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THE OFFICIAL PUBLICATION OF THE SOUTHERN LEPIDOPTERISTS' SOCIETY ORGANIZED TO PROMOTE SCIENTIFIC INTEREST AND KNOWLEDGE RELATED TO UNDERSTANDING THE LEPIDOPTERA FAUNA OF THE SOUTHERN REGION OF THE UNITED STATES (WEBSITE: www.southernlepsoc.org/)

J. BARRY LOMBARDINI: EDITOR

GORGONE CHECKERSPOTS IN GEORGIA

TEXT BY

PAULETTE HAYWOOD OGARD

PHOTOGRAPHS BY

SARA BRIGHT

Gorgone Checkerspots (*Chlosyne gorgone*) are rare commodities in the southeastern United States. Although they are widespread throughout the mid-West, in this part of the country they are considered a fugitive species—as the name implies, here today, and mysteriously gone tomorrow. Habitat requirements seem to dictate the length of their stay but are poorly understood. In April and May 2011, thanks to Irving Finkelstein's years of experience and his gracious generosity, Sara Bright and I were able to explore the habitat and lifestyle of Gorgone Checkerspots at Cooper's Furnace Day Use Area near Clarksville, Georgia.



Gorgone Checkerspot
(*Chlosyne gorgone*)(dorsal).

Cooper's Furnace Day Use Area is located on the banks of the Etowah River, near Altoona Dam. Currently operated by the U.S. Army Corps of Engineers, it served as an antebellum industrial center and is on the National Registry of Historic Places. Its trails wind through a lovely mixed pine and hardwood forest complete with mountain overlooks, picturesque streams, and a beaver pond. Irving has a long history with this site. In the mid-1970s when he decided to explore natural areas within a 50-mile radius of his new home in Atlanta, one reconnaissance mission took him to the Cooper's Furnace area where he was delighted to discover a colony of Gorgone Checkerspots. In the years that followed, he recalls that their population waxed and waned: one year he found eight gorgones during a 1½-2 hour search; the next year yielded only



Gorgone Checkerspot egg cluster.



Early instars feed gregariously skeletonizing leaves.



Caterpillars wander from host plant after eating a few leaves in search of more host plant.

4; and the following year he found only 2 butterflies. For several years, the gorgones seemed to have vanished, but in 2010, when James Adams expressed an interest in finding the species, Irving suggested revisiting the Cooper Furnace site. And their search was successful—four male Gorgone Checkerspots were flying near the roadside stream.

On April 19, 2011, Sara and I were eager to meet Irving to see whether gorgones would once again fly at Cooper's Furnace. We had never had a chance to observe a southern population. In our own state of Alabama, the last record is from the 1950's and the exact location is unknown. Any worries that the trip would end in a bust were quickly dispelled when the first butterfly Irving spotted past the entrance was a male Gorgone Checkerspot. Several others also sat along the dirt road. Dozens of Pearl Crescents were nectaring on the Daisy Fleabane that grew along the stream bank, but a few gorgones were also in the mix, including at least one female. By the end of the day, we saw a total of 11 gorgones.

Gorgone Checkerspot habitat is typically described in terms of "old fields," "grassy burns," and "second-growth scrub." The presence of a stream is often included, but the lush, damp area surrounding this particular stream did not seem to fit the descriptions at all. The power cut that rises steeply above the stream looked like a better match--sunny, dry, and sparsely vegetated. A climb to the first tower revealed a small group of Gorgone Checkerspots actively involved in territorial defense, mate hunting, and nectaring. The steep incline was covered with blackberry vines (ouch!), short pine and sweet gum saplings (with herbicide burns), and herbaceous plants that included phloxes, asters, bracken fern, and goldenrods. There were also sparse patches of a sandpapery-leaved sunflower (*helianthus* sp.) that we suspected served as the gorgones' host plant.

Two weeks later, our hunch was confirmed. We found a cluster of checkerspot eggs attached to the underside of a *helianthus* leaf, and several plants exhibited the blackened, skeletonized leaves that are the telltale eating signs of checkerspot caterpillars. Within this shriveled foliage, we found scores of first and second instar larvae. Most were covered with dark bristles, but some were virtually smooth, looking more like tiny tan mealworms than checkerspot caterpillars.

We visited the site again on May 12 and expanded our search another quarter mile up the power cut, discovering checkerspot cats intermittently among the patches of sunflowers as far as we were able to walk—approximately 15 clusters. We noticed that caterpillars take advantage of the colonial nature of the sunflowers by moving from plant to plant, decimating only a few leaves on the bottom half of each stem. They crawl along the ground and rest in the leaf litter on their way to find another plant. Although this pattern quickly becomes apparent to human searchers, perhaps it puzzles predators, and it may function to keep larvae out of (what we can testify is) brutal, direct sunlight.

In a subsequent visit, we continued to locate and re-visit caterpillar-chewed *helianthus* plants. Many no longer contained larvae. Certainly predation may have been a factor, but we also believe that the sheer number of caterpillars overwhelms the amount of available foliage. The leaves on this particular sunflower are thin and widely spaced, and its distribution is sporadic along the hillside.

By late May, some third-instar cats appeared to be in diapause within dried, lower leaves of their host plants. Leaf edges were delicately silked together, and these small structures often contained several larvae. Not all cats went into diapause. Later-instar caterpillars continued their eating regimens, although at this stage in their developments, they were less gregarious. We believe these non-diapausing individuals will compose a second flight. [Cont. on page 75.]

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

Regular	\$20.00
Student	\$15.00
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Information about the Society may be obtained from the Membership Coordinator or the Society Website: www.southernlepsoc.org/

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NATURAL PUPATION SITE OF A TIGER SWALLOWTAIL (*PTEROURUS GLAUCUS AUSTRALIS*) IN NORTHEASTERN FLORIDA

BY
MARC C. MINNO

Although some butterflies such as the Eastern Black Swallowtail (*Papilio polyxenes asterius*) sometimes pupate on the larval host plant or nearby, finding the pupae of butterflies in the field is often a difficult task. On March 23, 2010, I happened to find a pupa of the Tiger Swallowtail (*Pterourus glaucus australis*) at the St. Johns River Water Management District in Palatka, Florida, where I work.

This pupa (Fig. 1) was attached to the trunk of a Sweet Bay (*Magnolia virginiana*) tree growing along a small stream. Poison Ivy (*Toxicodendron radicans*) and Virginia Creeper (*Parthenocissus quinquefolia*) vines were also attached to the trunk around the pupa. The tree was about 45 to 50 feet tall and seven inches in diameter at breast height. The first branch was about 15 feet above ground surface. The pupa was attached to the southern side of the trunk about five feet above ground surface. One week later on March 30th, 2010, I noticed that the adult had emerged. I assume that the larva had fed on leaves in the canopy of the tree.

Tiger Swallowtails, however, do not always lay their eggs on leaves of the host plant high above the ground in Florida. On May 12, 2010, I found a young larva of *Pterourus glaucus australis* in a swamp in Lake County, west of US highway 27 near the Polk County line. The sapling was less than three feet tall (Fig. 2).



Fig. 1. Sweet Bay (*Magnolia virginiana*) tree with a pupa of *Pterourus glaucus australis*: A) Arrow marks the location of the pupa about five feet above the ground, B) same, C) the pupa, D) the pupa shell after eclosion.



Fig. 2. Young larva of *Pterourus glaucus australis* found on a Sweet Bay (*Magnolia virginiana*) sapling growing in a swamp in southern Lake County, Florida.

PUERTO RICO DREAMIN' ON SUCH A WINTER'S DAY

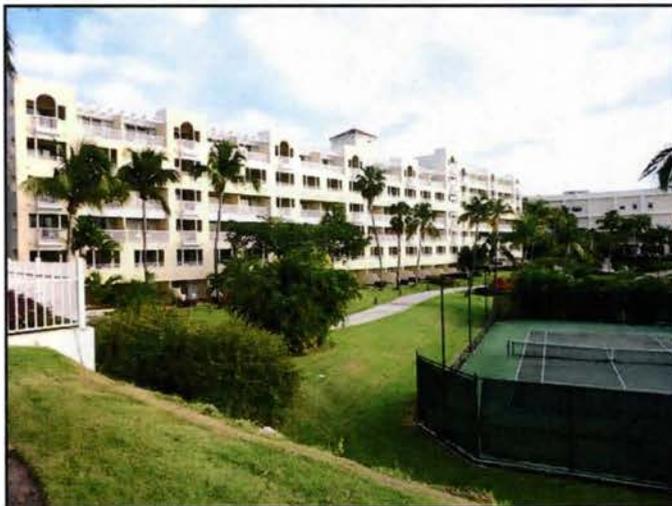
BY

CRAIG W. MARKS

These past few years, as winter approached and I bemoaned the passing of longer days and warmer weather, my Dad regularly has told me that winter hurts more now than when he was younger. The last two winters, even down here in southwestern Louisiana, have brought home the reality of those words. Where once snow fall was few and very far between here, we have now had two consecutive years of multiple snow storms, multiple ice storms and multiple (and consecutive) nights of temperatures below freezing.

While I acknowledge what Louisianians experienced this past winter was mild when compared to further north (even Memphis where my Dad lives had near arctic conditions on repeated occasions), I must also admit I was very excited when I found out in December that my work would require that I travel to Puerto Rico for the last two days of January and the first day of February (the word "require" is probably an oxymoron in the context of this sentence, but that is my story and I'm sticking to it).

So, on January 30, 2011, I left winter behind for three days in a tropical paradise. The Conference I was to attend was held at the El Conquistador Golf Resort and Casino at Las Croabas, on the northeast end of the island. I have visited the Caribbean before with trips to Key West, Grand Cayman, Grand Bahama, Turks and Caicos and Bonaire, but Puerto Rico is very different. First, it is much larger than I imagined, 110 miles long and 35 miles wide. On the one hour plus drive from San Juan (a huge city, by the way) to the resort, I was amazed at how many trees there were. It also has some serious elevation, with portions of the El Yunque Rain Forest reaching 3624 feet.



The resort itself sits along a cliff with the Atlantic Ocean on one side and a lush golf course on the other, sloping downward and inland from the buildings. I ran each day in shorts and a cut-off running shirt, up and down the golf course, sweating bullets and loving every minute of the 80 degree heat.

I had hoped to have time enough to hike the El Yunque Rain Forest, but it was too far from the resort, and I was without transportation. I had noticed a seemingly isolated, single lane road leading downhill from the rear of the complex so, on the 31st, after the initial session was completed I decided to go for a walk. The road ended up leading to a water treatment plant for the resort, but more important to me, it led to an open area filled with wild

flowers and butterflies. It may have been freezing back home, but I was in heaven!

Over the next two afternoons I saw Florida Whites, *Appias drusilla*; Great Southern Whites, *Ascia monuste*; one Cloudless Sulphur, *Phoebis sennae*; one or two Josephina Whites (possibly the same one each day), *Ganya josephina*; several *Eurema daira v. eletha* (those two look exactly the same to me); Little Yellows, *E. lisa*; *Strymon bubastus* hairstreaks; Cassius Blues, *Leptotes cassius*; Gulf Fritillaries, *Agraulis vanilla*; one Julia, *Dryas julia*; Zebra Longwings, *Heliconius charithonia*; Red Rims, *Biblis hyperia*; Hairy Duskywings, *Ephyriades arcus*; V-marked Skippers, *Choranthus vitellius*; Three-spotted Skippers, *Cymaenis tripunctus tripunctus*; Tropical Checkered Skippers, *Pyrgus oileus*; one Ocola Skipper, *Panoquina ocola* and a beautiful moth (actually 3 of them), *Composia credula*.



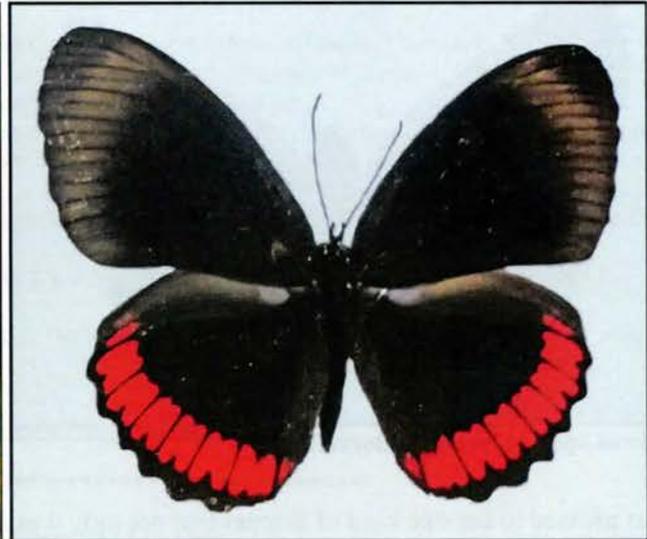
Great Southern White



Cassius Blue



Zebra Longwing



Red Rim

According to a recent book on Puerto Rican Butterflies by Perez-Asso, Genaro and Garrido, 102 species of butterflies have been reported from that island, with *Papilio demoleus* being the most recent addition (2006). Some of the butterflies I saw in Puerto Rico occur regularly in Louisiana (Cloudless Sulphurs, Little Yellows, Great Southern Whites, Gulf Fritillaries, Tropical Checkered Skippers and Ocola Skippers). I have seen others such as the Julia, Florida Whites, Zebra Longwings, Cassius Blues, Red Rims and Giant Whites in Florida and/or south Texas.

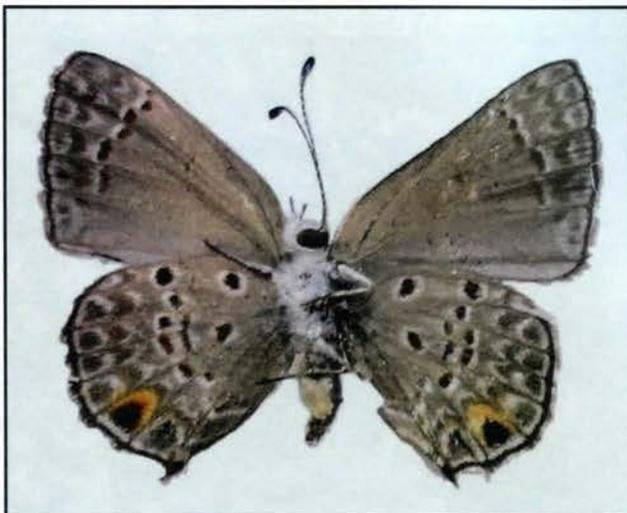
But I was also lucky enough to see several that do not get into the U.S. The V-marked Skipper, so named in Riley, is only known from Puerto Rico and the nearby Virgin Islands. At least where I was, it was the most common butterfly (I probably saw more than 15 each day). It reminded me of Fiery Skippers, *Hylephilia phyleus*, flying aggressively at anything that came into their area, then returning to a stalk of grass in the sun for a moment before dashing off again.

Another "island lifer" for me were three Hairy Duskywings (again, see Riley), a large spread-winged skipper with the males darkly colored like Zarucco Duskywings, *Erynnis zarucco*, back home. It ranges from Cuba to Puerto Rico

and the Virgin Islands then down into the Leeward Islands. The Millers reported it as a swift flyer, but all three I saw were placidly taking nectar and easy to approach. The only hairstreak I saw was the *Bubastus* Hairstreak. At the northern edge of its range in Puerto Rico, it also flies in South America, the Lesser Antilles, and the Virgin Islands. In the field, I thought it was the common *S. columella* but after noting the lack of tails I realized it was something different (see picture). Like the duskywings above, all three were taking nectar at low growing, small white flowers and were easily approached.



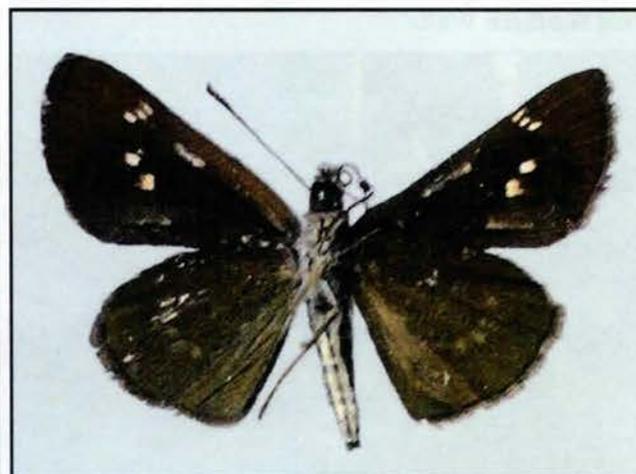
V-Marked Skipper



Bubastus Hairstreak



Three-spotted Skipper (dorsal)

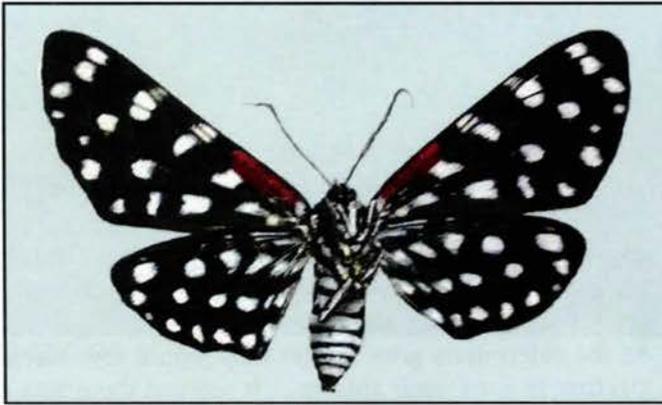
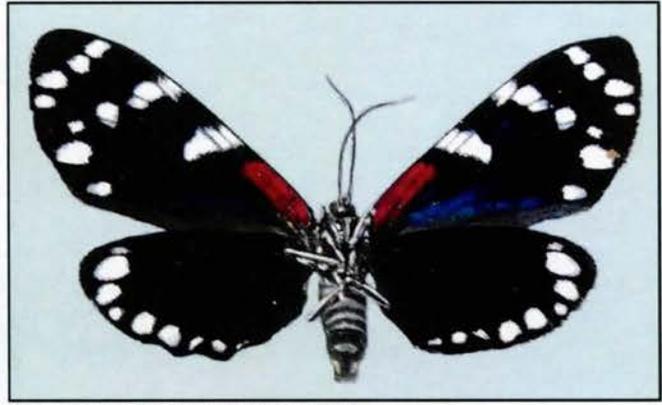


Three-spotted Skipper (ventral)

I was pleased to see one kind of skipper that not only was a first for me, but also added to my life-list of the butterfly fauna for the continental U.S. Common in Puerto Rico, the Three-spotted Skipper is reported also from the Bahamas, the Greater Antilles, the Virgin Islands and Florida. According to Glassberg, it is locally common in south Florida as well as the Keys, where it flies beside and is often confused with the Eufala Skipper, *Lerodea eufala*. My references indicate the same subspecies flies in both Puerto Rico and Florida with a different subspecies flying in Mexico and Central America.

In Puerto Rico, it flew in the same disturbed type of habitat as the V-marked Skippers, perching on taller grass stalks, not only along the forest edge but also in open grassy areas within the forest. It stayed mostly in the sun, moving in and out of the shadows. In this regard, it differed from Eufalas, at least in Louisiana, which seem to prefer more open areas. I also found this skipper to be a little larger and darker than Louisiana's Eufala Skippers.

Finally, there was the beautiful day flying moth, *Composia credula*. I have seen several of its cousin, the Faithful Beauty (*C. fidelissima*), in south Florida, and I initially thought that was what I was seeing again. However, once I finally got one of these fast flyers in my net, I quickly realized it was something different. The two pictures on the next page depict not only the differences between the two, but also their beauty.

*Composia credula* (ventral)*Composia fidelissima* (ventral),
26-V-2001, Dade, Co., FL

I left the island early February 2, enjoying blue skies, warm temperatures and a mild breeze. When I landed back in Louisiana at around 4:30 pm, the temperatures were hovering just above freezing with a strong, biting wind. The forecast was for the temperatures to drop down into the 20's overnight in the face of an approaching ice storm. Local schools had already been closed in anticipation of ice accumulation. As I sat shivering in my car (come on, who takes a coat to Puerto Rico?), I had to smile as I thought of all those tropical butterflies which were, at that moment, flying along the quiet, narrow road below the resort, two time zones to the east.

Next year the conference is in Aruba, and I'm already Aruba-dreaming.

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MANY THANKS TO THE FOLLOWING DONORS [DONATIONS TO SLS (March to June, 2011)]

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GUAVA SKIPPER (*PHOCIDES POLYBIUS*) LIFE HISTORY

BY
BERRY NALL

In the world of lepidoptera, it's not common to find a species where all stages have bold and beautiful colors. Guava Skippers are one of the exceptions. The eggs are a deep purple, the early instar caterpillars a bright red color, and the adults are spectacular in iridescent blue hues.



Egg, 12-VIII-2010

Caterpillar on first day,
15-VIII-2010

Cat Traylor provided me with three eggs for this study. The caterpillars emerged on August 15, and immediately cut out leaf shelters such as the one in the 8-17 picture. As the caterpillars grew bigger they would sew leaves together to form their shelters. It seemed there was a significant change of appearance in almost every instar: first yellow stripes appeared, then eye spots that soon seemed to glow, and then in the last instars the purple and yellow caterpillar turned white!

The caterpillars seemed to grow at a good pace, but they took a full month to mature. This resulted in mature caterpillars that seemed unusually large for the size of skipper that would emerge - the last instars were quite chunky. The adults emerged 11-12 days after pupation began.

Many thanks to Cat Traylor for providing the eggs and also cuttings from her Guava tree.



Below leaf shelter, 17-VIII-2010



Yellow stripes appear, 19-VIII-2010



False eye spots become visible, 21-VIII-2010



Gorgeous middle instar, 28-VIII-2010



Late instars are white, often splotchy, 8-IX-2010



Immediately sewing leaves back together
after I opened shelter, 9-IX-2010



12-IX-2010



Mature caterpillar, 16-IX-2010



Chrysalis, 17-IX-2010



Fresh adult Guava skipper (ventral) 26-IX-2010



Fresh adult Guava Skipper (dorsal) 26-IX-2010

(The Editor thanks Mr. Berry Nall for permission to republish his butterfly life histories in the SLS NEWS; his website which contains life histories of numerous butterflies from our SLS region is located at <http://leps.thenalls.net/index.php>. Specifically, his Guava Skipper website is located at: http://leps.thenalls.net/content2.php?ref=Species/Eudaminae/polybius/life/polybius_life.htm)

JAMES' CONTINUING CHALLENGE

James Adams is continuing his challenge in 2011 to the SLS membership to write articles on *the "Dangers of Lepping"* and *"First Encounters"*. He will donate to the Society \$10 for each article up to \$100 dollars for the year. I neglected to mention (in the March issue of 2011) that for the December issue of 2010 he donated \$20 for two such articles. Many thanks to James. [The Editor]

CATERPILLARS IN MY POND

BY

LAWRENCE J. HRIBAR

I maintain two fish ponds in my yard in Marathon, Florida. One is stocked with goldfish, *Carassius auratus auratus*



(L.) and koi, *Cyprinus carpio carpio* (L.) (Cyprinidae); the other with guppies, *Poecilia reticulata* Peters (Poeciliidae). The guppy pond supports a thriving crop of green algae (unidentified) and three ornamental aquatic plant species: water lily, *Nymphaea* sp. (probably *N. colorata* Peter) (Nymphaeaceae); big floating heart, *Nymphoides aquatica* (J.F. Gmel.) Kuntze (Menyanthaceae) – also known as banana plant; and *Egeria densa* Planchon (Hydrocharitaceae), formerly in genus *Elodea*, sold in the aquarium trade as anacharis.



In early March of 2011, I noticed some small caterpillars on the leaves of the water lily. A couple of days later I noticed that there was extensive damage to the water lily leaves. The caterpillars had skeletonized the leaves and had grown in size. I watched one of the larger individuals feeding on leaves of *E. densa*. Others were feeding on the water lily. I did not see any feeding on the big floating heart, nor on the algae. Some of the big floating heart leaves were damaged, but this may have been due to feeding by snails. At least two species of snails live in the pond: ramshorn snails (Planorbidae) and pond snails (Lymnaeidae). I collected six of the caterpillars and sent them to the USDA-APHIS-PPQ office in Gainesville for identification. Julieta Brambila of that laboratory, Lyle Buss of the University of Florida, and James Hayden of the Florida State Collection of Arthropods determined that they were southern armyworms, *Spodoptera eridania* (Cramer) (Noctuidae). The specimens have been deposited into the Florida State Collection of Arthropods (E2011-1628-1). The southern armyworm has a very broad host range, including crops, ornamentals, and weeds; at least 117 plants have been

Caterpillars of the southern armyworm *Spodoptera eridania*.



reported as hosts (Heppner, 2003). This appears to be the first observation of this caterpillar feeding on *E. densa* and *Nymphaea*. On the 27th of March I again noticed two larvae in the same pond; one on a leaf of *Nymphaea*, the other on a leaf of *N. aquatica*. Neither was seen to feed.

Spodoptera eridania (photo by Jim Vargo, published with permission).

Reference

Heppner, J.B. 2003. *Lepidoptera of Florida. Part 1. Introduction and Catalog. Arthropods of Florida and Neighboring Land Areas*. Volume 17. Florida Department of Agriculture and Consumer Services Division of Plant Industry, Gainesville. x + 670 pp.

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TEXAS IS BURNING !

April was a bad month for Texas in terms of fires. Due to the State's extreme dry conditions because of the continuing drought, gusty high winds, and unseasonably high temperatures and low humidity, fires have been

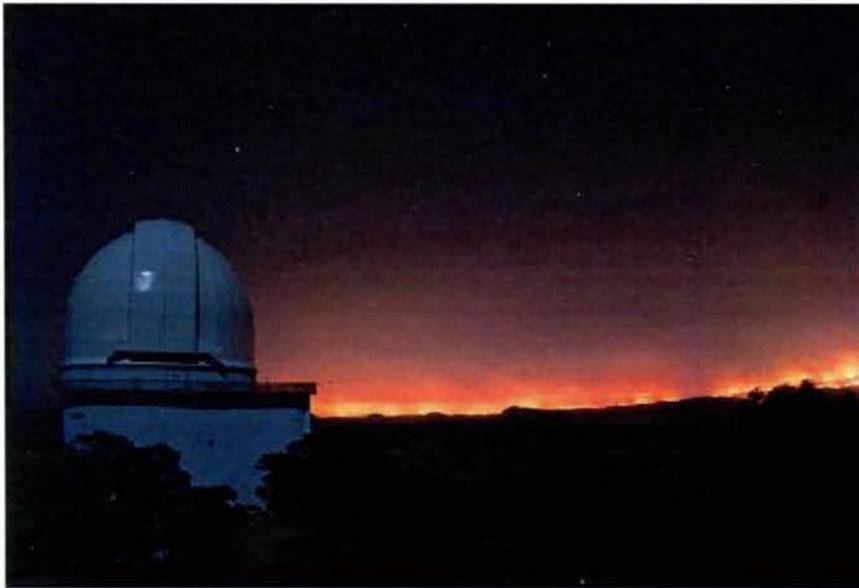


Fig. 1. SMITH TELESCOPE WITH FIRE ON HORIZON. This view of the Rock House wildfire was shot on the night of April 9, 2011, from the catwalk of the 2.1-meter Otto Struve Telescope dome looking east. The 2.7-meter Harlan J. Smith Telescope is at left (Credit: Frank Cianciolo/McDonald Observatory).

Desert Research Institute, and the McDonald Observatory are located. The fires in Jeff Davis County have been burning for 2 weeks. The Davis Mountains State Park and surrounding countryside are prime areas for both butterfly and moth collecting. This area is the home of the extremely beautiful Arctiid, the Northern Giant Flag Moth, *Dysschema howardi* (Hy. Edwards, [1887]).



Northern Giant Flag Moth (*Dysschema howardi*), male, collected 31-VII-2005 in Davis Mountains State Park, Fort Davis, Texas (wingspan 8.9 cm)(photo by JB Lombardini)



Northern Giant Flag Moth (*Dysschema howardi*), female, collected 14-VIII-2007 in Davis Mountains State Park, Fort Davis, Texas (wingspan 9.5 cm)(photo by JB Lombardini)

An interesting aside in fire fighting is that the Texas Forest Service will plan a controlled burn in the Fort Davis area to destroy an additional 70,000 areas to eliminate shrub which are in the fire's path and thus will remove fuel for the continuing fires which at this writing (April 28th) were only 75% contained. It is estimated that the fires are costing the State of Texas 2 million dollars per day. In the final analysis some good will certainly result from these fires which clear the brush from the hillsides and allow new growth to flourish. However, for the 30 homeowners who lost their homes in the area it is still truly a tragedy.

The photographs by Frank Cianciolo show the fires (both wild and controlled) around McDonald Observatory.



Fig. 2. HET WITH CONTROLLED BURNS ON SURROUNDING PEAKS. The Southern Area Incident Management Team undertook controlled burns on Sunday, April 17, 2011, to get rid of fuel on the mountains around McDonald Observatory. This would starve the Rock House wildfire of fuel should it head back in our direction. Here, Black Mountain is burning. The Hobby-Eberly Telescope (HET) dome is at right. Above it, the bright line on the right is the wildfire which broke through a burn-out line on Sunday afternoon. The bright line on the left is the front of a back-fire set to stop that portion of the wildfire. Silhouetted by the back-fires on Black and Spring (to the left) Mountains is Guide Peak now with only small pockets of active fires (Credit: Frank Cianciolo/McDonald Observatory).



Fig. 3. FRANK N. BASH VISITORS CENTER WITH CONTROLLED BURN. The controlled burn of Sunday, April 17, 2011, as seen from the Frank N. Bash Visitors Center's public telescope park at McDonald Observatory, where public star parties are held three times each week. The Southern Area Incident Management Team undertook the controlled burn to starve the Rock House wildfire of fuel, should it turn back toward the observatory (Credit: Frank Cianciolo/McDonald Observatory).



Fig. 4. TELESCOPE (0.9-METER) WITH FIRE ON HORIZON. This view of the Rock House wildfire was shot on the night of April 9, 2011, overlooking the dome of the 0.9-meter Telescope (Credit: Frank Cianciolo/McDonald Observatory).



Fig. 5. OVERVIEW OF OBSERVATORY WITH CONTROLLED BURN ON GUIDE PEAK. Guide Peak in flames from the controlled burn undertaken by the Southern Area Incident Management Team on April 17, 2011. The Two peaks of McDonald Observatory, Mount Fowlkes and Mount Locke, are to the right and far right, respectively. The domes of the 9.1-meter Hobby-Eberly, 2.7-meter Harlan J. Smith, and 2.1-meter Otto Struve Telescopes are visible (Credit: Frank Cianciolo/McDonald Observatory).



Fig. 6. HET AND CONTROLLED BURN ON GUIDE PEAK. The Southern Area Incident Management Team undertook controlled burns on Sunday, April 17, 2011, to get rid of fuel on the mountains around McDonald Observatory. This would starve the Rock House wildfire of fuel should it head back in our direction. This shot shows Guide Peak, to the north of the Hobby-Eberly Telescope (HET), almost completely burned (Credit: Frank Cianciolo/McDonald Observatory).



Fig. 7. WIDE SHOT OF CONTROLLED BURNS NEAR HET. The Southern Area Incident Management Team undertook controlled burns on Sunday, April 17, 2011, to get rid of fuel on the mountains around McDonald Observatory. This would starve the Rock House wildfire of fuel should it head back in our direction. The Hobby-Eberly Telescope (HET) dome is at right (Credit: Frank Cianciolo/McDonald Observatory).

[The Editor and the Members of the Southern Lepidopterists' Society thank Frank Cianciolo for allowing us to use his impressive photographs in the NEWS of the SLS that were initially posted on the McDonald Observatory public website (in the image gallery pages, <<http://mcdonaldobservatory.org/news/gallery/gallery.php?t=28>>). Frank Cianciolo, Sr. Program Coordinator, can be contacted at the McDonald Obs/Bash Visitors Center/University of Texas at Austin, 3640 Dark Sky Drive, McDonald Obs., TX 79734 (Phone: 432- 426-4152)].



Gary Ross' s Garden in Baton Rouge, LA. [Gary standing in Garden (in photograph on left) behind gate] (photographs by Gary Ross).

CALL FOR ARTICLES

Dear SLS Members:

I am trying to take up space and thought that a somewhat clever way was to ask you, the SL Society membership, for articles. The NEWS is only as good as the articles that I receive and while a certain few members submit excellent material on a regular basis, I cannot expect these few to continuously submit articles and other items of hopefully interest to the Society members. Thus, I am asking all of those individuals of the SL Society, and we are approximately a total of 170 members, who have never submitted anything to be published in the NEWS, to please consider writing something - and/or send me some photographs of your field trips.

Many thanks,

The Editor

DEFINITION:

Salt Marsh - a wet area that usually has brackish water and plants (rushes, sedges, and grasses) that thrive in a salty environment. Salt marshes are many times overlooked for their importance to the ecosystem. They provide both a nursery area and a sanctuary for many young fish and crustaceans. The salt marsh has an abundance of insects which provides food for many of the larger inhabitants.

**REVISITING THE NONCOMMERCIAL COLLECTION OF FAUNA
BY U.S. NATIONAL FOREST VISITORS IN 2011
BY
VERNON ANTOINE BROU JR.**

In early 2011, I encountered a Wildlife Biologist of Kisatchie National Forest who insisted that a permit was required to collect insects on National Forest Lands. I immediately informed him I had a document from the National Forest Service (See News of The Lepidopterists Society Vol. 40:4) indicating that permits were not required to collect insects on National Forest lands. He inferred that it made no difference what I had and my response appeared to provoke his ire. He was insistent that I would have to obtain a permit. Prior to this event, I had a cordial relationship with several of the District Rangers for nearly 30 years of collecting insects at this location never previously requiring such a permit.

Subsequent to this latest interaction, I spent a week E-mailing and calling the National Forest Service to get a copy of the current policy regarding this issue. A search of the regulations on accessible on line via the web resulted in frustration.

I spoke with numerous personnel at The NF headquarters and Regional Offices and was assured someone was working on the issue. I requested that it would be advantageous to revisit the matter so as to address all NF lands in a manner for disseminating to all concerned across the US. They agreed.

Here is the 2011 response (on page 57) to the issue of collecting not only insects but any fauna of NF lands. It would be advisable to carry a copy of this 2011 document with you when collecting on NF Lands. Persons wishing to obtain this article via pdf can link to:

http://independent.academia.edu/VernonAntoineBrouJr/Papers/538122/Revisiting_the_noncommercial_collection_of_fauna_by_U.S._National_Forest_visitors_in_2011

United States
Department of
Agriculture

Forest
Service

Southern Region

1720 Peachtree Road NW
Atlanta, Georgia 30309

File Code: 2720
Date: April 21, 2011



Mr. Vernon Antoine Brou Jr.
74320 Jack Loyd Road
Abita Springs, LA
70420

Dear Mr. Brou:

Thank you for your April 4, email to Randy Karstaedt concerning the current Forest Service direction related to the noncommercial collection of insects on National Forest System (NFS) lands. Mr. Karstaedt was the Forest Service contact in 1998 but has since moved on to become the Rocky Mountain Director of Physical Resources in Region 2.

The Southern Region (Region 8) has developed supplemental direction regarding the noncommercial collection of insects on NFS lands. This direction can be found in R8 Supplement 2700-2006-1, Forest Service Manual 2700 - Special Use Management, Chapter 2720 - Special Uses Administration; Section 2724 - Feasibility, Research, Training, Cultural Resources, and Historical, Subsection 2724.2 - Research, which is as follows:

2724 – FEASIBILITY, RESEARCH, TRAINING, CULTURAL RESOURCES, AND HISTORICAL
2724.2 – Research

1. Plant collecting for any purpose is not authorized by a special use authorization. See FSH 2409.18, Section 87 – Sale of Special Forest Products, for direction.
2. The noncommercial collection of fauna by Forest visitors, either in small groups or by individuals in pursuit of a personal interest, should be managed as a noncommercial recreational activity which, pursuant to 36 CFR 251.50, does not require a special use authorization. Groups of 75 or more people, require a Noncommercial Group Use Permit.
3. An authorization is required for organized collecting activities that charge a participation fee as defined in 36 CFR 251.51 Commercial use or activity.
4. Forest Supervisors may regulate uses through a closure order under 36 CFR 261.53, or by imposing conditions on the possession, storage, or transportation of fauna under 36 CFR 261.58(s).
5. All parties engaged in this type of activity, whether commercial or noncommercial, recreational or non-recreational, are obligated to comply with Forest Service Orders and with other Federal, State, and local laws and regulations that may apply to fauna collecting activities on National Forest System lands. These include, but are not limited to state wildlife and/or agricultural regulations, regulations designed to protect threatened or endangered species pursuant to the Endangered Species Act, and requirements to maintain viable populations pursuant to the National Forest Management Act.

Outside of the Southern Region, the direction that was distributed in 1998 is still to be followed by Forest Service employees. Generally, the noncommercial collection of insects, by individuals or small groups, does not require a special use authorization. If the collecting is done as a commercial enterprise, or if that collection should require the placement of temporary collection improvements on NFS lands, then a permit would be required. Also, if the species to be collected were considered threatened or endangered, then a permit from the U. S. Fish and Wildlife Service would be required. In some cases, the Forest Service may prohibit collecting in certain areas through a Forest Service closure order. You would need to check for these restrictions before conducting any collection activities.

Sincerely,

ANDREW COLANINNO
Director of Lands, Minerals and Uses

DEFINITIONS:

Aposematism - in the simplest definition *aposematism* primarily describes the organism's use of bright, very conspicuous markings and coloration to warn a predator that it is dangerous, *e.g.*, being poisonous or having a noxious taste. The predator has learned from experience having made the mistake in the past of attacking or eating the *aposematic* organism and thus avoids that particular species in the future.

However, warning coloration is not the only method that the organism may use to warn its predator. Other methodologies are also used such as warning sounds, odors, or behavior. The final result is that both the predator and the prey benefit. The predator avoids the bad experience by not attacking the prey, and the prey is not attacked and thus lives for the future.

Source: <http://en.wikipedia.org/wiki/Aposematism>

Crypsis - the ability of an organism to hide, *i.e.*, avoid observation, from its predators by blending into its environment. The word *camouflage* is sometimes used as a definition but *camouflage* also has a bit broader definition in that it can mean concealment by a predator to capture its prey. *Crypsis* is the antithesis of *aposematism*.

Source: <http://en.wikipedia.org/wiki/Crypsis>

The best photograph that I (JBL) have seen depicting *crypsis* is by Lior Golgher who described the following when



Find the hidden frog (photograph by Lior Golgher).

he was in Brazil with his guide Francisco. Lior stated that Francisco "...noticed the frog from a walking height while I couldn't find it with his finger pointing right at it. Even after detecting it, I couldn't see it on the camera screen, so I just identified adjacent objects (probably the branch to its right) and brought them into frame."

Description: A well camouflaged frog in the Lower Rio Branco-Rio Jauaperi Extractive Reserve, Brazil.

Hint: The frog is just to the left of the top end of the vertical stick.

If you have found the frog, congratulations you have excellent discriminatory vision. **IF NOT AND YOU GIVE UP, PLEASE GO TO PAGE 69!!!**

Source: http://en.wikipedia.org/wiki/File:Camouflage_DSC05383_-_Original_image.JPG



Reakirts's Blue (*Echinargus isola*)



Striped hairstreak (*Satyrium liparops*)



Silver-spotted Skipper (*Epargyreus clarus*)

Photographs submitted by Ro Wauer were photographed at Lick Creek Park, Brazos Co., TX, (near College Station) during April and May of 2011 (see Ro's Texas State Report on page 80).

RAPID ASSESSMENT OF ELEVATIONAL ZONATION AND BIODIVERSITY IN ECUADORIAN BUTTERFLY FAUNAS

BY

LANCE A. DURDEN¹ AND MARK WELFORD²

With the unprecedented destruction of tropical habitats worldwide, there is a need for rapid ecological assessments of sites targeted for modified land use (Singer and Ehrlich, 1991; Sparrow *et al.*, 1994; Ghazoul, 2002). In 1967, oil was discovered in eastern Ecuador. In order to export this oil, a 499 km long pipeline was constructed across the Andes to coastal regions (Gerlach, 2003). The pipeline has since been enlarged several times and, in 2002, construction of another oil pipeline was begun (Gerlach, 2003).

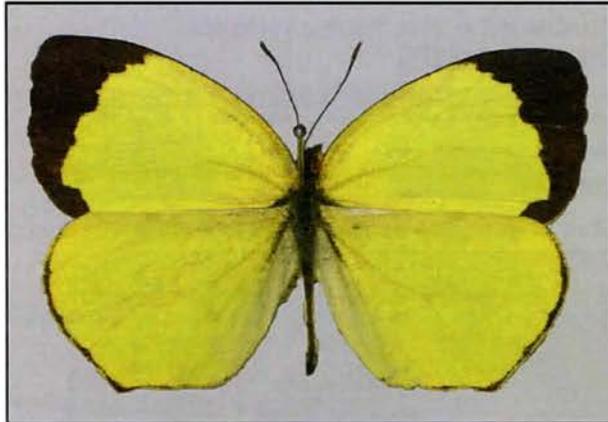


Fig. 1. *Eurema xanthochlora* (Kollar), Tandayapa, 20 June 2002.

The two pipelines cross the eastern cordillera of the Andes at Papallacta Pass but, rather than following the first pipeline on the western slope of the Andes down the Chiriboga road – already a highly disturbed corridor (Stattersfield *et al.*, 1998) – a new route was chosen for the second pipeline adjacent to Yanacocha and through the upper section of the Tandayapa Valley. Large tracts of land, ranging from lowland tropical Amazonian rainforest to high elevation páramo habitats were impacted by this activity. Because of the rapid land clearing associated with the construction of these pipelines, it would be advantageous to be able to rapidly assess the ecological attributes of these sites prior to their destruction or modification. Other land use changes such as deforestation for cattle ranching, cultivation, and charcoal production (Stattersfield *et al.*, 1998; Ridgely and Geenfield, 2001) and

sprawling urbanization particularly surrounding Quito also point to the need for rapid ecological assessments in Ecuador.

Butterflies can be excellent indicators of habitat quality and other attributes such as elevational zonation (Ehrlich *et al.*, 1994; Sparrow *et al.*, 1994; Beccaloni & Gaston, 1995; Ghazoul, 2002; Simonson *et al.*, 2001). Not only can they directly demonstrate the biodiversity of an important group of indicator invertebrates but they can also reflect plant diversity since their larvae are almost exclusively phytophagous. Ecuador straddles the equator and has a wide range of elevations because the Andean cordillera bisects the country from the northeast to the southwest. Because this elevational diversity often occurs within a relatively small area, we were able to complete a rapid assessment of the elevational zonation and biodiversity of Ecuadorian butterflies based on data from four relatively adjacent sampling sites during a single month.

Materials and Methods

Butterflies were recorded at four sites in central/eastern Ecuador in June 2002. These sites were:

- 1) Papallacta Pass (78.12W, 0.02S), in the eastern Andean cordillera (Napó Province), at elevations of ~2,900 – 4,070 m;
- 2) Reserva Ecología Yanacocha (78.33W, 0.10S), in the western Andean cordillera (Pichincha Province) at ~3,600 m;
- 3) Tandayapa Valley (78.42W, 0.01S), also in the western Andean cordillera (Pichincha Province) at ~1,750 m;
- 4) Tiputini Biodiversity Station (76.80W, 0.38S), in the Amazon Basin east of the Andes (Orellana Province) at ~200 m.

All four sites are located within a linear distance of ~220 km; the first three sites listed are within a linear distance of ~65 km of each other. The Papallacta Pass site represents high Andean páramo grasslands with short ground-level vegetation and patches of *Polylepis* trees, stunted elfin trees and arable crops. Reserva Ecología Yanacocha (maintained by Fundación Jocotoco) is a conservation park located on a side vent of Volcán Guagua Pichincha (volcano elevation, 4,675 m). Because it has been a principal water source for the City of Quito for centuries (Ridgely

and Greenfield, 2001) and it also lies on the blast zone of Volcán Guagua Pichincha, the western slope is more forested (with stunted elfin and *Polylepis* trees) than the Papallacta site, despite being at similar elevation. However, the Yanacocha site also includes some páramo grasslands. Topography at both the Papallacta and Yanacocha sites is mountainous and night-time temperatures can dip below freezing. The third site visited was the Tandayapa Bird Lodge in the Tandayapa Valley on the edge of the Chocó subregion. This lower montane cloud forest site is fairly heavily forested along rich orogenous valleys but the height of emergent trees is significantly less than that at the Tiputini site and vegetational species composition was clearly different. The Tiputini site is characterized by classical evergreen tropical lowland Amazon Basin rain forest with large emergent trees above the main forest canopy and a light-restricted ground level with sparser vegetation. Many trees at both the Tandayapa and Tiputini sites are coated with epiphytes. We recorded butterflies at Papallacta for one day, Yanacocha for one day, Tandayapa for three days, and Tiputini for four days, all during June 2002.



Fig. 2. *Leptophobia tovaria* (Felder), Tandayapa, 19 June 2002.

and Bollino and Onore (2001) for Papilionidae and/or Pieridae, D'Abbrera (1984, 1987a, 1987b, 1988) for Nymphalidae, D'Abbrera (1994) and DeVries (1997) for Riodinidae, D'Abbrera (1995) for Lycaenidae, and Evans (1952, 1953, 1955) and Lewis (1987) for Hesperidae. Reliable Internet identification guides were also used especially for Ithomiinae and Hesperidae. A few specimens were kindly identified by Drs. Jason Hall (Smithsonian Institution) and Keith Willmott (University of Florida).

Butterflies were recorded at each site by observation, photography or collection of specimens using a traditional hand-held 46 cm diameter butterfly net with a 60 cm handle. Specimens were captured, observed or photographed at ground-level; several canopy-frequenting species (DeVries *et al.*, 1997; Murray, 2000; DeVries & Walla, 2001) were not therefore recorded especially at the Tiputini site which is characterized by significant arboreal stratification. Generally, specimens were captured, identified and released. Specimens that could not be identified in the field, were either photographed or kept as voucher specimens and identified later. Pinned, labeled voucher specimens collected during this study are deposited in the Museo Ecuatoriano de Ciencias Naturales, Quito. Guides used for identifying specimens were Espinosa *et al.* (1977), DeVries (1987), Piñas-Rubio and Manzano-Pesántez (1997) and Garwood *et al.* (2007) for various groups, D'Abbrera (1981)

Results

We recorded 24 different species of butterflies at Papallacta, 10 at Yanacocha, 27 at Tandayapa, and 208 at Tiputini (Tables 1-4). The butterfly faunal compositions recorded at each site were very different with the faunas at Tandayapa and Tiputini being most similar to each other (4 shared species, 11 shared genera) and those of Yanacocha and Tiputini being most different [no shared species or genera (Table 5)].



Fig. 3. *Marpesia crethon* (Fabricius) mud-puddling at boat dock, Tiputini, 21 June 2002.

In Tables 1-4, a question mark following a taxon name implies that we are not absolutely certain of the identity of the specimen(s); however, question-marked species are definitely different from any of the others listed in the Tables. Further, a few of the skippers (Hesperidae) could be distinguished from each other but could not be identified to species. Skippers in this category are placed in their appropriate genus in the Tables and further listed as species # 1 or # 2 in order to distinguish them.

We recorded some taxa that are not included in the Ecuador butterfly lists of Espinosa *et al.* (1997) (Tables 1, 3, and 4). However, some of these species have been reported from Ecuador by other workers (D'Abbrera 1981, 1984, 1987a, 1987b, 1988, 1994; DeVries *et al.* 1997; Piñas-Rubio and Manzano-

Pesántez 1997; Murray 2000; Bollino and Onore 2001). We also recorded at least one undescribed species (*Rhamma* n. sp., a lycaenid at Tandayapa, identified by Jason Hall). Elevational zonation was also pronounced especially between Andean and lowland rainforest taxa as discussed with specific examples in the following section. Nevertheless, a small number of species were recorded at more than one elevation including two wide-ranging species at both the high Andean Papallacta site and the lowland Amazonian site (the nymphaline *Junonia evarete* and the skipper *Heliopetes alana*).

Discussion

Each of the four sites we sampled was characterized by very different butterfly faunas (Tables 1-5) with elevational zonation being distinct. The Papallacta site was characterized by relatively low butterfly abundance (personal



Fig. 4. *Greta andromica* (Hewitson), Tandayapa, 19 June 2002.

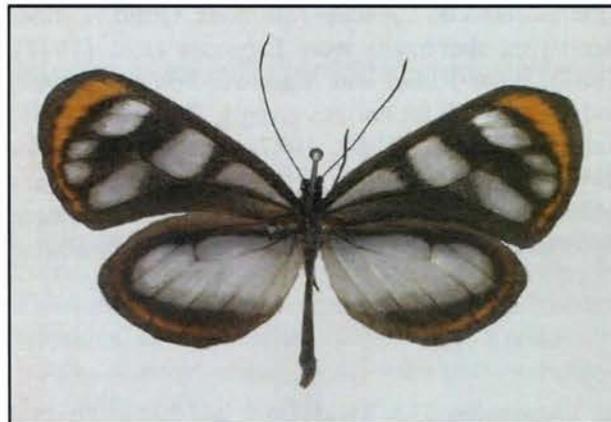


Fig. 5. *Oleria sexmaculata* (Haensch), Tiputini, 23 June 2002.



Fig. 6. *Lasiophila persepolis* (Hewitson), Yanacocha, 18 June 2002.

observations) and by a mixture of Andean endemics and "generalist" species, the latter typically occupying large geographical ranges especially to the north. Twelve (50%) of the butterfly species we recorded at Papallacta can be considered to be Andean endemics (D'Abrera, 1981, 1988; Espinosa *et al.*, 1997): the papilionid *Papilio polyxenes sardalus*, the pierids *Colias lesbia*, *Colias mossii*, *Catasticta susiana*, *Leptophobia philoma*, *Tatochila macrodice artodice*, *Tatochila sagittata*, *Tatochila xanthodice*, and the nymphalids *Vanessa altissima*, *Vanessa carye*, *Erichthodes erichto* and *Pedialodes asconia*. In fact, most known species in the genus *Tatochila* are Andean endemics (D'Abrera, 1981; Espinosa *et al.*, 1997), suggesting that the genus evolved in this region. Not surprisingly, the Andean cordillera has apparently had a major impact on butterfly speciation (Willmott *et al.*, 2001). Remarkably, the "generalist" species we recorded also all occur in the Nearctic zoogeographical region, but almost exclusively in the very southern zones of that region (Scott, 1986; Smith *et al.*, 1994). At the Papallacta site, 9 of the 24 (38%) species we recorded also occur in the Nearctic region. These are the papilionid *Papilio polyxenes*, the pierids *Zerene cesonia* and *Ascia monuste*, the nymphalids *Euptoieta claudia*, *Junonia evarete*, *Vanessa virginiensis*, *Danaus plexippus* and *Agraulus vanillae*, and the hesperiid *Urbanus proteus*. However, some of the subspecies of these butterflies that we recorded, such as *P. polyxenes sadalus*, appear to be Andean endemics (Espinosa *et al.*, 1997).

Our limited records for Yanacocha suggest that the butterfly fauna at this site is very unique with only one shared species (the lycaenid, *Thecla coronata*, which was also recorded at Papallacta) with any of the other three sites. In fact, *T. coronata* has been recorded from a wide range of elevations in the neotropics (D'Abrera, 1995). The uniqueness the Yanacocha fauna is underlined in Table 5 which shows that the butterfly species and genera we recorded there differed most between this site and any of the others. Unlike our Papallacta, Tandayapa and Tiputini records, we found no butterflies with Nearctic affiliations at Yanacocha. The apparent uniqueness of this site warrants further biological investigations. Such uniqueness is not limited to the butterfly fauna; the bird fauna is also unusual. The critically endangered puffleg, *Eriocnemis nigrivestis* (Bourcier and Mulsant), is found on only one other volcano (Del Hoyo *et al.*, 1999; Ridgely and Greenfield, 2001). Also, the near threatened snipe, *Galinago imperialis* Sclater and Salvin, in Ecuador known only from eastern cordillera

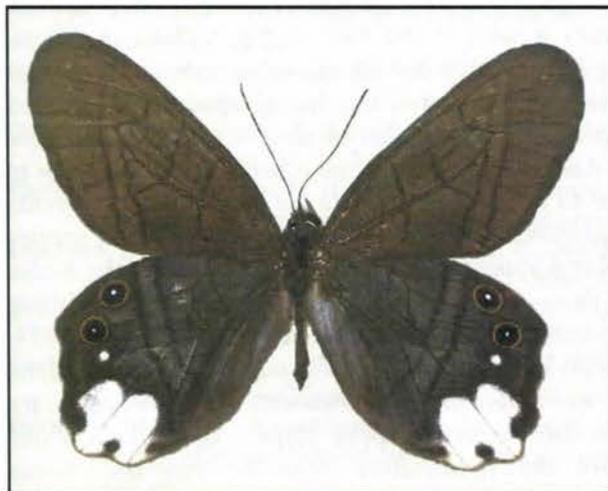


Fig. 7. *Pierella astyoche* (Erichson), Tiputini, 24 June 2002.

the lycaenid *Everes comyntas* (identified by Jason Hall) has a strong Nearctic affiliation and is common in large areas of eastern and central North America (Scott, 1986).

Tiputini had by far the most diverse butterfly fauna (208 species) of any of the sites we assessed (Table 4). Predictably, it had a characteristic lowland Amazon Basin butterfly fauna with abundant ithomiines, brassolines, riodinids, and partially clear-winged ground-frequenting satyrines in the forest understory and abundant papilionids, pierids, hesperiids and certain nymphalids in forest clearings and along river banks. Dismorphine pierids, heliconiines and certain satyrines, limenitidines and nymphalines frequented other forest sites including grassy areas near cabins or bodies of water. The Tiputini butterfly fauna that we recorded was clearly specialized but was most similar to that of Tandayapa and least similar to that of Yanacocha (Table 5). Two species (*J. evarete* and *H. alana*) were recorded at both Tiputini and Papallacta (Tables 2, 4) demonstrating that some butterflies were not restricted by elevation in



Fig. 8. *Pierella lena* (L.), Tiputini, 22 June 2002.

(elevation, 400-450 m) about 90 km to the northwest of Tiputini.

In addition to the elevational zonation we noted, some butterfly taxa appear to be restricted to either the western slope of the Andes and the western Andean cordillera or eastern slope of the Andes and eastern Andean cordillera (Espinosa *et al.*, 1997; Willmott *et al.*, 2001). Several biogeographical boundaries seem to occur in the region; the first appears to run down the central valley of Ecuador that separates the western and eastern Andean cordilleras; the second occurs at the upper-treeline on the western slope of the western Andean cordillera; and the third at the upper-treeline of the east slope of the eastern cordillera (Stattersfield *et al.*, 1998). Because two of the sites we surveyed (Yanacocha and Tandayapa) are situated on the west slope of the western cordillera and one site (Papallacta) is situated on the eastern

specimens, has been observed at Yanacocha (Ridgely and Greenfield, 2001).

The butterfly fauna we recorded at Tandayapa was very different from the Andean faunas at Papallacta and Yanacocha and was most similar to that recorded at Tiputini (Table 5). However, the Tandayapa fauna was relatively unique and included the only undescribed species of this study. At this mid-elevational site, representatives of some characteristically lowland neotropical butterfly subfamilies, such as charaxines, ithomiines and heliconiines, were recorded (Table 3). However, this site was too high for representatives of other lowland neotropical groups such as members of the Morphinae. Nevertheless, high and mid-elevational taxa such as *Pedialodes* spp. (Satyrinae) were relatively common at this site. Tandayapa evidently has a transitional butterfly fauna somewhat intermediate between that of the high Andes and the lowland Amazon Basin. One of 27 species (4%) recorded at Tandayapa,

this study. Of the 208 species recorded at Tiputini, 23 (11%) of these also occur in the southern reaches of the Nearctic region (Scott, 1986; Smith *et al.*, 1994). These are the papilionid *Papilio anchisades*, the pierids *Eurema nise*, *Phoebis argante* and *Phoebis statira*, the nymphalids *Diaethria clymene*, *Hamadryas amphinome*, *Marpesia chiron*, *Marpesia petreus*, *Junonia evarete*, *Siproeta stelenes*, *Libytheana carinenta*, *Doxocopa pavon*, and *Dryas iulia*, and the hesperiids *Astraptus fulgerator*, *Carrhenes canescens*, *Cogia calchas*, *Gorgythion begga*, *Helioipetes arsalte*, *Pellicia dimidiata*, *Polythrix octomaculata*, *Urbanus dorantes*, *Urbanus simplicius* and *Xenophanes tryxus*. However, some of these species such as *L. carinenta* are represented by different subspecies in the two zoogeographical regions (Espinosa *et al.*, 1997; Scott, 1986). The butterfly fauna we recorded in four days at Tiputini appears to have many similarities to the more extensive fauna (811 species) recorded during a four-year survey by Murray (2000) at Jatun Sacha (01.04S, 77.36W), a lowland Ecuadorian site

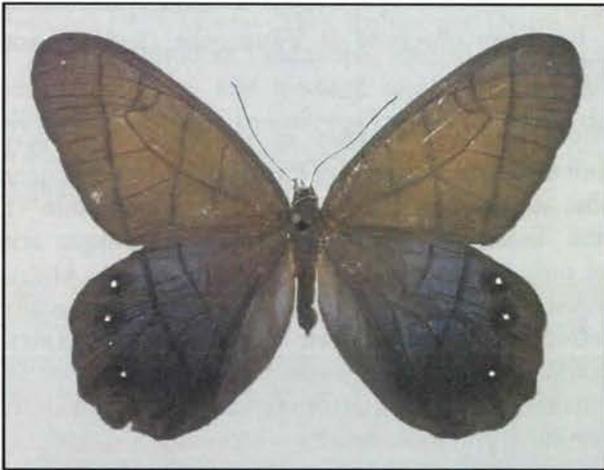


Fig. 9. *Pierella lamia* (Sulzer), Tiputini, 21 June 2002.

cordillera, some of our data are relevant to this phenomenon. Also, Tiputini is well to the east of the Andean cordillera. Clearly, the four species that we recorded at both Tandayapa and Tiputini (Tables 1 and 4) and the one species we recorded at both Papallacta and Yanacocha are not restricted to either side of the Andes. However, some other species do appear to be restricted to one side. Our data are too limited to provide definitive statements on this but many of the Tiputini species listed in Table 4 appear to be restricted to the east of the Andes (several of them are also Amazonian endemics). In addition, our data, in combination with other reports (D'Abrera, 1984, 1987a,b, 1988; Espinosa *et al.*, 1997), suggest that some of the butterflies we recorded at Yanacocha or Tandayapa are restricted to the western Andean slope. Butterflies in this category are the nymphalids *Acionote ozomene*, *Greta andromica*, *Ithomia terra terrana*, *Cissia alcinoe*, *Euptychia inornata*, *Pedialodes peucestas*, and *Steremnia monachella*, and

the lycaenids *E. comyntas* and *Rhamma* n. sp.

Overall, our rapid (1-4 days at each site) assessments of four butterfly faunas in Ecuador highlight differences in biodiversity and elevational zonation between the sites. Extended surveys of at least one year duration would be required at each site in order to accommodate seasonal phenomena and to obtain a more complete picture of these butterfly faunas. Unfortunately, the luxury of having a year (or even a month) of survey data is not always feasible, especially in the tropics, for assessing the biological attributes of threatened ecological sites. Therefore, rapid surveys of indicator species such as butterflies may become more common in the future.

Acknowledgements

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TABLE 1. Butterflies recorded at Reserva Ecología Yanacocha, Ecuador (western cordillera of Andes mountains), ~3,600 m elevation, June 2002.

FAMILY NYMPHALIDAE (6 species)	FAMILY LYCAENIDAE (2 species)
SUBFAMILY SATYRINAE (6 species)	<i>Thecloxurina loxurina</i> (Felder and Felder)
<i>Lasiophila persepolis</i> (Hewitson)	<i>Thecla coronata</i> (Hewitson)
<i>Lymanopoda nivea bingo</i> Pyrez	
<i>Pedialodes chrysoaenia</i> (Hopffer)	FAMILY HESPERIIDAE (2 species)
<i>Pedialodes morenoi</i> (Dognin)	<i>Dalla agathocles</i> (Felder and Felder)
<i>Pedialodes polla</i> (Thieme)	<i>Molo</i> sp. # 1
<i>Steremnia monachella</i> (Weymer)	
	TOTAL SPECIES – 10

TABLE 2. Butterflies recorded at Papallacta Pass, Ecuador (eastern cordillera of Andes mountains), 2,900-4,070 m elevation, June 2002.

FAMILY PAPILIONIDAE (1 species) <i>Papilio polyxenes sadalus</i> (Lucas)	<i>Junonia evarete</i> (Cramer) <i>Vanessa altissima</i> (Roserberg and Talbot) <i>Vanessa carye</i> (Hübner) <i>Vanessa virginiensis</i> (Drury)
FAMILY PIERIDAE (10 species)	
SUBFAMILY COLIADINAE (3 species) <i>Colias lesbia</i> (Felder) <i>Colias mossii</i> (Rothschild) <i>Zerene cesonia</i> (Stoll)	SUBFAMILY DANAINAE (1 species) <i>Danaus plexippus</i> (L.)
SUBFAMILY ANTHOCHARINAE (2 species) <i>Catasticta confusa</i> (Reissinger) <i>Catasticta susiana</i> (Hopffer)	SUBFAMILY HELICONIINAE (1 species) <i>Agraulus vanillae</i> (L.)
SUBFAMILY PIERINAE (5 species) <i>Ascia monuste</i> (L.) <i>Leptophobia philoma</i> (Hewitson) <i>Tatochila macrodice artodice</i> (Staudinger) <i>Tatochila sagittata</i> (Rober) <i>Tatochila xanthodice</i> (Lucas)	SUBFAMILY SATYRINAE (2 species) <i>Erichtodes erichto</i> (Butler) <i>Pedialodes asconia</i> (Thieme)
FAMILY NYMPHALIDAE (9 species)	FAMILY LYCAENIDAE (1 species) <i>Thecla coronata</i> (Hewitson)
SUBFAMILY NYMPHALINAE (5 species) <i>Euptoieta claudia</i> (Cramer)	FAMILY HESPERIIDAE (3 species) <i>Heliopetes alana</i> (Reak) <i>Morys cerdo</i> (Boisduval) <i>Urbanus proteus</i> (L.)
	TOTAL SPECIES – 24

TABLE 3. Butterflies recorded at Tandayapa Bird Lodge, Ecuador, ~1,750 m elevation (western slope of Andes mountains), June 2002.

FAMILY PIERIDAE (3 species)	SUBFAMILY LIMENITIDINAE (3 species) <i>Adelpha collina</i> (Hewitson) <i>Diaethria clymena</i> (Cramer) <i>Diaethria marchalii</i> (Guérin-Meneville)
SUBFAMILY COLIADINAE (3 species) <i>Eurema xanthochlora</i> (Kollar) <i>Leptophobia penthica</i> (Kollar) <i>Leptophobia tovaria</i> (Felder)	SUBFAMILY NYMPHALINAE (2 species) <i>Anartia amathea</i> (L.) <i>Hypanartia dione</i> (Latreille)
FAMILY LYCAENIDAE (3 species) <i>Everes comyntas</i> (Godart) <i>Rhamma</i> n. sp. <i>Thecla aegides</i> (Felder)	SUBFAMILY SATYRINAE (5 species) <i>Cissia alcinoe</i> (Felder & Felder) <i>Euptychia inornata</i> (Felder)? <i>Pedialodes drymaea</i> (Hewitson) <i>Pedialodes peucestas</i> (Hewitson) <i>Pedialodes phrasis</i> (Grose-Smith)
FAMILY NYMPHALIDAE (15 species)	FAMILY HESPERIIDAE (6 species) <i>Bolla</i> sp. # 2 <i>Callimormus gracilis</i> (Felder) <i>Eutocus</i> sp. # 1 <i>Eutyche</i> sp. # 1 <i>Molo</i> sp. # 2 <i>Morys</i> sp. # 2
SUBFAMILY ACRAEINAE (1 species) <i>Actinote ozomene</i> (Godart)	
SUBFAMILY CHARAXINAE (1 species) <i>Marpesia coresia</i> (Godart)	
SUBFAMILY HELICONIINAE (1 species) <i>Philaethria dido</i> (L.)	
SUBFAMILY ITHOMIINAE (2 species) <i>Greta andromica</i> (Hewitson) <i>Ithomia terra terrana</i> (Haensch)	
	TOTAL SPECIES – 27

TABLE 4. Butterflies recorded at Tiputini Biodiversity Station, Ecuador (lowland Amazonian rain forest, east of Andes mountains), ~200 m elevation, June 2002.

FAMILY PAPILIONIDAE (7 species)	
<i>Eurytides earis</i> (Rothschild and Jordan)	<i>Hamadryas amphinome</i> (L.)
<i>Graphium agesilaus</i> (Guérin-Meneville and Percheron)	<i>Marpesia berania</i> (Hewitson)
<i>Papilio anchisades</i> Esper	<i>Marpesia chiron</i> (Fabricius)
<i>Papilio torquatus</i> (Cramer)	<i>Marpesia crethon</i> (Fabricius)
<i>Parides lysander</i> (Cramer)	<i>Marpesia hermione</i> (Felder and Felder)
<i>Parides sesostris</i> (Cramer)	<i>Marpesia petreus</i> (Cramer)
<i>Protesilaus telesilaus</i> (Felder and Felder)	<i>Panacea divalis</i> (Bates)
	<i>Paulogramma peristera</i> (Hewitson)
	<i>Peria lamis</i> (Cramer)
	<i>Pyrrhogyra crameri</i> (Aurivillius)
	<i>Pyrrhogyra neaerea</i> (L.)
	<i>Pyrrhogyra otolais</i> (Bates)
	<i>Temenis laothoe</i> (Cramer)
	<i>Temenis pulchra</i> (Hewitson)
	<i>Tigridia acesa</i> (L.)
FAMILY PIERIDAE (21 species)	SUBFAMILY NYMPHALINAE (9 species)
SUBFAMILY DISMORPHIINAE (3 species)	<i>Anartia amathea</i> (L.)
<i>Dismorphia pinthous</i> (L.)	<i>Castilia perilla</i> (Hewitson)
<i>Dismorphia theucarilla erythroae</i> (Bates)	<i>Eresia clara</i> (Bates)
<i>Enantia licinia</i> (Cramer)	<i>Eresia eunice</i> (Hübner)
SUBFAMILY COLIADINAE (11 species)	<i>Junonia evarete</i> (Cramer)
<i>Eurema agave</i> (Cramer)	<i>Metamorpha elissa</i> Hübner
<i>Eurema albula</i> (Cramer)	<i>Siproeta stelenes</i> L.
<i>Eurema elathea vitellina</i> (Cramer)	<i>Tegosa pastazena</i> (Bates)
<i>Eurema nise</i> (Cramer)	<i>Telenassa burchelli</i> (Moulton)
<i>Eurema venusta</i> (Boisduval)	SUBFAMILY CHARAXINAE (3 species)
<i>Eurema xanthochlora</i> (Kollar)	<i>Agrias claudina</i> (Godart)
<i>Phoebis argante</i> (Fabricius)	<i>Archaeoprepona amphimachus</i> (Fabricius)
<i>Phoebis bourkei</i> (Dixey)	<i>Memphis morvus</i> (Fabricius)
<i>Phoebis rurina</i> (Cramer)	SUBFAMILY APATURINAE (3 species)
<i>Phoebis statira</i> (Cramer)	<i>Doxocopa agathina</i> (Cramer)
<i>Phoebis trite</i> (L.)	<i>Doxocopa elis</i> (Felder and Felder)
SUBFAMILY ANTHOCARINAE (6 species)	<i>Doxocopa pavon</i> (Latreille)
<i>Itaballia demophile</i> (L.)	SUBFAMILY LIBYTHEINAE (1 species)
<i>Itaballia pisonis</i> (Hewitson)	<i>Libytheana carinenta</i> (Cramer)
<i>Melete lycimnia napona</i> (Fruhstorfer)	SUBFAMILY HELICONIINAE (5 species)
<i>Perrhybris lorena</i> (Hewitson)	<i>Dione junio</i> (Cramer)
<i>Perrhybris pyrria glessaria</i> (Fruhstorfer)	<i>Dryas iulia</i> (Fabricius)
<i>Pieriballia mandela tithoreides</i> (Butler)	<i>Heliconius erato</i> (L.)
SUBFAMILY PIERINAE (1 species)	<i>Heliconius wallacei</i> Reakirt
<i>Ascia sincera</i> Weymer	<i>Philaethria dido</i> (L.)
FAMILY NYMPHALIDAE (125 species)	SUBFAMILY ITHOMIINAE (26 species)
SUBFAMILY LIMENITIDINAE (36 species)	<i>Aeria eurimedia</i> (Cramer)
<i>Adelpha cytherea</i> (L.)	<i>Ceratinia poecila</i> Bates
<i>Adelpha erotia</i> (Hewitson)	<i>Forbestra olivencia</i> (Bates)
<i>Adelpha iphicles</i> (L.)	<i>Godyris zavaletta</i> (Hewitson)
<i>Adelpha mesentina</i> (Cramer)	<i>Hypoleria cymo</i> (Hübner)
<i>Asterope markii hewitsoni</i> (Staudinger)	<i>Hypoleria oriana</i> (Hewitson)
<i>Callicore astarte</i> (Cramer)	<i>Hyposcada anchiala ecuadoriana</i> (Byrk)
<i>Callicore cyllene</i> (Doubleday)	<i>Hyposcada illinissa</i> Hewitson
<i>Callicore cynosura</i> (Doubleday and Hewitson)	<i>Hyposcada zarepha kena</i> (Hewitson)
<i>Callicore hesperis</i> (Guérin-Meneville)	<i>Hypothyris berna</i> (Haensch)
<i>Catacore kolyma</i> (Hewitson)	<i>Hypothyris euclea</i> (Haensch)
<i>Catanophele numilia</i> (Cramer)	<i>Hypothyris mamercus</i> (Hewitson)
<i>Colobura dirce</i> (L.)	<i>Hypothyris ninonia</i> (Hübner)?
<i>Diaethria clymena</i> (Cramer)	<i>Ithomia amarilla</i> (Haensch)
<i>Dynamine artemisia</i> (Fabricius)	<i>Mechanitis mazaesus</i> (Hewitson)
<i>Dynamine chryseis</i> (Bates)	<i>Mechanitis polymnia</i> (L.)
<i>Dynamine persis</i> Hewitson	<i>Melinaea mneophilus</i> Hewitson
<i>Eunica clytia</i> (Hewitson)	<i>Methona grandior</i> (Forbes)
<i>Eunica eurota</i> (Cramer)	
<i>Eunica mygdonia</i> (Godman)	
<i>Eunica sophonisba</i> Cramer	
<i>Eunica taurione</i> Hübner	

Napeogenes pheranthos Bates
Napeogenes sylphis corena (Hewitson)
Oleria janarilla (Hewitson)?
Oleria ileridina lerida (Kirby)
Oleria sexmaculata (Haensch)
Pteronymia vestilla sparsa Haensch
Pseudoscada aureola (Bates)
Scada batesi (Haensch)

SUBFAMILY SATYRINAE (36 species)

Bia actorion (L.)
Cepheptychia cephus (Fabricius)
Cissia confusa (Staudinger)
Cissia hermes (Fabricius)
Cissia myncea (Cramer)
Cissia penelope (Fabricius)
Cissia proba (Weymer)
Cithaerius aurora (Felder and Felder)
Cithaerius merolina (Zikan)
Cordaes enyo (Hewitson)
Euptychia arnaea (L.)
Euptychia enyo (Butler)?
Euptychia herse (Cramer)
Euptychia hesionides (Forster)
Euptychia terrestris Butler
Euptychia picea (Butler)
Euptychia tricolor (Hewitson)
Haetera piera (L.)
Meganeuptychia helle (Cramer)
Meganeuptychia libye (L.)
Meganeuptychia modesta (Butler)
Meganeuptychia segesta (Weymer)
Pareuptychia hesione (Sulzer)
Pareuptychia interjecta hesionides (Forsters)
Pareuptychia occirhoe (Fabricius)
Pierella astyoche (Erichson)
Pierella lamia (Sulzer)
Pierella lena (L.)
Pierella rhea Fabricius
Splendeuptychia ashna (Hewitson)
Taygetis celia (Cramer)
Taygetis valentina (Cramer)
Taygetis virgilia (Cramer)
Taygetis xenana (Butler)
Ypthimoides erigone (Butler)
Ypthimoides renata (Cramer)

SUBFAMILY MORPHINAE (3 species)

Morpho adonis (Cramer)
Morpho deidamia Hübner
Morpho hecuba (L.)

SUBFAMILY BRASSOLINAE (3 species)

Caligo idomeneus (L.)
Catoblepia soranus (Westwood)
Opisphanes cassina (Felder and Felder)

FAMILY RIODINIDAE (24 species)

Adelotypa alector Butler
Adelotypa sp. # 2
Amarynthia meneria (Cramer)

Anteros formosus (Cramer)
Calydna punctata Felder and Felder
Charis auius (Cramer)
Charis cleonus (Stoll)
Charis gynaea (Godart)?
Emesis lucinda (Cramer)
Eunogyra satyrus Westwood
Eurybia lamia (Cramer)
Eurybia unxia (Godman and Salvin)
Euselasia hygenius (Stoll)
Euselasia orfita (Cramer)
Ithomeis mimica (Bates)
Mesosemia cippus (Hewitson)
Mesosemia jucunda Stichel
Mesosemia sirenia Stichel
Mesosemia thymetus (Cramer)
Monethe albertus Felder and Felder
Nymphidium lisimon (Stoll)
Nymphidium medusa Druce
Riodina lysisippe (Stichel)
Semomesia macaris (Hewitson)

FAMILY LYCAENIDAE (2 species)

Arawacus aetolus (Cramer)
Timolus echion (L.)

FAMILY HESPERIIDAE (29 species)

Astraptes fulgerator (Walch)
Autochton sp. # 1
Bolla sp. # 2
Cabrius sp. # 1
Carrhenes canescens (Felder)
Cogia calchas (Herrich-Schäffer)
Cycloglypha caeruleonigra Mabilie
Cymaenes alumna (Butler)
Ebrietus sp. # 1
Entheus priassus (L.)
Eutocus sp. # 2
Gorgiopus sp. # 1
Gorgythion begga (Prittwitz)
Heliopetes alana (Reakirt)
Heliopetes arsalte (L.)
Hyalothyreus neleus (L.)
Ouleus fridericus (Geyer)
Paches gladius (Butler)
Pellicia dimidiata Herrich-Schäffer
Phanus sp. # 1
Phocides thermus (Mabilie)?
Polythrix octomaculata (Sepp)
Porphyrogenes passalus (Herrich-Schäffer)
Pyrrhopyge sp. # 1
Pythonides jovianus (Stoll)
Urbanus dorantes (Stoll)
Urbanus simplicius (Stoll)
Urbanus teleus (Hübner)
Xenophanes tryxus (Stoll)

TOTAL SPECIES – 208

TABLE 5. Faunistic similarities (percent of shared species and genera) recorded for rapid surveys of butterflies at four sites in Ecuador.

SITE (No. spp. & genera)	Papallacta* (24, 18)	Yanacocha (10, 8)	Tandayapa (27, 23)	Tiputini (208, 125)
Papallacta	-----	10%, 25%	0%, 17%	1%, 4%
Yanacocha	4%, 11%	-----	0%, 13%	0%, 0%
Tandayapa	0%, 22%	0%, 38%	-----	2%, 9%
Tiputini	8%, 28%	0%, 0%	15%, 48%	-----

*In each case, sites listed in the left column are compared with sites listed at the top of the table.

(Lance Durden, E-Mail: ldurden@georgiasouthern.edu)

Crypsis - Continued from page 59. *Did you find the frog?*



The hidden frog (photograph by Lior Golgher).

Mr. Golgher would like to have the members of the SLS who found this task of finding the frog interesting to respond to him at the following e-mail address (FoundFrog@gmail.com) and tell him how long it took you to find the frog. Mr. Golgher studied neuroscience at the Weizmann Institute of Science in Israel and has used this test in the past (*How long it takes to find the frog?*) in some of his studies. He found that most people find the frog after a few minutes, if they do not lose patience and give up. However, a single subject found the frog within a few seconds and he believes that this is more than anecdotal and thus would be interested in having the readers send him this information.

(Lior Golgher, 8 Ha'asif St., Herzliya 46309, ISRAEL)

[The Southern Lepidopterists' Society thanks Mr. Lior Golgher for allowing us to use his photographs in the NEWS - The Editor.]

Source: [http://upload.wikimedia.org/wikipedia/commons/9/96/Camouflage_DSC05383 - Frog_Highlight.JPG](http://upload.wikimedia.org/wikipedia/commons/9/96/Camouflage_DSC05383_-_Frog_Highlight.JPG)

**OH DEER ME
(ANOTHER TALE OF DISASTER WHILE LEPPING)**

**BY
KELLY RICHERS**

Some lepping trips are uneventful, and some are so event filled that parts seem to be lost in the memory when they are overshadowed by other parts. Such was a trip in 2009 that I took to the east coast in October.

As a member of the Wedge Entomological Research Foundation, I take a trip every October to Washington, D.C. to the annual meeting of the Foundation at the Smithsonian. Since the meeting is on a Friday, I generally arrive Thursday morning for a day of research at the Smithsonian, (I live in California so I take the overnight flight and arrive at 6 a.m.) then rent a car. This trip I rented a little Hyundai, very "lightweight" if you will, for the weekend. The reason for renting a car is that I drive out on Friday night to the Shenandoah Valley to spend the weekend with my mother and brother who live near Harrisonburg Virginia, where I keep a couple of moth traps (if you can believe I would do such a thing).

So, the research day went well. I took the little car from the hotel in Tysons Corner to the Dunn Loring metro station, and got off the metro at the Smithsonian exit, spent the day with the moths in the collection, and reversed that trip in the evening. The day of the meeting I repeated the trip in to Washington for the meeting.

At the meeting, John Brown invited several of us to dinner. As he lives in an area just southwest of the Dunn Loring exit, it seemed a great fit to head out a few hours late toward the Shenandoah Valley. He printed out instructions from some travel site, and I was all set to drive there after the meeting.

When I got to the Dunn Loring metro station that evening, the first thing I noticed was that none of the streets shown as being next to the station on the map were actually named the same name. Now, unless I had stepped off the subway into a parallel dimension, something was badly wrong. However, I dutifully drove off to the southwest, thinking I would eventually run into the roads on the actual map. Such was not the case, however, and 15 minutes later, I gave up and called. Turns out the map was from some other Dunn Loring. How many can there be? As I headed north again in heavy traffic, moving slowly, in the presumably correct direction, the guy behind me rear ended me, not stopping for some reason in the stop and go traffic.

I pulled off the road into a parking lot so we could trade information, only to see him pause at the entrance, then continue off into the traffic, ignoring me waving and jumping up and down behind him. There were several scratches on the car, and I was not looking forward to returning it, as I had forgone the extra insurance. I was sure it would cost me a hundred or more dollars to return.

However, I made it to dinner, and made it later that night to the Shenandoah Valley. Over the next two days I played 72 holes of golf with my brother, and set traps about five miles outside town Saturday night. Sunday night we had time for me to set traps and collect them Monday morning with one final round of golf before I flew back, if I collected them at dawn.

Monday I drove in the dark to where I had set the traps and picked them up off the power line near where it cut through the forest road. In October, if the weather holds, there are numerous southern moths that make it up the Valley, so those collected are always interesting. I put the traps in the little Hyundai and started off to my brother's house for the golf outing.

Why those particular five deer decided to cross the road through my car at that particular time shall forever remain a mystery. I was on a rural road with forest on my right and fields on my left. There were numerous other cars on the road, spaced about 50 yards apart in the morning gloaming, and mine was just one of dozens. Did they think "Hey, an aluminum car, let's go through it!"?

Regardless of the reason, all five deer crossed at the same time. I saw the first one, and swerved left to go behind it, since it was crossing from left to right. That brought me crashing into the second one, who hit my fender with her head hard. Swerving right and braking (I was going all of 45 at the time of the crash) I hit the third one in the

panel in front of the door on the left side, destroying the panel almost completely as the deer must have lunged forward as I went left initially. The fourth deer scooted past untouched. The fifth smashed into the panel behind my door on the left side.

All this happened in about two seconds. I was left with a destroyed car on the driver's side and the cars behind me braking to a stop. I saw a driveway and coaxed the car to the right into the driveway. Attempting to get out, I discovered that the door was completely jammed, so I did a "Dukes of Hazzard" and hoisted myself out the window.

As I thought, the left side of the car was destroyed. Bits of deer hair hung out of the panel joints, and there was a head imprint in the front left fender-really! The side panel itself was dented in horribly. The door was untouched. The back panel was dented horribly. At a glance I estimated \$2000 damage minimum. The car looked like the Keystone Cops had been using it for a day.

Literally ten seconds later a car pulled up from the opposite direction, a driver leaned out and said "Deer hit ya?"

I affirmed his statement, and he pulled in the driveway next to me. Turns out he lived there, and on an average of every three weeks deer hit a car at that spot. He was very nice, and we walked the road together, expecting to find at least one or two dead deer, judging from the dents, somewhere near the road. Nothing. The deer were probably running in the woods laughing their big white tails off.

Somehow I got to my brother's, and later somehow got the car to the rental place at Dulles. When I pulled into the rental return, the person checking me in just stared. I climbed out the window and calmly stated "This isn't your ordinary car rental return".

Eventually it cost me \$500 for the deductible on my insurance, and there was one good aspect of it. I forgot completely about the person who rear ended me...! Just another danger of lepping.

(Kelly Richers, E-Mail: KeRichers@wuesd.org)



[Submitted by Vernon A. Brou Jr.]



More photographs from the Garden of Gary Ross (photographer GR).

**NEW HOST PLANT RECORDS FOR THE ZABULON SKIPPER
(*POANES ZABULON*) IN FLORIDA
BY
MARC C. MINNO**

The Zabulon Skipper occurs in central and northern Florida, but seems to be most common in the eastern Panhandle, especially from Jackson County eastward into Leon County. This is a common species at Florida Caverns State Park, located just north of Marianna. It is my impression that this skipper has become more abundant in peninsular Florida in recent years. In 2010, I found males perching on leaves in woodlots near my home in Gainesville such as at the University of Florida Natural Area Teaching Laboratory on campus and in the forest adjacent to the Royal Park Shopping Plaza. I spent a lot of time collecting in these areas in the 1980s and 1990s and never saw a Zabulon Skipper during those years. Effie Smith reported finding several Zabulon Skippers at Cedar Key in Levy County in March 2008 [M. C. Minno, 2008. Recent sightings of the Cuban Crescent and Zabulon Skipper in central Florida. *Southern Lepidopterists' News* 30(2):84]. Jeff Sloten and I also found Zabulon Skippers at Gulf Hammock in Levy County on May 16, 2010, and at the Lower Suwannee River National Wildlife Refuge in Dixie County on September 17, 2010.

On April 10, 2010, while searching for butterflies at San Felasco Hammock State Park, located northwest of Gainesville in Alachua County, I observed a female Zabulon Skipper ovipositing on Variable Witchgrass (*Dichanthelium commutatum*) (Fig. 1A). This is one of the most common grasses in Florida. *Dichanthelium* species are perennial, clumping grasses with a basal rosette of leaves in winter. This female fluttered about 1-foot above the ground and sought out leaves on the flowering stalks of the witchgrasses. I observed her to perch on three different witchgrass plants. On each plant, she bent her abdomen downward (Fig. 1B), quickly laid an egg on the underside of a leaf, then continued searching. After a few minutes, she flew off and was lost from sight. On June 10, I returned to this spot and found a larva of the Zabulon Skipper on Variable Witchgrass (Fig. 1C). The Zabulon Skipper is also frequently associated with another common grass, Longleaf Woodoats (*Chasmanthium laxum* var. *sessiliflorum*), in Florida. I have reared adults from larvae collected on this plant at Blue Springs Park in Jackson County.

Our house is located in Gainesville, just east of the Royal Park Shopping Plaza. While playing outside with our grandkids, Mirin (age 5) and Rose (age 2), on May 8, 2010, I noticed a skipper shelter on the leaves of some Indian Woodoats (*Chasmanthium latifolium*) that I had planted near the street. I pointed the shelter out to the kids and remarked that it was probably just a Clouded Skipper (*Lerema accius*), which uses a variety of different grasses. You can imagine my surprise when I opened the shelter and found a Zabulon Skipper larva! I have never seen adults of this skipper in my yard, yet there was the caterpillar. I watched this larva over the next few weeks, but it was parasitized by tiny wasps and never completed development.

In summary, the Zabulon Skipper appears to be increasing in abundance in northern Florida. *Dichantheium commutatum* and *Chasmanthium latifolium* are new larval host records for this butterfly.

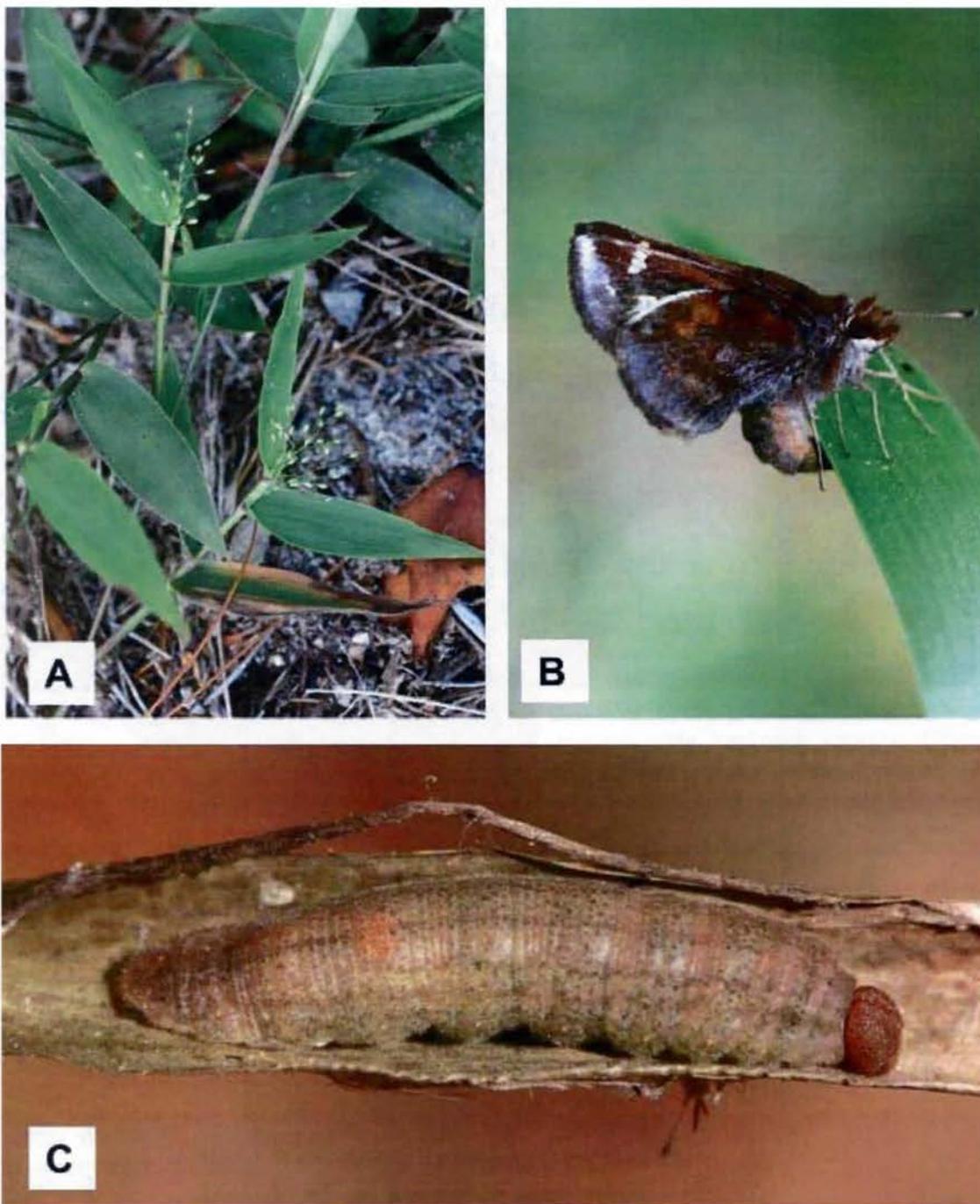


Fig. 1. *Poanes zabulon* and host plant: A) Variable Witchgrass (*Dichantheium commutatum*) at Eglin Air Force Base in Okaloosa County, Florida, B) a female Zabulon Skipper ovipositing on Variable Witchgrass at San Felasco Hammock State Park, Alachua County, C) Zabulon Skipper larva on *D. commutatum*.

(Marc C. Minno, E-Mail: mminno@bellsouth.net)

NEW MOON DATES FOR 2011

July 30
August 29

September 27
October 26

November 25
December 24

HETEROCAMPA ASTARTE DOUBLEDAY, 1841
(LEPIDOPTERA: NOTODONTIDAE) IN LOUISIANA

BY
VERNON ANTOINE BROU JR.



Fig 1. *Heterocampa astarte* phenotypes in St. Tammany Parish: males, a-c, females, d-f.

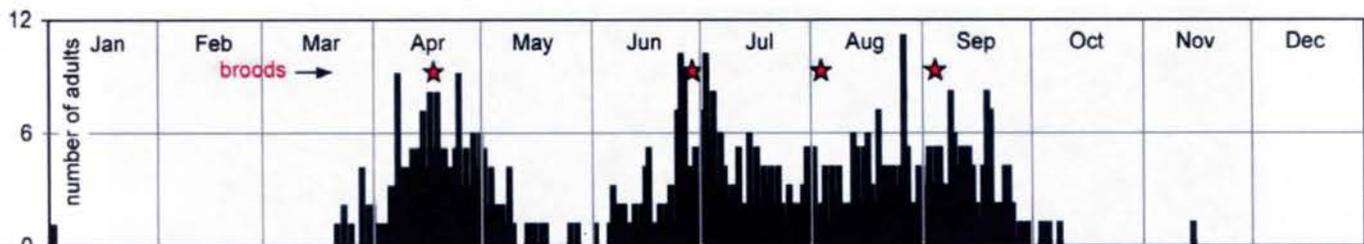


Fig. 2. Adult *H. astarte* captured at sec.24T6SR12E, 4.2 mi NE of Abita Springs, Louisiana. n = 600.

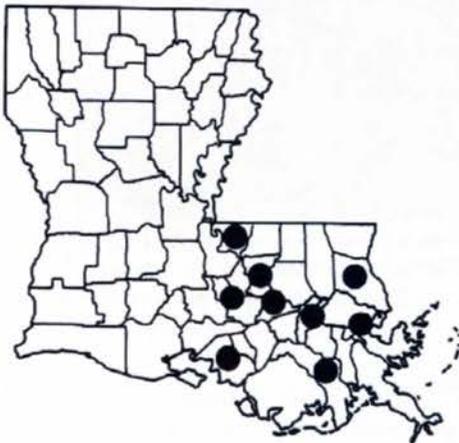


Fig. 3. Parish records.

The large and robust notodontid moth *Heterocampa astarte* Doubleday (Fig. 1) has been captured over much of southeastern Louisiana. Adults fly from late March to early October. Based on the multiyear composite phenogram (Fig. 2), *astarte* appears to have four annual broods in southeastern Louisiana; the initial brood peaks mid April, with the second brood peaking near the end of June and subsequent broods peaking at about 36-day intervals. The third brood peaking end of July/early August is the least populated or may represent a minor partial emergence.

Packard (1895) made a most enigmatic statement regarding broods indicative of so many of the early authors of the times "In Texas the moth was collected by Belfrage, April 27 and 29, and July 11, showing that in that state it is double brooded".

Packard (1895) listed specimens from Florida, Georgia and Texas. *H. astarte* was not addressed by Covell (1984). Heppner (2003) listed the range of *astarte* to be the southeast U.S. (South Carolina to Florida and Arkansas to Texas). The parish records in Louisiana are illustrated in Fig. 3.

Literature Cited

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

[Cont. from page 42 - "Gorgone Checkerspots in Georgia"]



Older caterpillars feed in groups of 2 or 3.



5th instar caterpillars eat entire leaf except mid and outer veins.



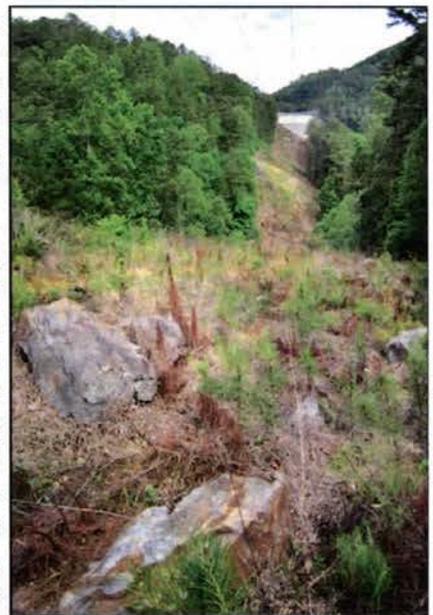
Gorgone Checkerspot (*Chlosyne gorgone*)(ventral).



Chrysalid of Gorgone Checkerspot.

Why has this population persisted at Cooper's Furnace Day Use Area? The answer may lie in the landscape practices used to maintain the powerline easement. According to Curtis Eaton, Georgia Power's north Georgia forestry specialist, the company has changed its maintenance practices. Formally, it bush-hogged vegetation every six years to keep the rights-of-way cleared, but re-growth was so rapid that saplings often reached heights of 18-20' before the next mow was scheduled. Under the new practices, the sites are still bush-hogged every six years, but selective spraying also occurs on a two-year cycle between mows. Power company personnel use backpack sprayers filled with non-restricted, selective-use herbicides to hand spray only woody brush. Eaton says that the change has not only been more efficient and economical for the power company, it has also created a more visually appealing landscape that often includes, in his words, "an explosion of wildflowers." Fortunately it creates a landscape that definitely appeals to G o r g o n e Checkerspots, artificially maintaining their low-growth habitat that is often naturally sustained only by periodic fires.

Although we have pieced together some of the Gorgone Checkerspots' life history in the Southeast, the puzzle is far from complete. We still do not know the exact species of the *helianthus* plants that dot the Cooper's Furnace hillside. Sunflowers are notoriously difficult to identify, and this one is no exception—a positive ID will have to wait until later in the summer when its flowering structure can be examined and properly keyed. We also wonder about the timing and size of subsequent flights-- will a second or even third flight occur, and how large will it be?



Altoona Dam.

Finally, how far does the population extend up the power company's easement, and how long will Cooper's Furnace Day Use Area continue to support colonies of Gorgone Checkerspots? Only time and continued observation will tell.

[If anyone has knowledge of a Gorgone Checkerspot population in Alabama, please contact the authors at habitatdesigns@hotmail.com]

A CHECKLIST OF BUTTERFLIES RECORDED AT HARMON DEN WILDLIFE MANAGEMENT AREA, HAYWOOD COUNTY, NORTH CAROLINA, 1976 - 2003

BY
 CHARLES V. COVELL JR.

In 1976 my parents moved from Virginia to Bat Cave, Henderson Co., NC, and later to a retirement home in Hendersonville. During trips from Louisville, KY, to visit them, I began taking the easy turnoff just inside NC from TN on Route I-40 at Harmon Den Wildlife Management Area, Haywood County. A dirt road followed a tumbling mountain stream up to a Max Patch Bald (described in more detail by Marks, 2010). Almost all my records are from the first 3 miles into Harmon Den from the Interstate. Over the years I made lists of butterflies that I had positively identified, and wrote an article about the place for *American Butterflies* (Covell, 1994). I had included a checklist of 31 species with that manuscript; but the editor deleted it. This list expands my list to 49, as I continued to stop there until late 2003. My *Papilio glaucus* records certainly include *P. appalachiensis* (Pavulaan & Wright), which was unknown to me during my visits to Harmon Den. At this time I cannot distinguish one from the other in my records, though later summer sightings were most likely *P. glaucus*.

The excellent article by Craig Marks has prompted me to present my list here, and note several species that he found that I did not: *Celastrina neglectamajor* Opler & Krizek, *Celastrina nigra* (W. Forbes), *Glaucopsyche lygdamus* (Doubleday), and *Cyllopsis gemma* (Hübner). Harry Legrand (2011) made further contributions to our knowledge of Harmon Den butterflies in the "Comments" on p. 17, mentioning *Amblyscirtes hegon*, and *Hesperia sassacus* along with valuable field notes. With these additions to my records, we now have 55 species – a fairly extensive list. (I was tempted to add *Anthocharis midea* (Hübner) as I have a "possible" sighting on April 15, 2001; but since I am not certain I have to leave it off.)

A few general notes might also be useful. There were times when I found Red-spotted Purples and Northern Pearly-eyes very common late in the summer. One time I found many Summer Azures clustered on a horse "plop" in the stream. While I found Diana there in earlier years of my survey, I did not see any in most recent years. I mentioned finding a just-run-over timber rattler in my 1994 article, so beware! My visits were always very brief, and never far from the main dirt road up the "holler;" so there are still promising areas yet to be explored.

In recent years I reported my survey lists to Donna M. Hollingsworth, USDA (Forest Service) in Burnsville, NC, for their records of wildlife in the French Broad District, Pisgah National Forest. Maybe some of those data are available from sources mentioned by Harry Legrand. I have complete field notes for all the visits, and could assist anyone wishing to prepare a more detailed survey publication in the future.

While some specimens were collected, especially in the earlier years, most of the records are definite sightings by me. Names which follow and their arrangement are in accordance with Pelham (2008). Common names follow

Opler (1995).

Finally, this is a wonderful spot for the lepidopterist, and so easy to access from I-40. I hope you will go there and add to the species list!

ORDER LEPIDOPTERA

Family HESPERIIDAE - Skippers

Epargyreus clarus (Cramer) - Silver-spotted Skipper
Autochton cellus (Boisduval & Le Conte) - Gold-banded Skipper July 14, 1996
Erynnis icelus (Scudder & Burgess) - Dreamy Duskywing
Erynnis brizo (Boisduval & Le Conte) - Sleepy Duskywing
Erynnis juvenalis (Fabricius) - Juvenal's Duskywing
Erynnis baptisiae (W. Forbes) - Wild Indigo Duskywing

Ancyloxipha numitor (Fabricius) - Least Skipper
Panoquina ocola (W.H. Edwards) - Ocola Skipper
Hylephila phyleus (Drury) - Fiery Skipper
Wallengrenia egeremet (Scudder) - Northern Broken-Dash
Atalopedes campestris (Boisduval) - Sachem
Poanes hobomok (T. Harris) - Hobomok Skipper
Poanes zabulon (Boisduval & Le Conte) - Zabulon Skipper

Family PAPILIONIDAE - Swallowtails

Battus philenor (Linnaeus) - Pipevine Swallowtail
Papilio glaucus (Linnaeus) - Eastern Tiger Swallowtail
 [and unrecognized *P. appalachiensis* (Pavulaan & Wright, Appalachian Tiger Swallowtail)]

Papilio troilus (Linnaeus) - Spicebush Swallowtail

Family PIERIDAE - Whites and Sulphurs

Pyrisitia lisa (Boisduval & Le Conte) - Little Yellow
Abaeis nicippe (Cramer) - Sleepy Orange
Colias philodice Godart - Common Sulphur
Colias eurhytheme Boisduval - Orange Sulphur

Phoebis sennae (Linnaeus) - Cloudless Sulphur
Pieris virginiensis (W. H. Edwards) - West Virginia White
Pieris rapae (Linnaeus) - Cabbage White

Family LYCAENIDAE - Harvesters, Coppers, Hairstreaks and Blues

Feniseca tarquinius (Fabricius) - Harvester
Calycopis cecrops (Fabricius) - Red-banded Hairstreak
Strymon melinus Hübner - Gray Hairstreak

Cupido comyntas (Godart) - Eastern Tailed-Blue
Celastrina ladon (Cramer) - Spring Azure
Celastrina neglecta (W. H. Edwards) - Summer Azure

Family NYMPHALIDAE - Brush-footed Butterflies

Libytheana carinenta bachmanii (Kirtland) - American Snout
Danaus plexippus (Linnaeus) - Monarch
Limenitis arthemis astyanax (Fabricius) - Red-spotted Purple
Boloria bellona (Fabricius) - Meadow Fritillary
Speyeria diana (Cramer) - Diana Fritillary
Speyeria cybele (Fabricius) - Great Spangled Fritillary
Speyeria aphrodite (Fabricius) - Aphrodite Fritillary
Asterocampa clyton (Boisduval & Le Conte) - Tawny Emperor
Vanessa virginiensis (Drury) - American Lady

Vanessa atalanta (Linnaeus) - Red Admiral
Nymphalis antiopa (Linnaeus) - Mourning Cloak
Polygonia interrogationis (Fabricius) - Question Mark
Polygonia comma (Harris) - Eastern Comma
Polygonia faunus smythi A. Clark - Smyth's Green Comma
Junonia coenia Hübner - Common Buckeye
Phyciodes tharos (Drury) - Pearl Crescent
Lethe anhedon A. H. Clark - Northern Pearly-Eye
Hermeuptychia sosybius (Fabricius) - Carolina Satyr
Megisto cymela (Cramer) - Little Wood-Satyr
Cercyonis pegala (Fabricius) - Common Wood-Nymph

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Charlie sends in the following Florida report for 2011.

Jack V. Shaw's records from Marmaduke Pond/San Felasco Hammock Preserve, vic. Gainesville, Alachua Co.:

3/27/2011 through 4/3/2011

Silver-spotted Skipper (Silver-spotted Skipper depositing eggs on Bastard Indigo trees)	Red Admiral
Cloudless Sulphur	Spicebush Swallowtail
Clouded Skipper	Common Buckeye
Carolina Satyr	American Snout (Outbreak of American Snout feeding on early blooming viburnum)
Viola Satyr	Tropical Checkered-skipper
Palamedes Swallowtail	Pipevine Swallowtail
Phaon Crescent	

4/4/2011 through 4/9/2011

Red-spotted Purple	Spicebush Swallowtail
American Snout (Continued outbreak of American Snout; numbers unusually high when compared to previous years.)	Lace-winged Roadside-skipper
Phaon Crescent	Question mark
Palamedes Swallowtail	Common Buckeye
Red-banded Hairstreak	American Lady
Carolina Satyr	Silver-spotted Skipper
Variiegated Fritillary	Red Admiral
	Cloudless Sulphur

4/10/2011 through 4/16/2011

Common Buckeye	Questionmark
Cloudless Sulphur	Red-spotted Purple
Palamedes Swallowtail	Silver-spotted Skipper
American Lady	Zebra Swallowtail
Sleepy Orange	Banded Hairstreak

Comments:

First time observation of Banded Hairstreaks in Marmaduke Pond. This Butterfly was abundant and seen regularly feeding on early blooming Viburnum, Ligustrum, and other masses of white flowers such as Shasta Daisies. Banded HS was most commonly observed butterfly for this week.

4/17/2011 through 4/23/2011

Questionmark	American Lady
Cloudless Sulphur	Black Swallowtail
Palamedes Swallowtail	Pearl Crescent
Zarucco Duskywing	Phaon Crescent

Carolina Satyr
Dun Skipper

Common Buckeye
Zebra Swallowtail

4/24/2011 through 4/30/2011

Common Buckeye
Phaon Crescent
American Lady
Palamedes Swallowtail
Horaces Duskywing
Pearl Crescent
Black Swallowtail (both adult and larvae)
Pipevine Swallowtail

Red-banded Hairstreak
Longtail Skipper
Gray Hairstreak
Banded Hairstreak
Gulf Fritillary
Dun Skipper
Clouded Skipper
Southern Broken-dash

Comments:

Banded Hairstreaks returned with the beginning of blooming of Oakleaf Hydrangia.

5/1/2011 through 5/7/2011

Southern Oak Hairstreak
Banded Hairstreak
Spicebush Swallowtail
Red-banded Hairstreak
Phaon Crescent
Horaces Duskywing
Common Buckeye
Giant Swallowtail

Black Swallowtail (larvae only)
Pearl Crescent
American Lady
Gulf Fritillary
Hackberry Emperor
Gray Hairstreak
Eastern Tiger Swallowtail
Pipevine Swallowtail

Comments:

All hairstreaks most commonly observed on Oakleaf Hydrangia.

Black Swallowtail larvae on parsley and fennel do not appear to be surviving. We do have an unusual large number of Cardinals, Wrens, and other opportunistic birds in area.

5/8/2011 through 5/14/2011

Eastern Tiger Swallowtail
Spicebush Swallowtail
Horaces Duskywing
Southern Oak Hairstreak
Byssus Skipper
Black Swallowtail
Common Buckeye
Gray Hairstreak
Silver-spotted Skipper

Giant Skipper
Dun Skipper
Pearl Crescent
Southern Cloudywing
Phaon Crescent
Red-spotted Purple
Red-banded Hairstreak
Zarucco Duskywing

5/15/2011 through 5/21/2011

Spicebush Swallowtail
Longtail Skipper
Common Buckeye
Red-banded Hairstreak
Horaces Duskywing
Black Swallowtail
Eastern Tiger Swallowtail (black form female)
Giant Swallowtail

Palamedes Swallowtail
Gray Hairstreak
Gulf Fritillary
Byssus Skipper
Pipevine Swallowtail
Red-spotted Purple
Silver-spotted Skipper

5/22/2011 through 5/28/2011

Gulf Fritillary
Phaon Crescent
Dun Skipper
Horaces Duskywing

Pipevine Swallowtail
Red-banded Hairstreak
American Lady
Black Swallowtail

Zebra Swallowtail
Viola Satyr
Carolina Satyr

Spicebush Swallowtail
Giant Swallowtail
Gray Hairstreak

Comments:

Southern Arrow-wood *Viburnum* beginning to bloom-out.
Unusual to see no *Palamedes* Swallowtails this time of year.

5/29/2011 through 6/4/2011

Red-spotted Purple
Giant Swallowtail
Pipevine Swallowtail
Fiery Skipper
Byssus Skipper
Horaces Duskywing

Gulf Fritillary
Great Purple Hairstreak
Black Swallowtail (Adult and Larvae)
Whirlabout Skipper
Phaon Crescent

Comments:

Observation of Great Purple HS first of year. This is unusually low abundance compared to past years.
Species counts and individual counts appear to be down from previous years

6/5/2011 through 6/11/2011

Gulf fritillary
Giant Swallowtail
Gray Hairstreak
Carolina Satyr

Broken-dash Skipper (not sure whether southern or northern)
Red-spotted Purple
American Lady

Comments:

Species/Individual counts appear to be low compared to previous years. This trend observed on Don Stillwaugh's butterfly count in Goethe State Forest and Devil's Hammock. Much smoke in Marmaduke Pond/San Felasco Hammock, Goethe SF, and Devil's Hammock.

Moth report from Jean Evoy recorded at her Peace River basin property, DeSoto County, 3 miles north of Arcadia:

OECOPHORIDAE:

Eupragia hospita 5/5.

COSSIDAE:

Cosula magnifera 4/27.

MEGALOPYGIDAE:

Lagoa lacyi Apr-Jun.

CRAMBIDAE:

Synclita oblitalis 3/6; *Glaphyria sequestrialis* 3/30; *Lineodes integra* 6/6; *Crambus satrapellus* 5/7; *Microcrambus elegans* 3/6; *Dolichomia binodulalis* 6/6; *Clydonopteron sacculana* 3/28;

GEOMETRIDAE:

Tornos scolopacinarius 3/91; *Epimecis hortania* 3/10; *Xanthotype urticaria* 3/1; *Chlorochlamys chloroleucaria* (spring form) 4/5; *Idaea hillia* 15/1; *Eulithis* sp. 4/16; *Euphabe meridiana* 5/3.

SATURNIIDAE:

Eacles imperialis 5/26.

SPHINGIDAE:

Lapara conifrarum 5/20; *Darapsa myron* 4/3; *Xylophanes tersa* 5/4.

NOTODONTIDAE:

Datana ministra 6/3; *Datana integerrima* 5/25

ARCTIINAE:

Utetheisa bella 5/12; *Virbia laeta* 5/8; *Halysidota tessellaris* 3/28; *Pareuchaetes insulata* 5/19.

LYMANTRIIDAE:

Dasychira tephra 5/3.

NOCTUIDAE:

Idia americalis 3/7; *Bleptina caradrinalis* 5/1; *Phytometra rhodarialis* 3/21; *Palpida pallidior* 5/5; *Phyprosopus callitrichoides* 5/17; *Hypsoropha hormos* 5/17; *Antiblemma concinnula* 5/23; *Panopoda carneicosta* 5/6; *Panopoda repanda* 4/3; *Selenisa sueroides* 5/25; *Parallelia bistriaria* 5/23; *Cutina distincta* 3/2; *Catocala minuta* 4/23; *Catocala* sp. 4/25; *Marathyssa inficita* 5/26; *Oruza albocostaliata* 4/22; *Homophoberia apicosa* 3/9; *Spragueia onagrus* 4/5; *Charadra deridens* 5/22; *Polygrammate hebraicum* 5/10; *Phosphilla miseliodes* 5/11; *Callopietria floridana* 5/15; *Condica mobilis* 5/5; *Azenia obtusa* 5/5; *Schinia trifascia* 5/6; *Neadysgonia smithii*, 3/26.

Records from Gainesville and vicinity, Alachua Co., from Charlie Covell:

Epargyreus clarus, May 28
Urbanus proteus, May 6, June 11
Erynnis horatius, May 10
Pyrgus communis (complex), June 2, 12
Ancyloxipha numitor, June 7
Hylephila phyleus, March 20, April 6, 20, 26, 27, 29, 30, May 10, 18, 20, 29, 30, June 9
Euphyes vestris, April 12
Papilio polyxenes asterius, March 11, April 20, 23, 27, May 13, 17, 18, 20
Papilio glaucus, March 18, April 3
Papilio troilus, March 18, 22, May 8, 22, June 12
Papilio palamedes, March 30, April 8, June 12
Heraclides cresphontes, March 17, 18, April 1, May 7, 10, 15, 18, 22
Phoebis sennae, March 13, 15, 18, 20, 22, 25, 29, April 1, 2, 3, 8, 9, May 7, 10, 20, June 2, 9, 12
Phoebis philea, May 8
Eurema nicippe, March 18, April 1, 23, 27, May 7, 20, June 7, 12, 15
Parhassius m-album, March 27
Calycopis cecrops, March 26, April 2, 28, May 15, 19, 28, June 2
Hemiargus ceraunus, May 19, June 13
Strymon melinus, April 17
Libytheana carinenta, March 26, 27, April 1, 2, 3, 4, 7, 8, 12, 17, 19, 27, May 22
Limenitis archippus, March 25, 26, April 1, May 20, June 7
Limenitis arthemis astyanax, March 31
Vanessa virginiensis, April 8, 17, 23, 27
Vanessa atalanta, March 18, 26, 27, 29, April 1, 2, 9, 20, 22, 23, 26, May 7, 10, 13
Phyciodes tharos, March 18,
Phyciodes phaon, May 7
Junonia coenia, March 18, 22, 25, 26, 27, April 1, 2, 3, 4, April 6, 9, 10, 20, 22, 23, 26, 27, 29, May 7, 8, 10, 13, 17, 18, 20, 21, 24, 29, June 9
Agraulis vanillae, April 6, 17, 20, 27, 28, 29, 30, 31, May 7, 8, 15, 17, 21, 22, 24, 28, 29, 30, 31, June 2, 6, 7, 9, 10, 11, 13, 14, 15
Euptoieta claudia, June 12
Asterocampa clyton, April 9
Danaus plexippus, March 22, 26, May 10, 13, June 9
Danaus gilippus berenice, June 9

March 21 at Payne's Prairie State Park, Alachua Co., around visitor center, Covell led a group for blacklighting, which yielded the following: *Prionoxystus robiniae* (Cossidae); *Pselnophora belfragei* (Pterophoridae); *Synanthedon acerni* (Sesiidae); *Eucosma robinsonana*, *Ancyliis divisana* (Tortricidae); *Actias luna*, *Antheraea polyphemus* and *Automeris io* (Saturniidae); *Darapsa myron*, *Darapsa versicolor*, and *Sphecodina abbotii*

(Sphingidae); *Cisthene* sp., *Halysidota tessularis*, *Apantesis vittata* complex, *Spilosoma congrua*, *Dahana atripennis*, *Crambida* nr. *pallida*, *Epantheria scribonia* (Arctiidae); *Episamias solitaria*, *Iridopsis defectaria*, *Anavitrinella pampinaria*, *Hypagyrtis unipunctaria*, *Glenoides texanaria*, *Lophosis laberculata*, *Scopula compensata*, *Hethemia pistacearia*, *Eupithecia miserulata*, *Eupithecia* sp., *Orthonama centrostrigaria* (Geometridae); *Polygrammate hebraeicum*, *Callopietria cordata*, *Panopoda repanda*, *Zale minerea*, *Zale* sp., *Acrionicta oblinata*, *Acrionicta brumosa*, *Eudryas unio*, *Alypia wittfeldi*, *Elaphria excessa* (Noctuidae); *Lacosoma chiridota* (Mimallonidae); *Tolype vellea* (Lasiocampidae); and other species yet undetermined. Participants included Eric Anderson, Jim Hayden, Bob and Grace Patterson, Herb and Carol Wolf, Jim Vargo, Thomson Paris, Larry Reeves, Roxy Wagner, David and Joanne Auth, and Jim Castner.

Yankeetown, Levy Co., March 17: *Poanes aaroni* and *Copaeodes minima* reported by Loran Gibson and Mike McInnis.

At Episcopal Camp Weed, Houston, Suwannee Co., March 19, Covell reported: *Hylephila phyleus*, *Phoebis sennae*, *Eurema nicippe*, *Phyciodes tharos*, *Junonia coenia*, and *Hermeuptychia sosybius*. Also moths including *Dryocampa rubicunda* (Saturniidae), and *Deidamia inscriptum* (Sphingidae). Other moth species still to be processed and identified.

Columbia Co., 3 miles West of Lake City on Rt. 90, Covell recorded a *Papilio troilus*.

Lower Suwannee National Wildlife Area, Levy Co., April 13, Covell and J. D. Turner recorded: *Poanes yehl*, *Oligoria maculata*, *Anatrytone delaware*, *Euphyes pilatka*, *Polites vibex*, *Polites* sp., *Hylephila phyleus*, *Lerema accius*, *Ancyloxipha numitor*, *Panoquina panoquin*, *Papilio palamedes*, *Papilio troilus*, *Papilio polyxenes asterius*, *Phoebis sennae*, *Eurema nicippe*, *Calephelis virginensis*, *Satyrium ontario favonius*, *Strymon melinus*, *Brephidium pseudofea*, *Limenitis archippus*, *Junonia coenia*, *Phyciodes tharos*, *Phyciodes phaon*, *Hermeuptychia sosybius*, and *Megisto cymela*. Also *Cisthene fucosa* (Arctiidae).

St. Petersburg (downtown), Pinellas Co., May 12: Covell saw *Phoebis sennae* and *Ascia monuste*.

Ocala, Marion Co., in Appleton Museum parking lot, June 5: Covell recorded a *Limenitis arthemis astyanax*.

Jeffrey Sloten reports the following (June 12, 2011) from Gainesville, Alachua Co., Newnans Lake: *Lethe portlandia*, *Asterocampa clyton*, *Asterocampa celtis*, *Limenitis archippus*, *Catocala carissima*, *Catocala piatrix*, *Catocala maestosa*, *Catocala sappho*, *Catocala lachrymosa*, *Catocala agrippina*.

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

The contributors include James Adams (JA or no notation) and Irving Finkelstein (IF). Other contributors are spelled out with the appropriate records. Most records presented here represent new or interesting records (range extensions, unusual dates, uncommon species, county records, etc.), or more complete lists for new locations/new times of year. All dates listed below are 2011 unless otherwise specified.

I-75 exit 169 (Wildwood exit), Dade Co., May 13:
GEOMETRIDAE: *Glena plumosaria* (COUNTY).

Calhoun, Gordon Co., JKA residence:
GEOMETRIDAE: *Hypomecis umbrosaria* (very dark), April 24.

Carbondale, I-75 exit 326, Whitfield Co.:
SPHINGIDAE: *Smerinthis jamaicensis*, April 15. **EREBIDAE:** *Dasychira atrivenosa* (female), May 31.

Taylor's Ridge, 5 mi. W of Villanow, Walker Co.:
April 2, 2011, with Jim Vargo:

SPHINGIDAE: *Deidamia inscripta* (extraordinarily abundant). **NOLIDAE:** *Baileya ellessyoo*. **EREBIDAE:** *Zale submediana* (COUNTY, though likely overlooked before). **NOCTUIDAE:** *Acronicta dollii*, *A. afflicta*, *Lithophane viridipallens* (COUNTY). **GEOMETRIDAE:** *Orthofidonia flavivenata*. **DREPANIDAE:** *Euthyatira pudens* (abundant, plus two "pennsylvanica" forms).

April 22, with IF:

TINEIDAE: *Scardia anatomella* (COUNTY), all previous records for *anatomella* are actually a closely related but undescribed species (pers. comm., J. F. Landry). **LIMACODIDAE:** *Packardia* sp. (nr. *albipunctata*, may be completely undescribed species). **SATURNIIDAE:** *Actias luna*. **SPHINGIDAE:** *Darapsa choerilus*, *Laothoe juglandis*, *Deidamia inscripta* (yes, still flying!). **EREBIDAE:** *Apantesis phalerata*, *Hypena abalienalis*, *Isogona tenuis*, *Metria amella* (2, far north), *Zale horrida*, *Z. metatoides*, *Z. obliqua*, *Allotria elonympha*, *Euparthenos nubilis*. **EUTELLIIDAE:** *Paectes oculatrix*, *P. pygmaea*. **NOCTUIDAE:** *Acronicta inclara*, *A. hasta*, *A. radcliffei*, *A. lithospila*, *A. laetifica*, *Agriopodes fallax*, *Leuconicta diphteroides*, *Callopietria cordata*, *Charadra deridens*, *Leucania* sp., *Ulolonche modesta* (uncommon in NW GA). **NOTODONTIDAE:** *Peridea basitriens*, *Lochmaeus bilineata*, *Ellida caniplaga*. **DREPANIDAE:** *Oreta rosea*. **GEOMETRIDAE:** *Macaria promiscuata*, *Plagodis alcoolaria*, *P. fervidaria*, *Probole amicaria*, *Euchlaena amoenaria*, *Metarranthis hamaria*, *Besma quercivoraria*. **PYRALIDAE:** *Acrobasis demotella* (COUNTY). **SESSIIDAE:** *Synanthedon acerni*.

Gates Chapel Rd., 8 mi. WNW of Ellijay, Gilmer Co., IF, May 11-13:

GEOMETRIDAE: *Metarranthis indeclinata*, *Nemoria saturiba* (COUNTY). **CRAMBIDAE:** *Crambus praefectellus* (COUNTY). **PYRALIDAE:** *Acrobasis demotella* (COUNTY).

Brasstown Bald (just to E of summit), 4200', Towns Co., JA & IF, May 19-20:

SATURNIIDAE: *Actias luna*. **EREBIDAE:** *Spilosoma latipennis*. **NOCTUIDAE:** *Malliatha concinnimacula*, *Acronicta innotata*, *Callopietria mollissima* (abundant!), *Euplexia benesimilis*, *Morrisonia triangula* (COUNTY), *M. latex*, *Lacinipolia lorea*. **GEOMETRIDAE:** *Homochlodes disconventa*, *H. lactispargaria*, *Probole nepiasaria*, *Plagodis pulveraria* (formerly *Anagoga occiduaria*), *Metarranthis amyrisaria*, *Hydriomena divisaria*.

5 mi. ESE of Fairmount, Bartow Co., Salacoa Rd @ Salacoa Creek, June 3-4:

EREBIDAE: *Euchaetes egle*. **NOCTUIDAE:** *Protapamea danieli* (an excellent place for this moth; cane feeder), *Oligia chlorostigma* (only place in Georgia where I've taken more than one specimen of this species), *Abagrotis magnicipida*. **GEOMETRIDAE:** *Cepphis decoloraria* (one of two places where I have taken multiples of this species), *Metarranthis angularia*. **LIMACODIDAE:** *Euclea nanina*.

Atlanta, Fulton Co., IF:

TORTRICIDAE: *Epiblema scudderiana*, April 20 (COUNTY). **NOCTUIDAE:** *Diastema tigris*, June 1 (second record for Atlanta, fewer than 10 records for STATE).

Ohoopsee Dunes, Tract 3 (Hall's Bridge rd. tract), 8 mi. WSW of Swainsboro, Emanuel Co., JA & IF:

April 7-8:

APATELODIDAE: *Olceclostera angelica*. **SPHINGIDAE:** *Darapsa choerilus*. **EREBIDAE:** *Drasteria grandirena*. **NOCTUIDAE:** *Charadra deridens*, *Cerma cora*, *Morrisonia triangular*, *Ulolonche modesta*.

Ohoopsee Dunes, Tract 4 (Covena Tract), 9 mil SW of Swainsboro, Emanuel Co., JA & IF:

April 7-8:

MIMALONIDAE: *Lacosoma chiridota*; **EREBIDAE:** *Virbia* sp. nov., *Euerythra phasma* (COUNTY), *Metalectra tantillus*, *Argyrostromis anilis*, *Panopoda rufimargo*, *Phytometra rhodarialis*, *Hemeroplanis obliquialis*. **NOLIDAE:** *Baileya acadiana* (COUNTY). **EUTELIIDAE:** *Marathyssa inficita*. **NOCTUIDAE:** *Cerma cora*, *Ponometia semiflava*, *Morrisonia triangula*, *Iodopepla u-album*, *Elaphria excusa*, *Anicla (Euagrotis) illapsa*. **NOTODONTIDAE:** *Clostera inclusa*, *Schizura* sp. (undescribed). **GEOMETRIDAE:** *Eumacaria madopata*, *Tornos scolopacinaris*. **CRAMBIDAE:** *Lineodes integra* (COUNTY, STATE? No other known records, though should be in the state), *Pyrausta acronialis*, *Diastictis pseudargyralis*. **COSSIDAE:** *Prionoxystus robiniae*. **PTEROPHORIDAE:** *Leiloptilus balanotes*.

Statesboro, Bulloch Co., GA, April 20, Lance Durden:

NOCTUIDAE: *Morrisonia triangula* (COUNTY).

Chickasawhatchee WMA, Mud Creek Road, 0.6 mi. S of hwy. 62, 13 mi SW of Albany, Dougherty Co., JA & IF:

April 8-9: MOST records are likely COUNTY records.

EREBIDAE: *Virbia laeta*, *Euerythra phasma*, *Ledaea perditalis*, *Phytometra rhodarialis*. **NOCTUIDAE:** *Cerma cora*, *Lacinipolia erecta* (STATE). **NOTODONTIDAE:** *Heterocampa varia*. **GEOMETRIDAE:** *Macaria distribuaria*, *Eusarca fundaria* (COUNTY). **CRAMBIDAE:** *Pyrausta phoenicealis*, *Crambus satrapellus*. **TORTRICIDAE:** *Carolella sartana*, *Platynota flavedana*.

Chickasawhatchee WMA, Seven Bridges Road, .5 mi. WSW of intersection with Pine Island rd., 2.5 mi. S of Hwy. 62, 18.5 mi. SW of Albany, Dougherty Co., JA & IF:

April 8-9: MOST records are likely COUNTY records.

MIMALLONIDAE: *Lacosoma chiridota*. **EREBIDAE:** *Colobochyla interpuncta*, *Nigetia formosalis*, *Celiptera frustulum*, *Neadysgonia smithii*, *Zale nr. metatoides*. **NOLIDAE:** *Baileya acadiana* (COUNTY). **NOCTUIDAE:** *Acrionicta connecta* (COUNTY), *Cerma cora*, *Comachara cadburyi*, *Callopietria cordata*, *Bellura densa*, *Iodopepla u-album*, *Morrisonia triangularis* (COUNTY), *Leucania adjuta*, *Xanthopastis timais*. **NOTODONTIDAE:** *Heterocampa astarte*, *Oligocentria lignicolor*. **GEOMETRIDAE:** *Euchlaena amoenaria*, *E. nr. muzaria*, *E. obtusaria*, *Lytrosis sinuosa*, *Tacparia zalissaria*, *Eubaphe mendica*, *Nemoria rubrifrontaria*. **PYRALIDAE:** *Dioryctria clarioralis*. **URODIDAE:** *Urodus parvula*. **COSSIDAE:** *Prionoxystus robiniae*.

Dixon Memorial Forest, swampy area, W of Laura Walker State Park, to south off of 177, April 9-10, Ware Co., JA & IF:

SATURNIIDAE: *Dryocampa rubicunda*, *Automeris io* (reddish orange males), *Antheraea polyphemus*, *Callosamia securifera* (male and female; unusual, as males don't usually come to lights). **LASIOCAMPIDAE:** *Artace cribraria*, **SPHINGIDAE:** *Isoparce cupressi*. **EREBIDAE:** *Idia julia*, *Argyrostromis erasa*, *A. quadrifilaris*, *Neadysgonia smithii*, *Pseudanthracia coracias*, *Zale squamularis*, *Z. horrida*, *Phytometra rhodarialis*. **NOCTUIDAE:** *Acrionicta longa*, *A. perblanda*, *Harrisimemna trisignata*, *Eudryas unio*, *Callopietria granitosa*, *C. cordata*. **GEOMETRIDAE:** *Iridopsis humaria* (COUNTY), *Epimecis hortaria* (extremely heavily banded), *Eutrapela clemataria* (yellow), *Metarranthis lateritaria*, *Euchlaens nr. pectinaria*, *Lytrosis sinuosa*, *Tacparia zalissaria*, *Cleora sublunaria*, *Iridopsis vellivolata*, *I. defectaria*, *Episemasia solitaria*, *Scopula timandrata* (COUNTY, fourth location in STATE), *Rheumaptera prunivora* (COUNTY). **PYRALIDAE:** *Macalla zelleri*, *Moodna ostrinella*. **LIMACODIDAE:** *Lithacodes nr. gracea*, *Heterogenea shurtleffi* (orange hindwings). **MEGALOPYGIDAE:** *Lagoa pyxidifera* (UNCOMMON in state, but not new county record). **PTEROPHORIDAE:** *Leiloptilus balanotes* (Large!).

Dixon Memorial Forest, just to NE of Laura Walker Lake, April 9-10, Ware Co., JA & IF:

EREBIDAE: *Virbia laeta*, *Apantesis phalerata*, *Litoprosopus futilis*, *Argyrostromis quadrifilaris* (both lined and unlined), *Panopoda repanda*, *Pseudanthracia coracias*. **NOCTUIDAE:** *Eudryas unio*, *Callopietria cordata*, *Homophoberia apicosa*, *Leucania incognita*. **NOTODONTIDAE:** *Heterocampa varia*, *Hyparpax perophoroides*. **GEOMETRIDAE:** *Macaria distribuaria*, *Nemoria outina* (COUNTY, second location in STATE). **LIMACODIDAE:** *Lithacodes nr. gracea*.

U.S. 1, 2.5 mi. S. of Waycross, April 9, Ware Co., at lights, JA & IF:

EREBIDAE: *Estigmene acrea*. **NOCTUIDAE:** *Eudryas unio*. **NOTODONTIDAE:** *Hyparpax perophoroides*. **GEOMETRIDAE:** *Macaria varidaria* (COUNTY), *Episemasia solitaria*. **CRAMBIDAE:** *Apogeshna stentialis*.

Vicinity of Meridian, Kittles Island, McIntosh Co., John Hyatt:

CRAMBIDAE: *Epicorsia oedipodalis*, Aug. 29, 2002 (COUNTY, STATE?); *Chilo demotellus*, July 18-22, 2002 & Aug. 29, 2004 (COUNTY, STATE?). **EREBIDAE:** *Catocala mira*, May 15-20, 2005 (COUNTY).

John Hyatt also sends in the following report for Georgia:

In McIntosh Co., Georgia, in the vicinity of Darien the last week of March, very little was flying despite good weather. Conditions were extremely dry, with many forest fires burning in that section of the state. Rainfall in the coastal strip from Savannah to St. Mary's was about 10-12 inches below norms for the preceding six months. It will be interesting to see if much flies there this summer - little appreciable rain has fallen since that visit.

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John sends in the following report:

Nothing much to report from Tennessee. After a rather hard winter (no unusual low temperature extremes or heavy snow, but it was consistently 5-10 degrees below normal temps for about 6 weeks running), the weather got warm in the last week of February and has stayed that way since. Spring flights of the common species appear to be heavy. On April 12, large numbers of *Psychomorpha epimenis* were seen in Scott Co., VA, within sight of the TN border.

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

Ed sent in the following Texas Zone report on May 28, 2011:

Most of Texas, except the northeast quadrant, has had severe drought conditions all spring with no sign of letting up so far. Wild fires have devastated many areas of the state especially in west Texas and these are continuing in many areas. What a contrast to the weather in the mid south and central plains. Our heart goes out to those affected by the tornados and flooding.

Not unexpectantly, collecting has been very poor in much of Texas. In Houston, where we have had perhaps 1 inch of rain in 2 months, butterfly and moth diversity is way down.

The following localities and dates are abbreviated in the list below:

MDSP = Martin Dies State Park, Jasper Co., TX, 19-III-11, Bordelon & Knudson
 CLSP = Caddo Lake State park, Harrison Co., TX, 21,22-III-11, Bordelon & Knudson
 TSP = Tyler State Park, Smith Co., TX, 23-III-11, Bordelon & Knudson
 SB = Study Butte, Brewster Co., TX, 11-IV-11, Bordelon & Knudson
 BIBE = Big Bend National Park, Chisos Basin, 12-14- IV-11, Bordelon & Knudson
 CNC = Concan, Uvalde Co., TX, 16-IV-11, Bordelon & Knudson
 NC = New county record
 Other data after the species not included above.

Butterflies:

HESPRIIDAE: *Erynnis brizo burgessi*, *E. telemachus*, *E. tristis tatus* (BIBE), *E. baptisiae* (CLSP); *Gesta invisius* (CNC); *Systasea zampa* (BIBE); *Hesperia metea licinus*, Wise Co., TX, LBJ Grassland, 26-III-11 and Henderson Co., TX, NW of Athens, 31-III-11 James McDermott; *Atrytonopsis vierecki*, *A. python* (BIBE); *Amblyscirtes hegon* (CLSP, TSP, NC), *A. alternata* (CNC); *Agathymus estellae valverdiensis*, Terrel Co, TX., 10 miles east of Dryden, 10-IV-11, C. Bordelon, sight.

PAPILIONIDAE: *Eurytides philolaus*, *Papilio astyalas pallas*, Hidalgo Co., TX, Santa Ana NWR, 2-IV-11, Mike Rickard (sightings)

PIERIDAE: *Anthocharis midea*, Spring Valley, Harris Co., TX, 1-III-11, C. Bordelon

LYCAENIDAE: *Callophrys henrici turneri*, Spring Valley, 26-II-11, C. Bordelon; *Callophrys niphon*, *C. irus hadra* (CLSP); *Celastrina echo cinerea* (BIBE), *Cupido comyntas* (CLSP, TSP).

Moths:

ERIOCRANIIDAE: *Dyseriocrania griseicapitella* (CLSP)

GELECHIIDAE: *Chionodes lactans* (BIBE, NC)

SESIIDAE: *Zenodoxus mexicanus* (BIBE, Terrel Co., TX, 10 m. west of Dryden, 10-IV-11); *Zenodoxus palmii* (CNC); *Synanthedon acerni* (CLSP)

TORTRICIDAE: *Phaneta umbrastriana* (TSP); *Catastega strigatella* (BIBE)

THYRIDIDAE: *Pseudothyris sepulchralis* (CLSP, abundant on flowers)

LIMACODIDAE: *Paleophobetron perornata*, Medina Co., TX, 5 m. west of Devine, 9,22-IV-11, Maury Heiman (NC). First TX examples seen for 20+ years. A strange and beautiful species.

PYRALIDAE: *Meroptera anaimella*, *Echinocerata strigalis*, *Sosipatra knudsoni* (all BIBE); *Raganotia dotalis* (SB)

GEOMETRIDAE: *Macaria quadrinotaria*, *M. promiscuata* (CLSP); *Tetracis crocallata* (CLSP); *Hethemia pistaciaria* (MDSP, CLSP, TSP)

URANIIDAE: *Urania fulgens*, Bastrop Co., TX, Utley, 7-IV-11 sight, NC

LASIOCAMPIDAE: *Heterapacha rileyana* (CLSP)

EREBIDAE: *Drasteria grandirena* (MDSP)

NOLIDAE: *Baileya acadiana* (CLSP); *B. ellessyoo* (TSP)

NOCTUIDAE: *Charadra moneta* (BIBE); *Oxycnemis grandimacula* (BIBE) *Sympistis kappa* Becker, Kaufman Co., TX, 9-IV-11, James McDermott; *Psaphida electilis* (TSP); *Xystocephalus rufago* (TSP); *Egira variabilis* (BIBE); *Hyssia degenerans* (BIBE); *Xanthopastis timais*, Marshall, Harrison Co., TX, 20-IV-11, Bordelon & Knudson; *Cerastis tenebrifera* (CLSP).

Ro Wauer also sends in the following report for Texas: Butterflies recorded at Lick Creek Park, Brazos Co., TX, during April & May 2011. The following list was derived from eight visits to Lick Creek Park near College Station. Each trip lasted about three hours, between 9am and 2pm. Dates included April 1, April 5, April 12, April 20, May 4, May 17, May 26, and May 31. All species were photographed for verification. 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" (2008).

HESPERIIDAE:

1. Silver-spotted Skipper (*Epargyreus clarus*): 1 on May 26
2. Southern Cloudywing (*Thorybes bathyllus*): 1 on April 1
3. Northern Cloudywing (*Thorybes pylades*): 5 on April 1; 2 on April 5; 2 on May 4
4. Confused Cloudywing (*Thorybes confusis*): 1 on April 5
5. Juvenal's Duskywing (*Erynnis juvenalis*): 1 on April 1; 1 on April 12
6. Horace's Duskywing (*Erynnis horatius*): 2 on April 1; 1 on April 5; 1 on April 12; 3 on May 4; 2 on May 26; 2 on May 31
7. Funereal Duskywing (*Erynnis funeralis*): 1 on April 5; 1 on April 12; 1 on May 17; 1 on May 26

8. Common Checkered-Skipper (*Pyrgus communis*): 2 on April 1; 2 on April 5; 1 on April 20; 5 on May 4; 6 on May 17; 6 on May 26; 2 on May 31
9. Common Roadside-Skipper (*Amblyscirtes vialis*): 1 on April 1; 1 on April 12; 1 on May 31
10. Celia's Roadside-Skipper (*Amblyscirtes celia*): 2 on April 1; 3 on April 5; 4 on April 12; 1 on April 20; 3 on May 31
11. Bell's Roadside-Skipper (*Amblyscirtes belli*): 1 on April 12; 2 on May 31
12. Eufala Skipper (*Lerodea eufala*): 1 on May 26; 1 on May 31
13. Clouded Skipper (*Lerema accius*): 6 on April 1; 6 on April 5; 2 on April 12; 1 on May 26; 1 on May 31
14. Fiery Skipper (*Hylephila phyleus*): 1 on April 1; 2 on May 4; 7 on May 26; 2 on May 31
15. Whirlabout (*Polites vibex*): 1 on May 4
16. Southern Broken-Dash (*Wallengrenia otho*): 4 on May 26; 14 on May 31
17. Sachem (*Atalopedes campestris*): 2 on April 5; 3 on May 26; 1 on May 31
18. Dun Skipper (*Euphyes vestris*): 4 on April 5; 5 on April 12; 1 on May 17; 2 on May 26; 2 on May 31

PAPILIONIDAE:

19. Pipevine Swallowtail (*Battus philenor*): 2 on April 1; 2 on April 5; 1 on April 12; 1 on April 20; 2 on May 26
20. Black Swallowtail (*Papilio polyxenes*): 1 on April 1; 2 on April 5; 3 on April 12; 3 on April 3; 1 on May 4
21. Giant Swallowtail (*Papilio cresphontes*): 1 on April 5; 1 on April 20; 1 on May 17
22. Eastern Tiger Swallowtail (*Papilio glaucus*): 2 on April 5; 1 on April 12; 1 on April 20; 1 on May 31

PIERIDAE:

23. Dainty Yellow (*Nathalis iole*): 2 on April 5
24. Little Yellow (*Pyrisitia lisa*): 1 on May 17
25. Sleepy Orange (*Abaeis nicippe*): 1 on May 26
26. Orange Sulphur (*Colias eurytheme*): 4 on April 1; 4 on April 5; 5 on April 12; 5 on April 20
27. Southern Dogface (*Zerene cesonia*): 2 on April 20; 3 on May 4
28. Cloudless Sulphur (*Phoebis sennae*): 2 on April 1; 1 on April 12; 1 on May 31

LYCAENIDAE:

29. Striped Hairstreak (*Satyrrium liparops*): 1 on May 4
30. Northern Oak Hairstreak (*Satyrrium favonius ontario*): 25+ on April 20; 6 on May 4
31. Henry's Elfin (*Callophrys henrici*): 1 on April 1; 2 on April 5
32. Red-banded Hairstreak (*Calycopis cecrops*): 7 on April 1; 20+ on April 5; 8 on April 12; 3 on April 20; 1 on May 4; 4 on May 17; 1 on May 26; 5 on May 31
33. Dusky-blue Groundstreak (*Calycopis isobeon*): 2 on April 5; 2 on April 12
34. Gray Hairstreak (*Strymon melinus*): 1 on April 1; 2 on April 5; 1 on April 12; 1 on April 20; 1 on May 4; 1 on May 26; 2 on May 31
35. Marine Blue (*Leptotes marina*): 3 on May 26
36. Eastern Tailed-Blue (*Cupido comyntas*): 3 on April 1; 3 on April 5; 1 on April 20
37. Reakirt's Blue (*Echinargus isola*): 30+ on May 26; 1 on May 31

NYMPHALIDAE:

38. Monarch (*Danaus plexippus*): 6 on April 1; 5 on April 5; 1 on April 20; 1 on May 17; 2 on May 26
39. Gulf Fritillary (*Agraulis vanillae*): 1 on April 1
40. Variegated Fritillary (*Euptoieta claudia*): 1 on April 12; 3 on May 4
41. Hackberry Emperor (*Asterocampa celtis*): 9 on April 12; 4 on April 20; 1 on May 17; 1 on May 26
42. Mourning Cloak (*Nymphalis antiopa*): 3 on April 20
43. Question Mark (*Polygonia interrogationis*): 8 on April 12; 1 on April 20; 1 on May 4
44. Common Buckeye (*Junonia coenia*): 5 on April 1; 4 on April 15; 14 on April 12; 8 on April 20; 2 on May 4; 3 on May 17; 2 on May 26; 2 on May 31
45. Silvery Checkerspot (*Chlosyne nycteris*): 100+ on April 1; 200+ on April 5; 50+ on April 12; 10 on May 17; 3 on May 26; 3 on May 31
46. Phaon Crescent (*Phycoides phaon*): 1 on April 1; 3 on May 4; 10 on May 17; 21 on May 26
47. Pearl Crescent (*Phycoides tharos*): 20+ on May 4; 8 on May 17; 4 on May 26; 12 on May 31
48. Goatweed Leafwing (*Aeneas andria*): 4 on April 1; 3 on April 5; 2 on April 12; 1 on April 20; 1 on May 26

- 49. Gemmed Satyr (*Cyllopsis gemma*): 1 on April 1; 5 on April 5; 3 on April 12; 1 on April 20; 1 on May 4; 9 on May 17; 1 on May 31
- 50. Carolina Satyr (*Hermeuptychia sosybius*): 5 on April 1; 6 on April 5; 2 on April 12; 2 on May 17
- 51. Little Wood-Satyr (*Megisto cymela*): 10 on April 1; 30+ on April 5; 12 on April 12; 4 on May 17

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John Hyatt sends in the following report:

An interesting Virginia record - on April 29, Kentuckians Leroy Koehn, Bill Black, and I met atop Big Black Mtn. in Harlan Co., KY (4300'). It was sunny but very cool and windy, not much flying. The interesting sight there was an unusual early flight of buckeye butterflies - almost never seen here before midsummer. We then descended the mountain into Wise Co., VA, and explored a dirt road near the town of Appalachia, where Leroy caught a worn male *Erora laeta* - truly a rare find. Later in the day, at least two more specimens were definitely seen and identified, but not netted. This constituted the first spring sighting of *E. laeta* I'm made in about 20 years. Buckeyes were also flying at this locality.

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

SOUTHERN LEPIDOPTERISTS' SOCIETY

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