

Southern Lepidopterists'
Society
and

**ASSOCIATION FOR
TROPICAL LEPIDOPTERA**

2009 Annual Meeting



McGuire Center for Lepidoptera & Biodiversity
Florida Museum of Natural History
University of Florida
25-27 September 2009

Front Cover: *Citheronia regalis* ♂, em. June 13, 1990, ex. larva, Allatoona Dam, Bartow Co., Georgia leg. Irving L. Finkelstein. Image by D. Matthews.

**FALL MEETING OF THE SOUTHERN
LEPIDOPTERISTS' SOCIETY AND THE
ASSOCIATION FOR TROPICAL LEPIDOPTERA,
SEPTEMBER 25-27, 2009**

McGuire Center for Lepidoptera and Biodiversity Conference Room
Florida Museum of Natural History
University of Florida, Gainesville, Florida

Local Arrangements

Meeting Co-Chairs: Jacqueline Y. Miller and Deborah Matthews Lott

Meeting Organizing Committee:

Charles V. Covell, Jr., Christine Eliazar, Peter Eliazar, Thomas C. Emmel,
Deborah Matthews Lott, Jacqueline Y. Miller, Marc Minno, Tom Neal, Jeff
Slotten, Jim & Vanessa Schlachta.

Banquet/Lunch:

Jim & Vanessa Schlachta, Tom Neal, Jacqueline Y. Miller, Deborah Matthews
Lott

Field Trip Coordinators:

Jeff Slotten, Tom Neal, Marc Minno

Group Photograph, ATL Photo Contest & Collection Access:

Andrei Sourakov

Program:

Jacqueline Y. Miller and Deborah Matthews Lott

Program Technical Support:

Jim Schlachta, J. Court Whelan

Slide Fest & Door Prizes:

Charles V. Covell, Jr.

Registration:

Lorraine Duerden

Security:

Kurt Auffenberg



**ASSOCIATION FOR TROPICAL
LEPIDOPTERA**

Schedule of Events

Friday, September 25

9:00 a.m.: **Butterfly field trip** to Goethe State Forest. Meet at the Powell Hall, Florida Museum of Natural History entrance in the Cultural Plaza (please be prepared to provide your own transportation, food, and beverages).

1:00-5:00 p.m.: **Registration**, Lobby, Powell Hall, Florida Museum of Natural History, Cultural Plaza, University of Florida.

4:30-11:30 p.m.: **Moth field trip** to Goethe State Forest. Meet at the Powell Hall, Florida Museum of Natural History entrance in the Cultural Plaza (please be prepared to provide your own transportation, food, and beverages).

Saturday, September 26

8:00-9:00 a.m.: **Registration** and reception, Poster viewing, McGuire Center Conference Room

Saturday, September 26 (continued)

MORNING SESSION

Moderator: Charles V. Covell, Jr.

- 9:00 – 9:10 a.m.: Opening remarks: Joe Riddlebarger, J. D. Turner
- 9:10 – 9:30 a.m.: Deborah Matthews Lott
- “Endophagous Pterophoridae of the Southeast: Diversity and Morphology of the Boring Species”**
- 9:30 – 10:00 a.m.: Brian G. Scholtens & Tom Smith
- “Butterflies of South Carolina Inventory Project”**
- 10:00 – 10:30 a.m.: Marc C. Minno
- “The Extinction, Loss, and Decline of Butterflies in the Florida Keys”**
- 10:30 – 10:45 a.m.: BREAK
- 10:45 – 11:15 a.m.: Jacqueline Y. Miller
- “An Update on the Taxonomy, Biodiversity and Biogeography of the Butterflies of the West Indies”**
- 11:15 – 11:45 a.m.: James K. Adams
- “The Known Unknowns: Undescribed Macromoths of Georgia”**
- 11:45 a.m. – 12:00 p.m. (noon): **Group Photo**, McGuire Center steps
- 12:00 – 1:00 p.m.: Lunch (provided): McGuire Center

AFTERNOON SESSION

Moderator: Peter Eliazar

- 1:00 – 1:20 p.m.: Matt Lehnert
- “Using Color to Map the Transition Zone of Two Eastern Tiger Swallowtail Subspecies in the Southeastern US and to Determine its Correlation with Biological Suture Zone Theory”**
- 1:20 – 1:50 p.m.: Charles V. Covell, Jr.
- “Project Ponceanus and Other Lepidopterous Adventures in South Florida, 1963–1993”**
- 1:50 – 2:20 p.m.: Bruce Purser & Daniel LaComme
- “Altitudinal Distribution of the Nymphalid *Perisama* in the Cosnipata Valley, S. Peru”**
- 2:20 – 2:35 p.m.: BREAK
- 2:35 – 3:00 p.m.: J. Court Whelan
- “An Initial Look at the Effects Butterfly Farms May Have on Their Environment”**
- 3:00 – 3:25 p.m.: Maria Fernanda Checa
- “Butterfly Communities from the West Ecuador Biodiversity “Hotspot”: Their Ecology and Conservation”**
- 3:25 – 3:45 p.m.: Mirian Medina Hay-Roe
- “Nutritional Ecology and Parasitoid Interaction in Two Ecological Races of the Fall Armyworm *Spodoptera frugiperda*”**
- 3:45 – 4:15 p.m.: Andrew D. Warren
- “Taxonomic and Biogeographic Studies on Mexican Hesperiiidae: News and Views from Year Two”**
- 4:15 – 4:20 p.m.: Announcements, Thomas C. Emmel
- 4:20 – 4:50 p.m.: Business Meeting, Southern Lepidopterists’ Society

Sunday, September 27

4:50 – 5:30 p.m.: Board Meeting, Southern Lepidopterists' Society
(McGuire Library)

4:50 – 6:00 p.m.: Free time on your own before banquet

EVENING EVENTS

6:30 p.m. Banquet, First Lutheran Church of Gainesville – Friendship Hall, 1801 NW 5th Avenue (see map in back of program).

7:30 p.m. Film presentations by Andrei Sourakov followed by announcement of winners of the photo contest, door prizes, and slidefest. Bring 5-10 of your favorite Lepidoptera-related 35mm slides or Powerpoint images to share with the group.

8:00-9:00 a.m.: Morning reception, McGuire Center Conference Room

MORNING SESSION

Moderator: Delano Lewis

9:00 – 9:10 a.m.: Announcements

9:10 – 9:40 a.m.: Bruce Purser

“The Long Evolution of Neotropical Butterflies”

9:40 – 10:10 a.m.: J. Court Whelan & Thomas C. Emmel

“Entomological Ecotourism: Its Beginnings and Current Progress”

10:10 – 10:25 a.m.: BREAK

10:25 – 10:55 a.m.: Boyce Drummond

“Survival of the Flittest: Ten Years of Pawnee Montane Skipper Survival in Fire and Drought”

10:55 – 11:25 a.m.: Ulf Eitschberger

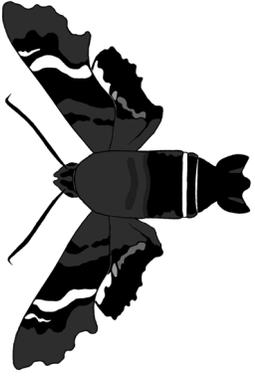
“The Taxonomy and Systematics of the Genus *Daphnis* Hübner, [1819] (Lepidoptera, Sphingidae)”

11:25 – 11:55 a.m.: Business Meeting, Association for Tropical Lepidoptera

11:55: Conclusion of Morning Session

11:55 a.m. – 12:25 pm.:

Board Meeting, Association for Tropical Lepidoptera (Director's Conference Room)



Posters

Please take time to peruse the many posters on display in the hall and on tables outside the McGuire Center conference room. Several posters are new this year and on display for this meeting only. New posters are listed in the abstracts section below.

Abstracts

Adams, James K. (jadams@daltonstate.edu), Department of Natural Science, Dalton State College, Dalton, GA

“The Known Unknowns: Undescribed Macromoths of Georgia”

ABSTRACT: Georgia, a large state with significant topography, has a remarkably rich flora and fauna. There are northern influences in the Georgia Appalachians and subtropical influences in the south; montane, piedmont and coastal plain regions; forested, scrub, prairie, dune, and swamp habitats. The richness is very apparent in the moth fauna, including several species which are newly discovered, and others which are rarely encountered, which remain undescribed. There are at least 20 species of macromoths in Georgia which have no name -- you'll get a chance to see them and the habitats from whence they come.

Checa, María Fernanda (mfcheca@ufl.edu), McGuire Center for Lepidoptera and Biodiversity, Florida Museum of Natural History, PO Box 112710, Gainesville, FL, USA, 32611-2710

“Butterfly Communities from the West Ecuador Biodiversity “Hotspot”: Their Ecology and Conservation”

ABSTRACT: Ecuador's butterfly fauna is one of the most diverse in the world, along with those of Peru and Colombia. However, our knowledge about many ecological aspects of these insects is still scarce. I surveyed the butterfly fauna of the Río Canandé Reserve, Esmeraldas Province, over one year using traps baited with rotting shrimp, in both primary and early successional forests. A total of 3620 individuals and 113 species of butterflies were collected, including a number of new records for this hotspot. The structure and composition of butterfly communities significantly differed between the two habitats. A literature review revealed that exploitation of wood and the cultivation of oil palm are the main deforestation factors for the region. Promoting sustainable development in this hotspot is urgently required, where less than 6% of natural forests remain and more than 75% of people are poor. Butterflies offer the potential for providing a sustainable income for rural communities, and this study contributes to realizing this potential through improved knowledge of species ecology and distribution.

Covell, Charles V., Jr. (ccovell@flmnh.ufl.edu), McGuire Center for Lepidoptera and Biodiversity, Florida Museum of Natural History, PO Box 112710, Gainesville, FL, USA, 32611-2710

“Project Ponceanus and Other Lepidopterous Adventures in South Florida, 1963 - 1993”

ABSTRACT: During the sixties to early nineties the author made numerous visits with family and students to the Everglades National Park, Homestead area, and Florida Keys to collect and survey butterflies and moths. Highpoints of the search for the Schaus Swallowtail and other butterflies and moths are reviewed, colleagues recalled, and images shown.

Drummond, Boyce (bdrummond3@msn.com), Colorado College, 14 E. Cache la Poudre Street, Colorado Springs, CO 80903

“Survival of the Flittest: Ten Years of Pawnee Montane Skipper Survival in Fire and Drought”

ABSTRACT: The Pawnee montane skipper (*Hesperia leonardus montana*) was listed by the USFWS as Threatened in 1987, after surveys determined that its known habitat is limited to less than 40 square miles along the South Platte River southwest of Denver, Colorado. Found only in ponderosa pine savanna growing on steep slopes of Pikes Peak Granite, skipper populations have been decimated by catastrophic fire and severe drought over the past two decades. Annual monitoring has shown that population densities of this species fluctuated nearly 20-fold during this period, and are strongly correlated with flowering stem densities of prairie gayfeather (*Liatris punctata*), an important nectar source and aggregation site. Recent forest management efforts in the area attempt to restore pre-settlement conditions to reduce risk of catastrophic fire and to improve skipper habitat by encouraging growth and reproduction of prairie gayfeather.

Eitschberger, Ulf (info@ulfei.de), Entomologisches Museum Dr. Ulf Eitschberger, Marktleuthen, Germany

“The Taxonomy and Systematics of the genus *Daphnis* Hübner, [1819] (Lepidoptera, Spingidae)”

ABSTRACT: All taxa of the genus *Daphnis* Hübner, [1819] are listed in a checklist. Because of the loss of the type specimens, neotypes are designated for *Sphinx hypothis* Cramer, 1780 and *Sphinx nerii* Linnaeus, 1758. This was demanded by Diehl, [1982: 5]. *Daphnis hypothis* auct., nec Cramer (1780), is divided into two subspecies, so that *Daphnis hypothis crameri* **subspec. nov.** is described as new for science. *Darapsa moorei* W. J. McLeay, 1866 **stat. rev.**, due to the genetic differences to *Sphinx hypothis* 1780, has to be raised to species level again.

Hay-Roe, Mirian Medfina (mmhr@ufl.edu), United States Department of Agriculture, ARS, CMAVE, Gainesville, FL 32608

“Nutritional Ecology and Parasitoid Interaction in Two Ecological Races of the Fall Armyworm *Spodoptera frugiperda*”

ABSTRACT: Two ecological races of the Fall Armyworm, *Spodoptera frugiperda*, were raised under laboratory conditions feeding

on natural host plants (corn and bermuda grass). Survivorship, mortality and fitness (measured by the pupal mass and wing length of the final adult) were measured. The results indicate that survivorship and fitness of the final adult depend on the natural host plant. The effect on the survivorship and fitness of the larval parasitoid *Euplectrus platyhypenanae* fed on Fall armyworms will also be described.

Lefnert, Matthew S. (mlehnert@ufl.edu), McGuire Center for Lepidoptera and Biodiversity, Florida Museum of Natural History, PO Box 112710, Gainesville, FL, USA, 32611-2710

“Using Color to Map the Transition Zone of Two Eastern Tiger Swallowtail Subspecies in the Southeastern US and to Determine its Correlation with Biological Suture Zone Theory”

ABSTRACT: The pre- and post-zygotic reproductive isolating mechanisms that affect and maintain hybrid zones continues to be definitive subject matter of evolutionary biology. Regions that encompass multiple hybrid zones are called suture zones, and are of particular interest due to the likelihood that similar biotic or abiotic factors affected hybridization in numerous taxa in these areas. The purpose of this research was to use color quantification as a tool to determine if the transition zone between two subspecies of Eastern Tiger Swallowtail, *Papilio (Pierourus) glaucus* overlaps the Northern Florida suture zone. Lenseye® software was used to quantify the yellow and orange hues of live *P. glaucus* individuals collected from populations throughout the southeastern US. It was found that some transition in orange and yellow hues occurs within the Northern Florida suture zone.

Matthews Lott, Deborah (mothnut@hotmail.com), McGuire Center for Lepidoptera and Biodiversity, Florida Museum of Natural History, PO Box 112710, Gainesville, FL, USA, 32611-2710

“Endophagous Pterophoridae of the Southeast: Morphology and Diversity of the Boring Species”

ABSTRACT: Endophagous pterophorids of the southeastern U.S. include representatives in 7 of the 28 nearctic genera. Most of these species are stem or flower borers of various composites (Asteraceae).

The adults, especially those in the genus *Hellinsia*, are beige or off-white and usually difficult to identify without examining the genitalia. While the adults are not particularly remarkable, larvae exhibit some interesting and useful morphological features for identification, such as complex anal plates in the *Hellinsia* borers. Examples of some of these species, their habits, and morphological features are presented.

Matthews Lott, Deborah (mothnut@hotmail.com), McGuire Center for Lepidoptera and Biodiversity, Florida Museum of Natural History, PO Box 112710, Gainesville, FL, USA, 32611-2710

Poster Presentation - “Life histories, Morphology and Diversity in the Genus *Adaina* (Lepidoptera: Pterophoridae)”

ABSTRACT: The genus *Adaina* Tutt, includes 27 species worldwide, most neotropical in distribution. Larval hostplants are restricted to Asteraceae. Larvae are flower borers, stem gallers, or leaf skeletonizers. Larval morphology and chaetotaxy corresponds with feeding habit. Adults of endophagous feeders are white to yellow, with few markings, while those of external feeders exhibit darker maculation. Life histories and morphological features of representative species are presented, including a recently identified gallicolous species on Siam weed, *Chromolaena odorata*.

McManus, Valerie C. ^{1,2}, Jaret C. Daniels ^{1,2}, & Daniel A. Hahn¹ (jdaniels@flmnh.ufl.edu), ¹Department of Entomology and Nematology, University of Florida, Gainesville, FL and McGuire Center for Lepidoptera and Biodiversity, University of Florida, Gainesville, FL, ²Entomology and Nematology Department, University of Florida, Gainesville, FL

Poster Presentation – “Caterpillars at the Beach! Biology of *Brephidium pseudofoea* (Lepidoptera: Lycaenidae) and Physiological Adaptations of Larvae to Tidal Inundation”

ABSTRACT: The biology of the lycaenid butterfly, *Brephidium pseudofoea* (Morrison), was studied in its natural habitat in central Florida and was also reared from egg to adult under laboratory conditions. Additional details of the immature

stages are presented. This multivoltine species inhabits coastal salt marshes and tidal flats where its confirmed larval host plants, *Sarcocornia perennis* (Mill.) A. J. Scott, *Salicornia bigelovii* Torr., and *Batis maritima* L., are often subjected to tidal inundation, presumably along with the eggs, larvae, and pupae. The insect’s behavioral and physiological adaptations to this harsh environment are investigated. We show that immature stages are able to survive prolonged periods of salt water immersion and we test the hypothesis that larvae can respire during tidal inundation.

Miller, Jacqueline Y. (jmiller@flmnh.ufl.edu), McGuire Center for Lepidoptera and Biodiversity, Florida Museum of Natural History, PO Box 112710, Gainesville, FL, USA, 32611-2710

“An Update on the Taxonomy, Biodiversity and Biogeography of the Butterflies of the West Indies”

ABSTRACT: The evolutionary relationships and divergence of the butterfly fauna of the West Indies in the context of historical geology and their origin and dispersal has long been a subject for further discussion. These butterflies are closely aligned with South Florida, and Central and South America, but more often with Mexico and Central America. Their current distribution often reflects the historical geology of the area. At present there are more than 358 species found in the West Indies with more than 172 species endemic. Since the publication of *The Butterflies of the West Indies and South Florida* (Smith et al., 1994), there has been a renewed interest in the biodiversity of the lepidopteran fauna in the Caribbean. A brief overview of new information on the historical geology, taxa described, life history studies, invasive species, and conservation concerns will be presented.

Miller, Jacqueline Y. (jmiller@flmnh.ufl.edu), McGuire Center for Lepidoptera and Biodiversity, Florida Museum of Natural History, PO Box 112710, Gainesville, FL, USA, 32611-2710

Poster Presentation - “The Biodiversity of the Castniinae (Lepidoptera: Castniidae)”

ABSTRACT: The Castniinae is a neotropical subfamily that has certain morphological affinities with the Cossioidea, Sesiioidea, and Zygaenoidea. These are the "butterfly moths," a number of which exhibit the bright coloration of butterflies and may mimic and occur sympatrically with models or commimics of the Papilionidae, Ithomiinae, Heliconiinae, and other Nymphalidae. Others mimic aposematic moth genera and are involved in several complex familial relationships. The Castniinae feed on monocotyledenous plants as larvae, but a few genera, such as *Paysandisia*, *Castnia*, and *Telchin*, are major economic pests. Some aspects of their life history, taxonomy, diagnostic features of the adults, and behavior that distinguish these moths, including their biodiversity in Central and South America, will be presented.

Míno, Marc C. (mminno@bellsouth.net), 600 NW 35th Terrace, Gainesville, FL 32607-2441

“The Extinction, Loss, and Decline of Butterflies in the Florida Keys”

ABSTRACT: At least 119 butterfly species and subspecies have been reported from the Florida Keys. However, over the last 30 years butterflies have been disappearing from the Keys at an alarming rate. *Euphyes arpa*, *Staphylus hayhurstii*, and *Calephelis virginiensis* were gone from the Keys around 1980. *Epargyreus zestos obero*n and *Hesperia meskei pinocayo* disappeared by the end of 2004. Hurricane Wilma damaged the Keys in November 2005, and *Oligoria maculata*, *Chlorostymon maesites*, and *Anaea troglodyta floridalis* were gone by the fall of 2006. *Heraclides andraemon bonhotei*, *Eumica tatila tatilista*, *Cyclargus ammon*, *Cyclarus thomasi bethunebakeri*, *Anthanassa frisia*, *Junonia genoveva*, *Lerodea eufala*, *Erynnis zaruco*, and *Euphyes pilatka kloisi* are barely surviving. Some of these taxa may now also be gone from the Keys. The loss of *E. zestos obero*n and *H. meskei pinocayo* is especially significant because these represent the first butterfly extinctions in Florida, and are among the few to have occurred in the U.S. The federally endangered *Heraclides aristodemus ponceanus* and many formerly common butterflies have dwindled in abundance. The causes of the butterfly decline and loss in the Keys are poorly known. Habitat fragmentation, degradation, and loss due to urbanization as well as predation by exotic species of ants are likely affecting many butterfly taxa. Mosquito spraying may impact some butterfly

populations, but appears to be neutral or actually benefit others. Funding for research and conservation planning is needed in order to prevent further losses of imperiled butterflies.

Neal, Megan X. (chouwah@aol.com), Westwood Middle School

Poster Presentation - “Does Daylength Determine Diapause in the Tropical Swallowtail, *Battus polydamas*?”

ABSTRACT: The purpose of this experiment is to see whether daylength does affect pupal color and diapause. This is important to determine whether global warming will affect the life cycle of these species.

The first step of the experiment was to collect two polydamas swallowtail egg masses. These were found on the pipevine in our yard. Two large clear plastic containers were prepared with tender pipevine shoots and slightly damp paper towels on the bottom to prevent them from drying out. An egg mass of ten eggs was placed in each container. A circular hole was cut in the top of two cardboard Subway cup boxes. A light fixture was placed over each hole. The lights were shielded to keep daylight from getting in the boxes. One prepared plastic container was placed in each box. Next, each light was plugged into a timer. One of the timers was set for nine hours of light and the other one for fifteen hours. The containers were checked every two days and were cleaned and new foodplant added as the caterpillars grew. Notes were also taken at these times. When the caterpillars pupated, the number of green and brown pupae was noted for each container.

Results strongly show that daylength does affect diapause, but is the opposite of what was hypothesized. Short days produced green (non-diapausing) pupae and long days produced brown (diapausing) pupae. An explanation might possibly be that when days are short in the early dry season, there is still plenty of green foodplant, but when the days become long in the late dry season, everything is dried up. Global warming could affect this species by causing foodplant to grow or dry up at the wrong times. The butterfly could evolve to adjust to changes if they happened gradually enough.

Neal, Samuel M. (chouwah@aol.com), Westwood Middle School.

Poster Presentation - “Do the Two Color Forms of the Papaya Sphinx Caterpillar (*Erinnyis atlope*) Exhibit Different Behavior?”

ABSTRACT: The papaya sphinx is a tropical moth that can be an agricultural pest by eating all the leaves from papaya trees. It has long been known that there are two color forms, brown and green. Casual observation of caterpillars on garden plantings led to speculation that the color forms have different behavior. To demonstrate this experimentally, eggs and newly-hatched caterpillars were reared in containers. Records were kept of their progress and when they reached the last instar, they were placed on potted papaya trees. Here their behavior was observed. The brown caterpillars consistently crawled down the trunk and hid in the leaf litter when they were resting. The one green caterpillar stayed on the plant and hid in the tangle of new leaf stems at the crown of the plant. Although the results indicate strongly that there is a behavior difference between forms, since there was only one green larva, further study is needed.

Purser, Bruce (bruce.purser@wanadoo.fr), 39 av. de la République, Villemousson, 91360 France

“The Long Evolution of Neotropical Butterflies”

ABSTRACT: Understanding of butterfly populations and their evolution is handicapped by the lack of fossil evidence, progress depending mainly on the “mitochondrial clock”. This method may, however, be supplemented by relating butterfly taxonomy to datable *geodynamic events*. There are at least six well established events affecting South America, each possibly creating virgin territories which favoured the evolution of new taxa.

Close similarity between several Neotropical and African taxa (Charaxines, Acraeids, Saturnid and Heliid moths) suggests that evolution of Neotropical faunas (and floras) was initiated in *Gondwana*, about 100 MY ago. Subsequent events involved the creation of an Atlantic *proto-continent*, the diachronic (S to N) uprise of the *Andean chain*, and the filling of the *paleo-Amazon lagoon*. Constant erosion & fluctuating climates created humid valleys, each event contributing taxa to the highly diversified Neotropical fauna.

Purser, Bruce & Daniel LaComme, Assoc. French Lepidopterists* (bruce.purser@wanadoo.fr), 39 av. de la République, Villemousson, 91360 France

“Altitudinal distribution of the Nymphalid *Perisama* in the Cosnipata Valley, S. Peru”

ABSTRACT: There exist about 40 species of *Perisama* (Atal & Crosson du Cormier, 1996), 15 of which occur between 1000 and 3600m in the Cosnipata Valley. This altitudinal spectrum fluctuates according to the season, and maximum diversity (7 spp.) occurs between 1500 and 2000m. Although all species are parapatric, there exists a definite vertical stratification of species. Literature is too vague to evaluate the constance of this altitudinal sequence but shows that a given subspecies (ex. *P. jurinei jurinei*) may have extensive (1000 km) lateral distribution. Marked differences between species and the wide distribution of individual components tend to complicate the understanding of evolutionary relationships within this sequence in the Cosnipata Valley.

* Joint project, Universidad Nacional Mayor (Lima), Smithsonian Institute (Washington), & Assoc. of French Lepidopterists

Scholten, Brian & Tom Smith (scholtensb@cofc.edu), Biology Dept., College of Charleston, Charleston, SC 29424

“Butterflies of South Carolina Inventory Project”

ABSTRACT: Historically, only a handful of individuals have done work on South Carolina butterflies and the number of specimens in major collections is relatively limited. We are compiling the known records from these individuals and collections into a database to be used to put together a guide to South Carolina butterflies. We currently have documented records of 160 species, from over 12,000 individual specimen records. We are doing extensive new surveying to redocument as many species as possible from the state. Our recent survey work has resulted in valuable information about rare or potentially extirpated species, significant range extensions, the occurrence of vagrants in the state, and has produced at least 4 new species records for the state.

Sourakov, Andrei (asourakov@flmnh.ufl.edu), McGuire Center for Lepidoptera and Biodiversity, Florida Museum of Natural History, University of Florida, Gainesville, FL 32611-2710

“Learning About Butterfly Behavior Through Filmography”

ABSTRACT: Several short films will feature interesting aspects of butterfly and moth behavior.

Warren, Andrew D. (hesperioidea@yahoo.com), McGuire Center for Lepidoptera and Biodiversity, Florida Museum of Natural History, University of Florida, Gainesville, FL 32611-2710.

“Taxonomic and Biogeographic Studies on Mexican HesperIIDae: News and Views from Year Two”

ABSTRACT: A summary of the second (and final) year of post-doctoral studies at the “Alfonso L. Herrera” Zoology Museum, Sciences Department, National Autonomous University of Mexico, in Mexico City is provided. A review of fieldwork and research in collections in Mexico during 2008 and 2009 is given, with views from many states. Several recently described species of Mexican HesperIIDae are discussed, including *Stinga kendamulaza*, *Neposa* species and *Celotes spurcus*, including life history notes on the latter. In addition, brief notes on the spectacular nymphalid *Speyeria nokomis melanea*, the southernmost known population of the species (in Aguascalientes State), are provided.

Whelan, J. Court (cwhelan@ufl.edu), McGuire Center for Lepidoptera and Biodiversity, Florida Museum of Natural History, PO Box 112710, Gainesville, FL, USA, 32611-2710

“An Initial Look at the Effects Butterfly Farms May Have on Their Environment”

ABSTRACT: Butterfly farming is an emerging and rapidly growing commercial industry, both in developed and developing nations around the world. It contributes significantly in many places to

community welfare and environmental sustainability. Providing a number of incentives to local communities such as jobs, revenue, education, and conservation, these farms are becoming popular microeconomic enterprises and also ecotourism destinations. However, little is known about the impacts these farms have on their local environment.

This study aimed to collect data on wild butterfly abundances in north central Florida, as indicated by oviposition frequency rates, to determine any effect that proximity to butterfly farms may have on adult butterfly abundances. It was found that butterflies tended to oviposit in greater numbers closer to the farm epicenter, suggesting that the farm could be an attractive force for gravid female butterflies. It was also observed that components of the farm, such as host and nectar plant availabilities and high levels of conspecific densities, could contribute to the higher abundance of adult butterflies closer to the farm. With rapid turnover of host plants, both through commercial sale and use in the farms’ screened enclosures, the potted stock of host plants found around butterfly farms could be a dead-end for butterfly oviposition, as eggs are routinely removed before introducing the plant to the enclosures. Further studies are needed to assess the validity of an attraction hypothesis and whether certain farm components elicit comparatively greater abundances of adult butterflies.

Whelan, J. Court & Thomas C. Emmel (cwhelan@ufl.edu, teemmel@flmnh.ufl.edu), McGuire Center for Lepidoptera and Biodiversity, Florida Museum of Natural History, PO Box 112710, Gainesville, FL, USA, 32611-2710

“Entomological Ecotourism: Its Beginnings and Current Progress”

ABSTRACT: Ecotourism is a rapidly growing sector of the tourism industry, having a clear mission of improving the welfare of local communities, conserving biodiversity, and creating environmental awareness among tourists. Ecotourism can involve a variety of activities, ranging from bird-watching in Papua New Guinea to an Amazon riverboat tour in Brazil. Wherever these ecotours are taking place, they are invariably contributing to the preservation of the local environment, its biodiversity, and the communities that are now involved in ecotourism services and management. With insect conservation becoming a serious concern and the complex interconnections between

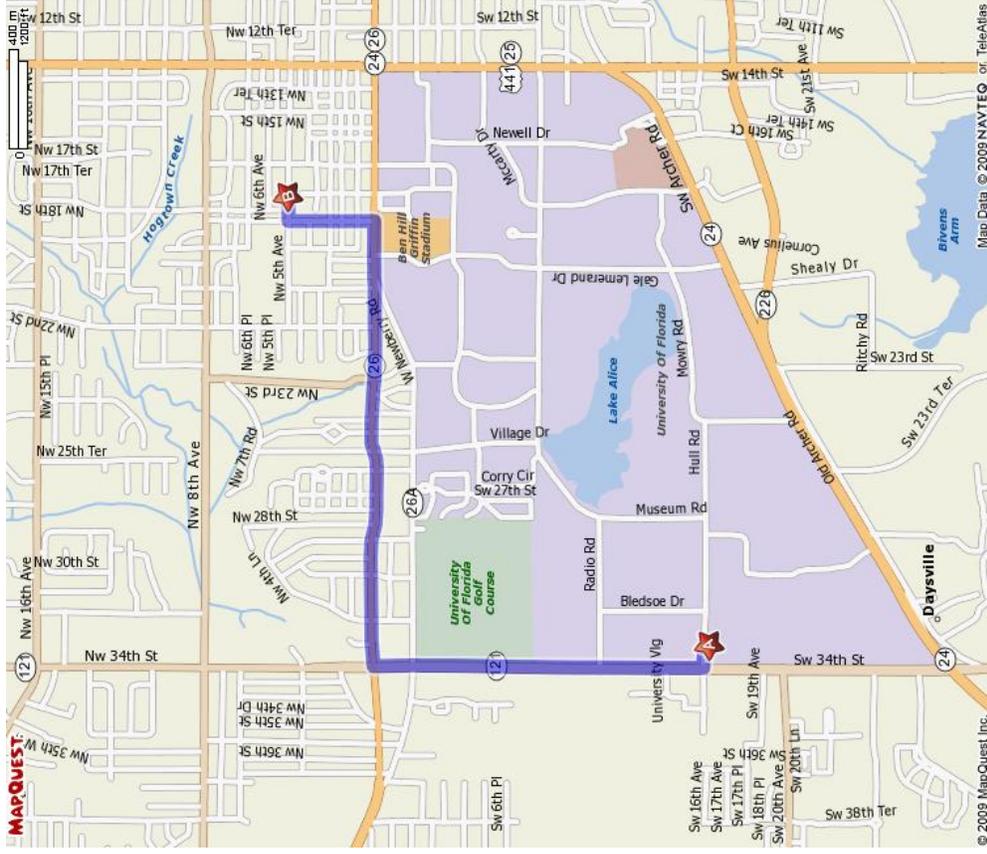
insects, plants and vertebrates receiving more scientific and public attention, entomological ecotourism is emerging as an effective solution to promote the conservation of insects, wildlife and the habitat they depend on.

Concomitant with increasing ecotourism in the 1970s and 1980s was the spreading interest in entomologically-based travel, largely initiated by Dr. Thomas Emmel and his research group at the University of Florida. Leading well over 100 research and photographic trips centered around insects, Dr. Emmel developed the foundation and prototypes for what is now a distinct brand of travel. Court Whelan, a PhD student with Dr. Emmel, is furthering the development of entomological ecotourism by specializing in the subject in his graduate education.

This presentation will cover the history of entomological ecotourism from the authors' experiences and perspectives, and suggest future avenues that might be available, including the planning of broader offerings to other scientific and general public audiences than those emphasized to date.

NOTES:

Location for Saturday Evening Banquet & Slide Fest:



Driving Directions to: First Lutheran Church of Gainesville - Friendship Hall, 1801 NW 5th Avenue

From the Florida Museum of Natural History - McGuire Center:

- 1.) Turn **right** at **SW 34th St** - 1.0 mi
- 2.) Turn **right** at **W University Ave** - 1.1 mi
- 3.) Turn **left** at **NW 22nd St** - 0.3 mi
- 4.) Turn **right** at **NW 5th Ave** - Destination will be on the right