northern mountain region - Harry Pavulaan).

Eurytides marcellus – Albemarle Co.: Charlottesville, 3/11/12 (Mark Adams). Loudoun Co.: Leesburg, Veterans Memorial Park, 3/13/12, 3/29/12 (unusually early - Harry Pavulaan).

Papilio polyxenes – Frederick Co.: Gore, Old Knob, 3/22/12 (Harry Pavulaan).

Papilio (Pterourus) glaucus – FAIRFAX city: 9/10/12 (Matthew O'Donnell). Frederick Co.: Gore, Old Knob, 3/22/12 (Harry Pavulaan). Loudoun Co.: Leesburg, Veterans Memorial Park, 3/29/12 (large summer form female already - Harry Pavulaan).

Papilio (Pterourus) troilus – FAIRFAX city: 9/10/12 (Matthew O'Donnell). SUSSEX Co., location not specified, 2007 photograph (Allen Bryan).

Papilio (Pterourus) appalachiensis – Fauquier Co.: Markham, George Thompson WMA, 5/12/12 (Jim Gallagher, Judy Gallagher, Mona Miller).

Heraclides cresphontes – Fairfax Co.: Herndon, 7/25/12 (female ovipositing on *Xanthoxylum americanum* - Mona Miller). Loudoun Co.: Leesburg, Edwards Landing Town Park, 7/14/12-7/18/12 (second brood female observed ovipositing daily on *Ptelea trifoliata* in naturalized *P. trifoliata* thicket and nectaring on *Buddleia*, 45 eggs counted - Harry Pavulaan); Third brood of fresh adults flew early September - Leesburg, Edwards Landing Town Park, 9/1/12 (Harry Pavulaan); Neersville, Blue Ridge Center for Environmental Stewardship, 9/9/12 (Harry Pavulaan, Sandra Pavulaan).

PIERIDAE:

Pieris rapae – Strong early flight in northern Virginia. Fauquier Co.: Markham, George Thompson WMA, 3/15/12 (very common – Harry Pavulaan). Loudoun Co.: Leesburg, Veterans Memorial Park, 3/13/12 (common to abundant in all forested and open habitats including suburban settings - Harry Pavulaan). Page Co.: Luray, Shenk Hollow, 2/18/12 (rare mid-winter observation – Mara Meisel, Paul Dennison, Rick Frederick, Sue Schaefer).

Pontia protodice – Fauquier Co.: Paris, Sky Meadows State Park, 8/5/12 (Scott Baron). HENRICO Co.: location not specified, 10/15/12 (Allen Bryan). Prince William Co.: Woodbridge, Occoquan NWR, 6/2/12 (Pat Durkin). Pulaski Co.: Dublin, 8/26/12 (observed nectaring on Red Clover – Alan Kessler, Clyde Kessler). SUSSEX Co.: location not specified, 3/31/07 (Allen Bryan). Warren Co.: Bentonville, Shenandoah River State Park, 9/9/12 (Glenn Koppel).

Anthocharis midea – Frederick Co.: Gore, Old Knob, 3/22/12 (abundant in woodlands - Harry Pavulaan). Loudoun Co.: Leesburg, Veterans Memorial Park, 3/29/12 (very common, adults worn, indicating very early flight, first flight seen at location in several years - Harry Pavulaan); Evergreen Mills, Banshee Reeks Nature Preserve, 3/17/12 (Glenn Koppel, Mary Koeneke).

Colias eurytheme – FAIRFAX city: 9/10/12, (Matthew O'Donnell). Fauquier Co.: Markham, 12/4/12 (Harry Pavulaan).

Phoebis sennae – Strong seasonal flight statewide. AMHERST Co.: location not specified, 9/22/12 (Mark Adams). Augusta Co.: Middlebrook, 6/9/12 (Tom Stock). BUCKINGHAM Co.: various locations, 9/26/12 (Bruce Grimes). FAIRFAX city: 9/10/12 (Matthew O'Donnell). Fairfax Co.: Burke, 9/1/12 (Matthew O'Donnell); Herndon, 4/13/12 (Mona Miller); Lorton, Meadowood Special Recreation Management Area, 10/05/12 (Matthew O'Donnell); Mt. Vernon, Huntley Meadows Regional Park, 9/1/12 (Matthew O'Donnell); Vienna, 5/3/2012 (Scott Baron); Great Falls, 8/24/12 (Harry Pavulaan); Vienna, Meadowlark Botanical Gardens, 9/14/12 (Harry Pavulaan), 9/22/12 (Matthew O'Donnell). Fauquier Co.: Markham, 4/29/12 (Harry Pavulaan, Sandra Pavulaan); Markham, Hollin Farm, 8/22/12 (Harry Pavulaan); Paris, Sky Meadows State Park, 5/12/12 (Scott Baron, Jim Gallagher, Judy Gallagher, Mona Miller). Franklin Co.: Ferrum, 4/8/12 (Clyde Kessler); location not specified, 9/2/12 (Clyde Kessler). Henrico Co.: locations not specified, 6/16/12, 9/26/12 (Scott Baron); location not specified, 9/26/12 (Bill Hark). Loudoun Co.: Neersville, Blue Ridge Center for Environmental Stewardship, 8/18/12, 9/9/12 (Harry Pavulaan); Leesburg, 8/17/12, 8/18/12, 8/20/12, 8/23/12, 8/24/12, 9/13/12 (Harry Pavulaan); Sterling, Claude Moore Park, 9/12/12 (Harry Pavulaan). Montgomery Co.: McCoy, Virginia Tech Kentland Research Farm, 5/3/12, 5/7/12 (Tom McAvoy). Norfolk city: Norfolk Botanical Gardens, 9/8/12 (56 observed - David Amadio). Northampton Co.: Cape Charles, Eastern Shore Virginia NWR, 9/7/12 (24 observed – David Amadio). Prince William Co.: Woodbridge, Occoquan Bay NWR, 9/3/12 (Matthew O'Donnell). Pulaski Co.: Dublin, 8/26/12 (observed at puddle party with many *Colias eurytheme* – Alan Kessler, Clyde Kessler). Rappahannock Co.: Washington, 7/28/12 (17 observed, nectaring on *Lobelia cardinalis* - Scott Baron, Greg Davis, Sandy Liebel). Richmond city: 5/9/12 (Bill Hark); Maymont Park, 9/26/12 (Bill Hark), 10/24/12 (Bill Hark). Rockingham Co.: Elkton, Kite's Spring, 8/18/12 (Mike Smith). Suffolk city: Great Dismal Swamp NWR, 9/7/12 (91 observed – David Amadio). Warren Co.: Bentonville, Shenandoah River State Park, 9/9/12 (Glenn Koppel).

Pyrisitia lisa – Unusually widespread and strong flight this season. ALBEMARLE Co.: Charlottesville, 10/6/12 (Mark Adams). AMHERST Co.: various locations, 9/22/12 (Mark Adams). Botetourt Co.: Gala, 8/27/12 (59 observed - Barry Kinzie). BUCKINGHAM Co.: various locations, 9/26/12 (Bruce Grimes). FAIRFAX city: 9/26/12 (Matthew O'Donnell). Fairfax Co.: Burke Centre, 9/8/12 (Matthew O'Donnell); Lorton, Meadowood Special

Recreation Management Area, 10/05/12 (Matthew O'Donnell); Mt. Vernon, Huntley Meadows Regional Park, 9/1/12, 10/6/12 (Matthew O'Donnell); Vienna, Meadowlark Botanical Gardens, 9/22/12 (Matthew O'Donnell). Fauquier Co.: Paris, Sky Meadows State Park, 5/12/12 (Mona Miller), 6/16/12 (Greg Davis, Walter Gould). FRANKLIN Co.: location not specified, 9/2/12 (Clyde Kessler). Giles Co.: Jefferson National Forest, Mountain Lake, 4/30/12 (Tom McAvoy). HENRICO Co.: 9/26/12 (Bill Hark), 9/28/12 (1 female white form – Bill Hark). Loudoun Co.: Neersville, Blue Ridge Center for Environmental Stewardship, 9/9/12 (Harry Pavulaan); Sterling, Claude Moore Park, 9/12/12 (Harry Pavulaan); Sterling, Algonkian Regional Park, 9/12/12 (Harry Pavulaan). Norfolk city: Norfolk Botanical Gardens, 9/8/12 (David Amadio). Prince William Co.: Woodbridge, Julie Metz Wetland Mitigation Area, 10/21/12 (Matthew O'Donnell); Woodbridge, Occoquan Bay NWR, 9/3/12 (16 observed – Matthew O'Donnell); Woodbridge, Veteran's Park, 10/20/12 (Matthew O'Donnell), 10/18/12 (Sheryl Pollock). Rappahannock Co.: Washington, 7/28/12 (Scott Baron, Greg Davis, Sandy Liebel). Rockingham Co.: Elkton, 8/27/12, 9/25/12 (Mike Smith). Suffolk city: Great Dismal Swamp NWR, 9/7/12 (David Amadio), 9/8/12 (David Amadio). Warren Co.: Bentonville, Shenandoah River State Park, 9/9/12 (Glenn Koppel), 9/29/12 (Matthew O'Donnell).

Abaeis nicippe – Unusually widespread flight this season. Accomack Co.: Chincoteague, Assateague Island, 4/16-4/17/12 (Denise Gibbs). Albemarle Co.: Charlottesville, 10/6/12 (Mark Adams). AMHERST Co.: various locations, 9/22/12 (Mark Adams). Botetourt Co.: Troutville, Woodpecker Ridge, 3/23/12 (Bruce Grimes). BUCKINGHAM Co.: various locations, 9/26/12 (Bruce Grimes). FAIRFAX city: 9/26/12 (Matthew O'Donnell). Fairfax Co.: Burke Centre, 9/8/12 (Matthew O'Donnell); Lorton, Meadowood Special Recreation Management Area, 9/30/12, 10/05/12 (Matthew O'Donnell); Vienna, Meadowlark Botanical Gardens, 9/14/12 (Harry Pavulaan). Fauquier Co.: Markham, George Thompson WMA, 3/15/12 ("rosa" form present, believed to overwinter as adults here – Harry Pavulaan), 4/14/12 (Harry Pavulaan), 4/15/12 (Tom Smith), 8/12/12 (Harry Pavulaan, Sandra Pavulaan); Markham, Hollin Farm, 8/22/12 (Harry Pavulaan); Paris, Sky Meadows State Park, 6/16/12 (Scott Baron), 8/5/12 (Scott Baron). FRANKLIN Co.: location not specified, 9/2/12 (Clyde Kessler); Philpott Lake, Salthouse Branch Park, 12/3/12 (Ray Callahan, Clyde Kessler). Loudoun Co.: Neersville, Blue Ridge Center for Environmental Stewardship, 8/4/12 (Sheryl Pollock, photo); 8/18/12, 9/9/12 (Harry Pavulaan); Sterling, Claude Moore Park, 9/12/12 (Harry Pavulaan). Norfolk city: Norfolk Botanical Gardens, 9/8/12 (46 observed - David Amadio). Northampton Co.: Cape Charles, Eastern Shore Virginia NWR, 9/7/12 (David Amadio). Prince William Co.: Haymarket, Silver Lake Regional Park, 8/12/12 (Greg "gergrd" [anonymous] via valeps Yahoo discussion group); Woodbridge, Occoquan Bay NWR, 10/14/12 (Matthew O'Donnell); Woodbridge, Veteran's Park, 10/20/12 (Matthew O'Donnell). Pulaski Co.: Dublin, 8/26/12 (Alan Kessler, Clyde Kessler). Rappahannock Co.: Washington, 7/28/12 (common - Scott Baron, Greg Davis, Sandy Liebel). Richmond city: Maymont Park, 9/26/12 (Bill Hark), 10/24/12 (Bill Hark). Rockingham Co.: Elkton, 3/28/12, 8/18/12 (Mike Smith). Suffolk city: Great Dismal Swamp NWR, 9/7/12 (David Amadio), 9/8/12 (David Amadio).

Nathalis iole – Historic seasonal migration into state, especially northern Virginia. Reports via NABA Sightings page and BAMONA maps indicated movement toward east via Ohio and Pennsylvania. Many county records. ACCOMACK Co.: Chincoteague, Assateague Island, first week of Oct. 2012 (abundant - Denise Gibbs). AUGUSTA Co.: Waynesboro, 7/28/12 (Peter Nebel), 8/10/12 (4 observed, photographed – Peter Nebel). CHARLES CITY Co.: Charles City, Harrison Lake Nat. Fish Hatchery, 10/21/12 (photographed – Paul Bedell). FAIRFAX Co.: Reston, Lake Fairfax County Park, 9/21/12 (photographed - Matt Myers). FLOYD Co.: Blue Ridge Parkway, Rocky Knob Recreation Area, 9/15/12 (John Ford, Clyde Kessler). GILES Co.: Glen Alton, 7/9/12 (Ray Callahan, Clyde Kessler). LOUDOUN Co.: Evergreen Mills, Willowsford community, 9/8/12 (6 observed - Mona Miller), 10/5/12 (50+ observed, nectaring on *Cardamine hirsuta*, *Potentilla indica*, *Ranunculus bulbosus*, *Cerastium vulgatum*, *Oxalis montana* – Mona Miller, Sheryl Pollock, Donna Quinn); Leesburg, Potomac Crossing greenbelt, 8/20/12 (2 netted for eggs - Harry Pavulaan), 9/15/12 (vouchered - Harry Pavulaan); Leesburg, Veterans Memorial Park, 8/21/12 (2 netted for eggs - Harry Pavulaan), 9/9/12 (20+, some vouchered for documentation - Harry Pavulaan); Neersville, Blue Ridge Center for Environmental Stewardship, 9/9/12 (1 photographed - Sandra Pavulaan, Harry Pavulaan); Sterling, Claude Moore Park, 9/12/12 (Harry Pavulaan). MADISON Co.: location not specified, 8/1/12 (photographed - David Cox). PATRICK Co.: Blue Ridge Parkway, Rocky Knob Recreation Area, 9/15/12 (John Ford, Clyde Kessler). PRINCE WILLIAM Co.: Haymarket, 9/7/12 (5, two netted/photographed - Laura McGranaghan), 9/10/12 (7 observed – Laura McGranaghan); Woodbridge, Veterans Park, 10/11/12 (3), 10/18/12, 10/20/12 (2) (all photographed - Matthew O'Donnell), 10/5/12 (4 observed – Sheryl Pollock), 10/18/12 (Sheryl Pollock). RADFORD City: 10/2/12 (photographed – Nancy Kent). RICHMOND City: 10/3/12 (Naseem Reza). ROCKINGHAM Co.: Elkton, 8/27/12, 9/25/12 (Mike Smith).

LYCAENIDAE:

Lycaena phlaeas - Augusta Co.: Middlebrook, 6/9/12 (Tom Stock). Fauquier Co.: Markham, George Thompson WMA, 4/29/12 (Tom Smith); Paris, Sky Meadows State Park, 8/5/12 (Scott Baron). Giles Co.: Glen Alton, 7/9/12 (Ray Callahan, Clyde Kessler). Rappahannock Co.: Washington, 7/28/12 (Scott Baron, Greg Davis, Sandy Liebel). ROCKINGHAM Co.: Elkton, 6/8/12, 8/27/12, 9/25/12 (Mike Smith).

Incisalia (Deciduphagus) augustinus - ROCKINGHAM Co.: Elkton, 3/28/12 (Mike Smith).

Incisalia (Deciduphagus) henrici henrici - Frederick Co.: Gore, Old Knob, 3/22/12 (Harry Pavulaan) - host Redbud in full bloom, one month early. GREENE Co.: Shenandoah Nat. Park, Pocosin Cabin Trail, 4/15/12 (Mike Smith).

Incisalia (Incisalia) niphon niphon - Prince William Co.: Woodbridge, 5/13/12 (nectaring on *Itea virginica* - Laura Farron).

Satyrrium edwardsi - KING WILLIAM Co.: location not specified, 6/4/06 (Allen Bryan).

Satyrrium kingi - KING WILLIAM Co.: location not specified, 7/4/07 (Allen Bryan).

Mitoura gryneus - Botetourt Co.: Troutville, Woodpecker Ridge, 4/1/12 (Bruce Grimes).

Calycopis cecrops - Unusually early reports for region. Albemarle Co.: Charlottesville, 4/9/12 (Laura Adams, Mark Adams). Fairfax Co.: Vienna, Meadowlark Botanical Gardens, 9/22/12 (Matthew O'Donnell). Fauquier Co.: Markham, George Thompson WMA, 4/20/12 (Tom Smith), 4/27/12 (very common - Billy Weber), 4/29/12 (Harry Pavulaan, Tom Smith); Paris, Sky Meadows State Park, 4/17/12, 4/30/12 (Scott Baron). Franklin Co.: Ferrum, 4/8/12 (Clyde Kessler). Prince William Co.: Woodbridge, Leesylvania State Park, 4/7/12 (Glenn Koppel, Mary Koeneke).

Parhassius m-album - SUSSEX Co.: no location specified, photographed 2009 (Allen Bryan).

Strymon melinus - FAIRFAX city: 9/10/12 (Matthew O'Donnell). RAPPAHANNOCK Co.: Washington, 7/28/12 (Scott Baron, Greg Davis, Sandy Liebel).

Everes comyntas - FAIRFAX city: 9/10/12 (Matthew O'Donnell).

Celastrina neglecta - All spring form reports identified by male dorsal FW scale pattern vs. *C. ladon*. FAIRFAX city: 9/10/12 (Matthew O'Donnell). Fauquier Co.: Markham, George Thompson WMA, 3/15/12 (1 netted - Harry Pavulaan), 3/17/12 (common - Harry Pavulaan). FRANKLIN Co.: location not specified, 9/2/12 (Clyde Kessler). Loudoun Co.: Leesburg, Veterans Memorial Park, 3/13/12 (3 netted - Harry Pavulaan), 3/17/12 (1 netted - Harry Pavulaan), 3/29/12 (females common, worn - Harry Pavulaan) - spring brood approaching end, with many worn females still present and ovipositing abundantly on *Viburnum prunifolium* [most years, the spring brood is just now emerging]. Caged females will NOT oviposit on *Cornus florida* and first instar larvae would rather crawl off and die than eat *Cornus florida*; also: Leesburg, Veterans Memorial Park, 4/5/13, (patched "*lucia*" form collected, possibly the only confirmed specimen known - Harry Pavulaan); 4/8/13, (margined "*marginata*" form collected - Harry Pavulaan). Patrick Co.: Blue Ridge Parkway, Rocky Knob, 11/10/12 (very late - Ray Callahan, Clyde Kessler).

Celastrina neglectamajor - Unusually early emergence, rarely recorded in April. Augusta Co.: Crawford Mountain, 6/9/12 (Tom Stock). Fauquier Co.: Markham, George Thompson WMA, 4/14/12 (7 netted - Harry Pavulaan), 4/15/12 (10+ observed, netted - Tom Smith), 4/20/12 (10 observed, netted - Tom Smith), 4/27/12 (common - Billy Weber), 4/29/12 (20+ observed, netted - Harry Pavulaan; 10+ observed, netted - Tom Smith). SHENANDOAH Co.: near Liberty Furnace, George Washington National Forest, 6/4/12 (Glenn Koppel, Mary Koeneke).

Glaucopsyche lygdamus nittanyensis - Albemarle Co.: Blue Ridge Mountains, Sugar Hollow, 4/8/12 (Mark Adams). Botetourt Co.: Troutville, Woodpecker Ridge, 4/1/12 (Bruce Grimes).

NYMPHALIDAE:

Libytheana bachmanni - Fauquier Co.: Markham, George Thompson WMA, 3/17/12 (very early arrival for region - Harry Pavulaan). Prince William Co.: Woodbridge, Occoquan NWR, 1/7/12 (very unusual winter sighting - Jan

Meyer).

Agraulis vanillae – BOTETOURT Co.: Fincastle, 6/30/12 (Bill Hunley, Mike Donahue). Norfolk city: Norfolk Botanical Gardens, 9/8/12 (David Amadio). Northampton Co.: Cape Charles, Eastern Shore Virginia NWR, 9/7/12 (David Amadio). Richmond City: Libby Hill Park, 10/6/12 (Bill Hark).

Euptoieta claudia – FAIRFAX city: 9/26/12 (Matthew O'Donnell). Frederick Co.: Gore, Old Knob, 3/22/12 (tiny, fresh male indicating local emergence - Harry Pavulaan).

Speyeria cybele – Culpeper Co.: Culpeper, Mountain Run Lake, 11/04/12 (fresh-appearing female photographed – [anonymous] BAMONA report). Fauquier Co.: Paris, Sky Meadows State Park, 5/28/12 (20 observed, unusually early – Scott Baron). Loudoun Co.: Neersville, Blue Ridge Center for Environmental Stewardship, 9/9/12 (5 females observed, still in fairly fresh condition - Harry Pavulaan).

Speyeria aphrodite – Loudoun Co.: Neersville, Blue Ridge Center for Environmental Stewardship, 8/4/12 (Sheryl Pollock).

Boloria bellona – Smyth Co.: Jefferson National Forest, Tilson Farm Tract, 5/28/12 (Clyde Kessler, Jesse Overcash).

Boloria selene – AUGUSTA Co.: location not specified, 6/10/06 (Allen Bryan).

Chlosyne nycteis – Unusually late records in many areas, large numbers of fresh individuals in September indicate third brood. Amherst Co.: no location given, 9/22/12 (Mark Adams). Fairfax Co.: Burke Centre, 9/8/12 (4 observed - Matthew O'Donnell); Vienna, Meadowlark Botanical Gardens, 9/14/12 (3 observed, Harry Pavulaan). Loudoun Co.: Leesburg, Veterans Memorial Park, 9/15/12 (common, Harry Pavulaan); Sterling, Algonkian Regional Park, 9/12/12, 9/14/12 (common both dates, Harry Pavulaan). Rappahannock Co.: Washington, 7/28/12 (Scott Baron, Greg Davis, Sandy Liebel). Smyth Co.: Jefferson National Forest, Tilson Farm Tract, 5/28/12 (Clyde Kessler, Jesse Overcash). Warren Co.: Bentonville, Shenandoah River State Park, 9/9/12 (Glenn Koppel).

Chlosyne harrisii – HIGHLAND Co.: location not specified, 6/10/07, 6/6/08 (Allen Bryan).

Euphydryas phaeton – Bath Co.: George Washington National Forest, Hidden Valley, 5/22/12 (Tom McAvoy).

Phyciodes tharos – Chesterfield Co.: Pocahontas State Park, 3/17/12 (unusually early – Paul Bedell). FAIRFAX city: 9/10/12 (Matthew O'Donnell). HANOVER Co.: Mechanicsville, Gaines Mill Battlefield, 8/13/12 (Glenn Koppel, Mary Koeneke).

Polygonia interrogationis – Very strong flight this season and unusually early reports of summer form, also summer and winter forms emerging concurrently. Carroll Co.: location not specified, 2/28/12 (Brian Kreowski). Fairfax Co.: Herndon, 2/22/12 (attracted to bait - Mona Miller). Fauquier Co.: Markham, George Thompson WMA, 4/27/12 (summer form observed, common – Billy Weber), 4/29/12 (30+ observed, roughly equal numbers of summer and winter forms – Harry Pavulaan), 6/24/12 (100+ observed, all summer form – Harry Pavulaan), 8/12/12 (1 summer form, 1 winter form, both freshly-emerged, netted – Harry Pavulaan, Sandra Pavulaan); Paris, Sky Meadows State Park, 4/17/12 (both winter and summer forms observed - Scott Baron), May 12, 2012 (both winter and summer forms observed - Scott Baron, Jim Gallagher, Judy Gallagher, Mona Miller). KING WILLIAM Co.: location not specified, 9/9/06 (Allen Bryan). Shenandoah Co.: Mount Jackson, 5/4/12 (7 observed, oviposition activity on one *Celtis occidentalis* tree, larvae found – Ali Singleton).

Polygonia comma – Fauquier Co.: Markham, George Thompson WMA, 6/24/12 (1 summer form, 1 winter form observed – Harry Pavulaan). KING WILLIAM Co.: location not specified, 3/12/06 (Allen Bryan).

Nymphalis antiopa – KING WILLIAM Co.: location not specified, 6/4/06 (Allen Bryan).

Vanessa virginiensis – Major northward migration in spring. Accomack Co.: Chincoteague, Assateague Island, 4/16-4/17/12 (abundant – Denise Gibbs). Fauquier Co.: Markham, George Thompson WMA, 12/4/12 (Harry Pavulaan). KING AND QUEEN Co.: Walkerton, 1/1/12 (unusual winter observation – Allen Bryan).

Vanessa atalanta – Major northward migration in spring. Accomack Co.: Chincoteague, Assateague Island, 4/16-4/17/12 (hundreds observed flying northward – Denise Gibbs). Botetourt Co.: Greenfield, 4/28/12 (“large numbers” observed – Bruce Grimes); Troutville, Woodpecker Ridge, 4/29/12 (50+ observed nectaring on Blackberry – Barry Kinzie). FAIRFAX city: 9/10/12 (Matthew O’Donnell). Fauquier Co.: Markham, George Thompson WMA, 4/29/12 (50+ observed – Harry Pavulaan), 6/24/12 (16 observed – Harry Pavulaan). Floyd Co.: 4/29/12 (about 12 per mile observed along highways – Bruce Grimes); 4/29/12 (38 observed – Clyde Kessler). Franklin Co.: Blue Ridge Mountains, 4/29/12 (dozens observed – Bruce Grimes); 4/29/12 (“way over 350...on about a 15 mile ride” – Clyde Kessler). Loudoun Co.: Major northward migration occurring throughout April, with hundreds seen daily in all habitats, crossing roads, in fields, woodlands, suburban yards, with many individuals seen active past sunset. Individuals or multiples nectaring on *Buddleia* all season through September (Harry Pavulaan). Montgomery Co.: 4/29/12 (about 12 per mile observed along highways – Bruce Grimes); 4/29/12 (30 observed – Clyde Kessler). Roanoke Co.: 4/29/12 (about 12 per mile observed along highways – Bruce Grimes).

Junonia coenia - AMHERST Co.: various locations, 9/22/12 (Mark Adams). FAIRFAX city: 9/10/12 (Matthew O’Donnell). Fauquier Co.: Paris, Sky Meadows State Park, 12/4/12 (Harry Pavulaan). FLUVANNA Co.: Palmyra, Pleasant Grove Plantation historic site, 10/13/12 (Matthew O’Donnell). King and Queen Co.: Walkerton, 1/1/12 (unusual winter observation – Allen Bryan). RAPPAHANNOCK Co.: Washington, 7/28/12 (Scott Baron, Greg Davis, Sandy Liebel).

Limenitis arthemis astyanax – Eastern Loudoun Co. and northern Fairfax Co.: Males disappeared by Sept. 1, 2012 but females very frequent and widespread throughout September in urban and suburban situations, apparently in search of oviposition sites and feeding mainly on *Buddleia* shrubs in gardens (Harry Pavulaan). HANOVER Co.: Mechanicsville, Gaines Mill Battlefield, 8/13/12 (common – Glenn Koppel, Mary Koeneke). SHENANDOAH Co.: near Liberty Furnace, George Washington National Forest, 6/4/12 (Glenn Koppel, Mary Koeneke).

Limenitis archippus - FAIRFAX city: 9/26/12 (Matthew O’Donnell).

Asterocampa clyton - RAPPAHANNOCK Co.: Washington, 7/28/12 (Scott Baron, Greg Davis, Sandy Liebel).

Asterocampa celtis – CHARLES CITY Co.: location not specified, 9/5/05 (Allen Bryan). HANOVER Co.: Mechanicsville, Gaines Mill Battlefield, 8/13/12 (common – Glenn Koppel, Mary Koeneke). Loudoun Co.: Leesburg, 9/21/12 (male observed nectaring on *Buddleia* sp.- Harry Pavulaan); 9/22/12 (female observed nectaring on *Buddleia* sp. - Harry Pavulaan) - unusual third brood emergence and adult nectaring observation in region.

Cyllopsis gemma – BEDFORD Co.: location not specified, 9/28/12 (Bob Epperson). Botetourt Co.: Troutville, Woodpecker Ridge, 4/1/12 (early record by “a couple of weeks” - Bruce Grimes); Catawba Creek, 4/14/12 (Mike Smith). CHARLES CITY Co.: location not specified, 4/15/06 (Allen Bryan). CHESTERFIELD Co.: Pocahontas State Park, 3/23/12 (Paul Bedell). FLUVANNA Co.: location not specified, 9/14/08 (Allen Bryan).

Satyroides appalachia appalachia: Giles Co.: Glen Alton, 7/9/12 (Ray Callahan, Clyde Kessler). Rockingham Co.: Elkton, Kite’s Springs, 6/8/12, 8/18/12 (Mike Smith).

Enodia anthedon – FAIRFAX city: 9/10/12 (Matthew O’Donnell). Loudoun Co.: Neersville, Blue Ridge Center for Environmental Stewardship, 8/18/12 (100+ observed in woodlands - Harry Pavulaan). Prince William Co.: Woodbridge, 5/9/12 (Barbara Farron). Smyth Co.: Jefferson National Forest, Tilson Farm Tract, 5/28/12 (Clyde Kessler, Jesse Overcash).

Enodia portlandia – Northampton Co.: Cape Charles, Eastern Shore Virginia NWR, 9/7/12 (David Amadio). SUSSEX Co.: location, date not specified, photographed in 2007 (Allen Bryan).

Coenonympha inornata – HIGHLAND Co. (STATE record): location not specified, 6/6/12 (Allen Bryan).

Hermeuptychia sosybius – Essex Co.: 8/14/10 (Bill Hark). Henrico Co.: Malvern Hill, Richmond National Battlefield Park, 8/13/12 (Glenn Koppel, Mary Koeneke). Prince William Co.: Woodbridge, Leesylvania State Park, 5/3/12 (Judy Gallagher), 9/15/12 (Matt O’Donnell).

Megisto “type 1” spring flight (= *eurytris* (Fabricius) sensu Gatrell) – Albemarle Co.: Sugar Hollow, 5/26/12 (Mark

Adams). Augusta Co.: Crawford Mountain, 6/9/12 (Tom Stock). Fauquier Co.: Paris, Sky Meadows State Park, 5/12/12 (23+ observed - Scott Baron, Jim Gallagher, Judy Gallagher, Mona Miller), 5/28/12 (Scott Baron), 6/3/12 (Mary Alexander, Mona Miller, Steve Malone), 6/16/12 (Scott Baron). Prince William Co.: Woodbridge, Occoquan NWR, 6/2/12 (Pat Durkin). SHENANDOAH Co.: near Liberty Furnace, George Washington National Forest, 6/4/12 ("superabundant" - Glenn Koppel, Mary Koenke). Smyth Co.: Jefferson National Forest, Tilson Farm Tract, 5/28/12 (30+ observed - Clyde Kessler, Jesse Overcash).

Megisto "type 2" summer flight (= *cymela* (Cramer) sensu Gatrell) – interestingly, no reports in Virginia! This taxon apparently very uncommon.

Danaus plexippus – FAIRFAX city: 9/10/12 (Matthew O'Donnell). HENRICO Co.: location not specified, 8/27/06 (larva – Allen Bryan). Prince William Co.: Woodbridge, 4/10/12 (Laura Farron) – very worn female ovipositing on *Asclepias tuberosa*. Such early-season worn females imply direct return from Mexican overwintering sites.

HESPERIOIDEA:

Urbanus proteus – Unusually strong flight statewide. ACCOMACK Co.: Chincoteague, Assagteague Island, first week of Oct. 2012 (abundant numbers observed - Denise Gibbs). ALBEMARLE Co.: Charlottesville, 9/23/12 (Mark Adams), 10/6/12 (observed nectaring on *Buddleia* sp. - Mark Adams). ALEXANDRIA City: 9/23/12 (Alonso Abugattas). Fairfax Co.: Centreville, 9/14/12 (Glenn Koppel, Mary Koenke); Vienna, Meadowlark Botanical Gardens, 9/6/12 (Mona Miller, Donna Quinn); 9/14/12 (Harry Pavulaan) - both times nectaring on *Verbena bonariensis*; Herndon, 7/31/12 (Sheryl Pollock). FAUQUIER Co.: Markham, Hollin Farm, 8/22/12 (nectaring on *Zinnia* - Harry Pavulaan); Loudoun Co.: Leesburg, 9/17/12, 9/21/12, 10/23/12, 10/27/12 (all Harry Pavulaan) - nectaring on *Buddleia* sp. and *Verbena bonariensis*. Norfolk city: Norfolk Botanical Gardens, 9/8/12 (16 observed - David Amadio). Northampton Co.: Cape Charles, Eastern Shore Virginia NWR, 9/7/12 (David Amadio). PRINCE WILLIAM Co.: Woodbridge, Veterans Park, 10/18/12 (Sheryl Pollock); location not specified, 10/18/12 (Matthew O'Donnell). Richmond city: Maymont Park, 10/24/12 (Bill Hark). Suffolk city: Great Dismal Swamp NWR, 9/7/12 (David Amadio).

Epargyreus clarus – Many unusually early and late records for region. Fairfax Co.: Vienna, Meadowlark Botanical Gardens, 9/22/12 (Matthew O'Donnell). HENRICO Co.: Malvern Hill, Richmond National Battlefield Park, 8/13/12 (Glenn Koppel, Mary Koenke). Loudoun Co.: Leesburg, 10/6/12, 10/7/12, 10/23/12 (three different individuals observed, nectaring on *Buddleia* sp. - Harry Pavulaan). Madison Co.: Shenandoah National Park, 3/29/12 (unusually early for region – Mara Meisel). Prince William Co.: Woodbridge, Leesylvania State Park, 4/7/12 (unusually early for region – Glenn Koppel, Mary Koenke). Richmond city: Maymont Park, 9/26/12 (Bill Hark).

Achalarus lyciades - Albemarle Co.: Sugar Hollow, 5/26/12 (Mark Adams).

Thorybes bathyllus – RAPPAHANNOCK Co.: Washington, 7/28/12 (Scott Baron, Greg Davis, Sandy Liebel).

Thorybes confusus – Augusta Co.: Crawford Mountain, 6/9/12 (photographed - Tom Stock).

Erynnis juvenalis – GREENE Co.: Shenandoah Nat. Park, Pocosin Cabin Trail, 4/15/12 (Mike Smith). HENRICO Co.: location not specified, 4/20/05 (Allen Bryan). Loudoun Co.: Leesburg, Veterans Memorial Park, 3/13/12 (Harry Pavulaan). RICHMOND city: 4/2/06 (Allen Bryan).

Erynnis baptisiae – FRANKLIN Co.: location not specified, 9/2/12 (Clyde Kessler).

Erynnis icelus – STAFFORD Co.: location not specified, 2007 photo (Allen Bryan).

Erynnis brizo - Fauquier Co.: Paris, Sky Meadows State Park, 4/17/12 (Scott Baron). Franklin Co.: Ferrum, 4/8/12 (Clyde Kessler). GREENE Co.: Shenandoah Nat. Park, Pocosin Cabin Trail, 4/15/12 (Mike Smith). ROCKINGHAM Co.: Elkton, 3/28/12, 4/29/12 (Mike Smith).

Staphylus hayhursti – RAPPAHANNOCK Co.: Washington, 7/28/12 (Scott Baron, Greg Davis, Sandy Liebel).

Pholisora catullus – FRANKLIN Co.: location not specified, 9/2/12 (Clyde Kessler).

Ancyloxypha numitor - FAIRFAX city: 9/10/12 (Matthew O'Donnell). FRANKLIN Co.: location not specified, 9/2/12 (Clyde Kessler).

Thymelicus lineola - Smyth Co.: Jefferson National Forest, Tilson Farm Tract, 5/28/12 (Clyde Kessler, Jesse Overcash).

Nastra lherminier - Formerly common and widespread, now becoming much less frequently observed in northern Virginia. Fauquier Co.: Paris, Sky Meadows State Park, 5/12/12 (Scott Baron, Jim Gallagher, Judy Gallagher, Mona Miller). Loudoun Co.: Neersville, Blue Ridge Center for Environmental Stewardship, 8/4/12 (Sheryl Pollock, photo). RAPPAHANNOCK Co.: Washington, 7/28/12 (Scott Baron, Greg Davis, Sandy Liebel).

Hylephila phyleus - Albemarle Co.: Sugar Hollow, 5/26/12 (Mark Adams). FAIRFAX city: 9/10/12 (Matthew O'Donnell). Fairfax Co.: Vienna, Meadowlark Botanical Gardens, 9/14/12 (37 observed - Harry Pavulaan).

Wallengrenia otho - Unusual showing for area, second year in a row. Fairfax Co.: Herndon, 8/15/12 (4 observed - Mona Miller), 8/17/12 (4 observed - Mona Miller) - 2 females of 8/15/12 confined on *Paspalum* sp. grass by Harry Pavulaan, 3 ova obtained* in one day before females died; Vienna, Meadowlark Botanical Gardens, 8/17/12 (5 observed - Harry Pavulaan), 8/24/12 (Harry Pavulaan). [*Note, larvae cut section of leaf slightly longer than larval length, fold and weave it into a small tubular shelter, then sever the shelter from leaf and hang it from a 1/8" thread when resting. When feeding, larvae pull the shelter up and move along the leaf with body inside the shelter, in behavior similar to Bagworm moths!].

Atalopedes campestris - AMHERST Co.: various locations, 9/22/12 (Mark Adams). FAIRFAX city: 9/10/12 (Matthew O'Donnell). Fairfax Co.: Vienna, Meadowlark Botanical Gardens, 8/17/12 (1800+ counted/estimated in 1 hour, swarming in all areas, making other Hesperid observations difficult - Harry Pavulaan). Fauquier Co.: Markham, George Thompson WMA, 4/29/12 (Harry Pavulaan) - very early for site. Franklin Co.: Ferrum, 4/8/12, 11/12/12 (Clyde Kessler). Loudoun Co.: Leesburg, 10/23/12 (some fresh, nectaring on *Buddleia* - Harry Pavulaan), last observed 10/26/12 and 11/22/12 (Harry Pavulaan). [Observational note: Leesburg, 8/18/12 - Harry Pavulaan observed male flying right alongside driver's side car mirror for several seconds, at 30 mph, indicating measured flight speed capability.] RAPPAHANNOCK Co.: Washington, 7/28/12 (Scott Baron, Greg Davis, Sandy Liebel).

Anatrytone logan - YORK Co.: location not specified, 6/24/06 (Allen Bryan).

Hesperia metea - ROCKINGHAM Co.: Elkton, 4/29/12 (Mike Smith).

Polites origenes - Fairfax Co.: Vienna, Meadowlark Botanical Gardens, 8/17/12 (11 net/released - all females; Harry Pavulaan). GOOCHLAND Co.: location not specified, 5/29/2006 (Allen Bryan). Loudoun Co.: Neersville, Blue Ridge Center for Environmental Stewardship, 8/4/12 (Sheryl Pollock). RAPPAHANNOCK Co.: Washington, 7/28/12 (Scott Baron, Greg Davis, Sandy Liebel).

Poanes zabulon - FAIRFAX city: 9/10/12 (Matthew O'Donnell). Fauquier Co.: Markham, George Thompson WMA, 4/20/12 (unusually early for region - Tom Smith), 4/27/12 (Billy Weber). HENRICO Co.: location not specified, 5/6/2006 (Allen Bryan). RAPPAHANNOCK Co.: Washington, 7/28/12 (Scott Baron, Greg Davis, Sandy Liebel).

Euphyes vestris - FAUQUIER Co.: Markham, George Thompson WMA, 6/24/12 (Harry Pavulaan).

Euphyes dion - Fairfax Co.: Mt. Vernon, Huntley Meadows Regional Park, 9/1/12 (7 observed - Matthew O'Donnell), 9/2/12 (4 observed - Rick Borchelt). Norfolk city: Norfolk Botanical Gardens, 9/8/12 (David Amadio). SUSSEX Co.: location not specified, 7/28/2007 (Allen Bryan).

Amblyscirtes hegon - Fauquier Co.: Paris, Sky Meadows State Park, 4/17/12 (5 observed - Scott Baron). Franklin Co.: Ferrum, 4/8/12 (nectaring preference on *Raphanus raphanistrum* - Clyde Kessler).

Amblyscirtes aesculapius - SUSSEX Co.: location not specified, 7/28/2007 (Allen Bryan).

Lerema accius - CHARLES CITY Co.: location not specified, 9/10/2005 (Allen Bryan). Fairfax Co.: Vienna, Meadowlark Botanical Gardens, 8/17/12 (Harry Pavulaan). FAUQUIER Co.: Markham, George Thompson WMA,

8/12/12 (Harry Pavulaan, Sandra Pavulaan). Loudoun Co.: Leesburg, 9/22/12, 10/23/12 (Harry Pavulaan), nectaring on *Buddleia* sp. PRINCE WILLIAM Co.: Woodbridge, Leesylvania State Park, 9/23/12 (Matthew O'Donnell); Woodbridge, Veterans Park, 10/11/12 (Matthew O'Donnell).

Panoquina ocola – GOOCHLAND Co.: location not specified, 7/30/2005 (Allen Bryan). RAPPAHANNOCK Co.: Washington, 7/28/12 (Scott Baron, Greg Davis, Sandy Liebel). WARREN Co.: Bentonville, Shenandoah River State Park, 9/29/12 (Matthew O'Donnell).

Calpododes ethlius - Norfolk city: Norfolk Botanical Gardens, 9/8/12 (14 observed - David Amadio). Suffolk city: Great Dismal Swamp NWR, 9/8/12 (David Amadio).

MOTHS:

Callosamia angulifera – Fauquier Co.: George Thompson WMA, male emerged on 6/3/2012 from cocoon found earlier on Spicebush. Cocoon had size and elongated shape of *Callosamia promethea*. Tulip Tree present as canopy tree at location (Harry Pavulaan).

Hemileuca maia – CHESTERFIELD Co.: Pocahontas State Park, 11/11/12 (Paul Bedell). FRANKLIN Co.: Ferrum, Ferrum College, 11/12/12 (Clyde Kessler). Montgomery Co.: Jefferson National Forest, Pandapas Pond Rec. Area, 10/20/12 (John Ford). PATRICK Co.: Burks Fork, 11/10/12 (Ray Callahan, Clyde Kessler); Blue Ridge Parkway, Rocky Knob, 11/10/12 (Ray Callahan, Clyde Kessler).

Alypia octomaculata – Albemarle Co.: Blue Ridge Mountains, Sugar Hollow, 4/8/12 (Mark Adams).

Noctua pronuba – Loudoun Co.: Leesburg, 5/19/2012 (Harry Pavulaan) - 15+ adults scared up from lawn while mowing. Several chased down and examined for coloration. Some light forms and some dark forms.

Thyris sepulchralis - Franklin Co.: Ferrum, 4/8/12 (nectaring on *Erigeron strigosus* - Clyde Kessler).

Psychomorpha epimenis – ALBEMARLE Co.: Charlottesville, 3/14/12 (Mark Adams).

Caenurgina erechtea – RADFORD City: 3/13/12 (Clyde Kessler).

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

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