

Southern Lepidopterists'
Society
and
**ASSOCIATION FOR
TROPICAL LEPIDOPTERA**
2019 Annual Meeting



Department of Biology, Georgia Southern University, Statesboro, Georgia

5-7 April 2019

Front Cover: *Fernaldella georgiana* (Covell, Finkelstein and Towers)
(Geometridae), Georgia's endemic moth, Ochopee Dunes, Emanuel
County, Georgia. Photograph by James K. Adams.

**ANNUAL MEETING OF THE SOUTHERN
LEPIDOPTERISTS' SOCIETY AND THE
ASSOCIATION FOR TROPICAL
LEPIDOPTERA
APRIL 5-7, 2019**

Department of Biology, Georgia Southern University, Statesboro, Georgia

Local Arrangements

Meeting Coordinators:

Lance A. Durden, Debbi Albanese, Deborah L. Matthews, Jacqueline Y. Miller,
Janee Cardell

Lunch/Breaks:

Debbi Albanese, Susan Durden

Field Trip Coordinators:

Lance A. Durden, James K. Adams

Group Photograph:

Alan Harvey

Collection Access:

Lucia Botnaru, Lance A. Durden

Program:

Lance A. Durden, Debbi Albanese

Registration:

Lucia Botnaru

***We thank our meeting benefactors, Jacqueline Miller, John Hyatt and
William Dempwolf***

Schedule of Events

Thursday, April 4

~6:30 pm: Night collecting at Ochoopee Dunes with James Adams. Bring your own lights/traps, headlamps, flashlights and collecting gear. Note: Ochoopee Dunes is ~1 hour drive from Statesboro. Contact: James Adams (jadams@daltonstate.edu) (Cell: 678-767-5938). Night collecting at Ochoopee Dunes “might” also be possible on the night of 5 April depending on level of interest and other factors. Contact James Adams, if interested.

Friday, April 5

10:00 am – 3 pm: **Day Field Trip.** Join Lance Durden to visit habitats around Statesboro. We will meet in the lobby of the Hampton Inn (350 Brampton Ave., Statesboro, GA 30458) at 10 am. Remember to pack water/fluids, sunscreen and mosquito repellent together with regular field equipment. Rubber boots would also be helpful because we will visit some wetland areas. This trip is open to everybody on a drop in basis. Contact: Lance Durden (ldurden@georgiasouthern.edu)

7:00 pm - midnight: **Night collecting** with Lance Durden. Meet at the Biology Building main entrance (4324 Old Register Road, Statesboro, GA 30458) at 7 pm. Bring your own sheets, lights, headlamps, flashlights and collecting gear. There will also be a communal sheet. This excursion will be close to the meeting site (~2 miles).

Contact: Lance Durden (ldurden@georgiasouthern.edu)

All field trip participants must sign a release form.

Saturday, April 6

Please enter the Biology Building (4324 Old Register Road, Statesboro, GA 30458) through the main entrance into the Atrium on the ground floor. Our meetings will convene in adjacent Lecture Hall 1109.

8:30-9:30: Registration and reception. Biology Building Atrium

MORNING SESSION

Moderator: Lance Durden

9:30-9:45: Opening remarks: **Lance A. Durden, J. D. Turner, John A. Hyatt**

9:45-10:05: **Charles V. Covell, Jr.**

“Butterfly gems from Kentucky”

10:05–10:25: **Jacqueline Y. Miller and Jorge M. Gonzalez**

“The discovery of the male of *Synpalamides estherae* Miller, 1976 (Lepidoptera: Castniidae: Castniinae), including a comparative discussion of the taxonomy and bionomics of related species with the description of a new genus”

10:25-10:50: **Keith R. Willmott, Jason P. W. Hall, Jamie I. Robinson Willmott**

“Butterfly Caterpillars of Ecuador”

10:50–11:10: BREAK

11:10–11:30: **Lance A. Durden**

“Some Queensland (Australia) Lepidoptera”

11:30-11:50: **Peter van Zandt**

“Floral visitors of Kohuhu (*Pittosporum tenuifolium*) in Canterbury, New Zealand”

11:50-12:10: **James K. Adams**

“Updates on the spread of *Dinumma deponens* (Erebidae: Scoliopteryginae) in the U.S.”

12:10-12:20: **Lance A. Durden**

“A new textbook chapter on Lepidoptera”

12:30: **Group Photograph**, Biology Building Atrium

12:30 – 1:00: Business Meeting, Association for Tropical Lepidoptera

12:30 – 1:30: **Lunch** in Biology Building Atrium.

AFTERNOON SESSION

Moderator: Debbi Albanese

1:40-2:00: **Stuart Marcus**

“A citizen scientist’s approach to mothing at Trinity River National Wildlife Refuge, Texas”

2:00-2:20: **James E. Hayden and Richard Mally**

“Tribal classification of Spilomelinae (Pyraloidea: Crambidae): implications for the New World fauna”

2:20-2:40: **Deborah L. Matthews and Jacqueline Y. Miller**

“Plume moths of The Bahamas”

2:40-3:00: BREAK

3:00-3:20: **Leroy Koehn**

“Bait traps for Lepidoptera: then and now”

3:20-3:40: **Jeff Sloten**

“Life History Notes on *Hyparpax peroptheroides* (Strecker, 1876)”

3:40-4:00: **Jacqueline Y. Miller**

“A tribute to Tom Emmel (1941–2018)”

4:00-4:10: Tributes to Tom Emmel and Peter Eliazar by other attendees

4:10-4:30: BREAK

4:30-5:30: Business Meeting, Southern Lepidopterists’ Society

EVENING EVENT

6:00 until ? **Banquet** (Dutch Treat), Millhouse Steakhouse (1301 Statesboro Place Circle, Statesboro, GA 30458).

Door Prizes – Charles V. Covell

Sunday, April 7

9:00 - 9:30: **Morning Reception**, Biology Atrium and Lecture Room 1109.

MORNING SESSION **Moderator: Lance Durden**

9:30-9:50: **John A. Hyatt**

“Concerning brown stains on green *Ornithoptera*”

9:50–10:10: **Marc Minno, Douglas M. Fernández Hernández, and David Auth**

“The Search for Cuba’s Rarest Butterflies”

10:10-10:20: **Jeff Slotten**

"A funny thing happened on the way up, on, and from the Wind River Mountains."

10:20-10:40: **James K. Adams**

“Three 2018 visits to the Fall Line Sandhills WMA: what visiting a new area in your home state of 28 years can tell you about moth faunas.”

10:40 – 11:00: **Brent Tharp**

“John Abbot water colors and prints at Georgia Southern University”

11:30: Optional trip (carpooling) to visit John Abbot’s gravesite and Historical Marker (~20 miles from meeting site).

Contact Lance Durden (ldurden@georgiasouthern.edu), if interested.

Abstracts

Adams, James K., Dalton State College, Dalton, GA (jadams@daltonstate.edu)

"Updates on the spread of *Dinumma deponens* (Erebidae: Scoliopteryginae) in the U.S."

Dinumma deponens was first encountered in the U.S. in N GA in 2012. Since that time, with the help of citizen scientists and the use of social media (Facebook, Bugguide), we have been able to track the spread of the moth, largely northward, filling the range of its introduced host, Silktree (or "Mimosa"), *Albizia julibrissin*. I will show the year by year spread of the moth, indicating how fast this species can disperse.

Adams, James K., Dalton State College, Dalton, GA (jadams@daltonstate.edu)

"Three 2018 visits to the Fall Line Sandhills WMA: what visiting a new area in your home state of 28 years can tell you about moth faunas."

Spurred to investigate this new area in middle western GA (Taylor Co.) by Georgia DNR person Nathan Klaus, I visited the area in mid June, beginning of September, and mid-October. Discoveries included many species new for me, new for the State, species representing significant range extensions, and even one new geometrid to science. Previously, my efforts had in many respects concentrated on "corners" of the state, assuming that all the interesting records would be peripheral. Clearly, I need to rethink this approach!

Botnaru, Lucia V. J. and Durden, Lance A., Department of Biology, Georgia Southern University, Statesboro, GA 30458 (ls05114@georgiasouthern.edu and ldurden@georgiasouthern.edu)

"Biodiversity of Lepidoptera on the Georgia Southern University campus"

The campus of Georgia Southern University encompasses several natural areas including a recently acquired "south campus," part of which is being prepared for development. Deciduous, coniferous and mixed wooded areas, wetlands and small sandhill and wiregrass habitats are present on the campus. As part of a University

funded Sustainability project, we have been recording and monitoring Lepidoptera biodiversity on campus using light, bait and pheromone traps as well as visual observations and photographs uploaded to iNaturalist. To date, 88 species of butterflies and several hundred species of moths have been recorded including a few notable species of moths.

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

“Butterfly gems from Kentucky”

A photographic review of butterfly discoveries by Kentucky lepidopterists, 1965 to present.

Durden, Lance A. Department of Biology, Georgia Southern University, Statesboro, GA 30458 (ldurden@georgiasouthern.edu)

“A new textbook with a chapter on Lepidoptera”

The third edition of a textbook entitled “Medical and Veterinary Entomology” edited by Gary R. Mullen and Lance A. Durden has recently been published (2019) by Elsevier/Academic Press. The book includes a chapter on Lepidoptera of medical/veterinary importance by Gary Mullen and Jennifer Zaspel, which will be highlighted.

Durden, Lance A. Department of Biology, Georgia Southern University, Statesboro, GA 30458 (ldurden@georgiasouthern.edu)

“Some Queensland (Australia) Lepidoptera”

Lepidoptera were observed and recorded in coastal Queensland, Australia during December, 2018 (mid-summer) mainly on the semi-natural campus of the University of the Sunshine Coast which adjoins Mooloolah River National Park. Observations from some other locations will also be discussed including a population of the Queensland-endemic Richmond birdwing butterfly (*Ornithoptera richmondia*) at Mary Cairncross Scenic Reserve.

Hayden, James E.¹, and Richard Mally

McGuire Center for Lepidoptera and Biodiversity, Florida Museum of Natural History, University of Florida, Gainesville, FL 32611-2710
(James.Hayden@freshfromflorida.com)

“Tribal classification of Spilomelinae (Pyraloidea: Crambidae): implications for the New World fauna”

Although Spilomelinae is the largest subfamily of Crambidae, it has no currently accepted classification above the level of genus. A newly proposed tribal classification helps identification and prediction. I discuss three tribes (Agroterini Acloque, Nomophilini Kuznetsov & Stekolnikov, and one based on the *Psara* Group of Munroe 1995), their diagnoses, nomenclatural changes for Nearctic species, and generalizations about host plant associations.”

Hyatt, John A., 233 Park Ridge Court, Kingsport, TN (jkshyatt@ceturylink.net)

“Concerning brown stains on green *Ornithoptera*”

As many as 25% of the green-colored male *Ornithoptera* specimens in institutional and private collections exhibit some degree of brown discoloration on their iridescent wing surfaces. The origin of this discoloration has been variously ascribed to such factors as “oil stains,” “fat,” “water-staining,” “over-relaxing,” “decay,” and even “polystyrene. This paper will present data on the peculiar distribution of discoloration in museum specimens of various genera and give the results of laboratory experiments aimed at determining the causes of discoloration. It will be shown that body oil or fat is generally not the cause of brown discoloration in *Ornithoptera*; a possible mechanism of staining will be given. Preliminary results from several approaches to removing the discoloration will be illustrated and discussed.

Koehn, Leroy, LepTraps, Georgetown, KY (LepTraps@aol.com)

“Bait traps for Lepidoptera: then and now”

The use of bait traps to collect Lepidoptera has its origins in Michigan in the late 1960s. New designs and materials have resulted in more durable and effective bait traps.

Marcus, Stuart J., Refuge Manager, Trinity River National Wildlife Refuge, Liberty, TX (stuart_marcus@fws.gov)

“A Citizen Scientist’s Approach to Mothing at Trinity River National Wildlife Refuge”

Soon after moving to a new headquarters building located on National Wildlife Refuge property in 2012, I noticed a plethora of moths attracted to the security lights. Having virtually no experience or expertise in identifying these creatures, I turned to the internet, which quickly opened my eyes to a new passion. Viewing cloth sheets illuminated with white, black, and mercury vapor lights, virtually outside my office door, became my daily (or nightly) routine. Along with educating myself about moths through photography, I have been able to pass this passion to hundreds of others who hopefully now see moths in a whole new “light.”

Matthews, Deborah L., and Jacqueline Y. Miller, McGuire Center for Lepidoptera and Biodiversity, Florida Museum of Natural History, University of Florida, Gainesville, FL 32611-2710 (dlott@flmnh.ufl.edu)

“Plume moths of The Bahamas”

The Caribbean plume moth fauna is poorly known, with few species recorded, for example, from Cuba (14) and Puerto Rico (21), compared to the neighboring mainland fauna of Florida (43). In the Bahamas, only five species of Pterophoridae were recorded (1980s). Our efforts to sample the total moth fauna of the Bahamas since 2011 resulted in 11 species reported after surveys on North Andros that year. Since then, 13 major islands in the Bahamas archipelago have been sampled, with the number of plume moth species now more than doubled to at least 23. An overview of the fauna and host associations will be given along with discussion of unknowns and potential new taxa.

Miller, Jaqueline Y. McGuire Center for Lepidoptera and Biodiversity, Florida Museum of Natural History, University of Florida, Gainesville, FL 32611-2710 (jmiller@flmnh.ufl.edu)

“A tribute to Tom Emmel (8 May 1941- 26 May 2018)”

Miller, Jaqueline Y. and Jorge M. Gonzalez, McGuire Center for Lepidoptera and Biodiversity, Florida Museum of Natural History, University of Florida, Gainesville, FL 32611-2710 (jmiller@flmnh.ufl.edu)

“The discovery of the male of *Synpalamides estherae* Miller, 1976 (Lepidoptera: Castniidae: Castiinae), including a comparative discussion of the taxonomy and bionomics of related species with the description of a new genus”

There are 14 species of the Castniinae known from Mexico of which eight appear to be endemic (Miller 2000; González 2008; González et al. 2008; Niño Maldonado 2013). Of these, *Synpalamides escalantei* (= *Castnia escalantei* Miller 1976) is widely distributed throughout Mexico including localities in Chihuahua, Guerrero, and Morelos. *Synpalamides chelone* (Hopffer 1857) was originally described from Mineral del monte, Hidalgo. Miller (1976) also described another species, *Synpalamides estherae*, (= *Castnia estherae* Miller 1976) which was based on a single female specimen collected in Purua, Michoacan. As far as we can tell, no additional specimens of this latter species have been observed until recently. We will provide a description of the male of *S. estherae*, a comparative discussion of the closely related *S. chelone* and *S. escalantei* and insight into their life history and bionomics, and a description of a new genus, *Escalantiana*, to which the above species are then assigned.

Minno, Marc¹, Douglas M. Fernández Hernández, and David Auth, ¹600 NW 35th Terrace. Gainesville, FL 32607 (marcminno@gmail.com)

“The Search for Cuba’s Rarest Butterflies”

From August 17 through September 2, 2018 we searched for butterflies in northeastern Cuba (Holguín and Guantánamo provinces) using 4-wheel drive jeeps. We explored mountain habitats in La Mensura and Alejandro de Humboldt national parks and other areas. Our group also included José E. Rivorón Pérez,

David L. Auth, Barbara A. DeWitt, Melissa Lackey, and John and Jane Lampkin. Although conditions were mostly very hot and dry, we found at least 112 species, including some uncommon butterflies such as *Hypanartia paullus*, *Eumaeus atala*, *Melete salcia cubana*, *Heraclides oxynius*, and *Heraclides pelaus atkinsi*. Of special interest, were skippers (Hesperiidae). We located *Astrartes cassander*, *Chioides marmorosa*, *Burca cubensis*, *Holguinia holguin*, *Oarisma bruneri*, and *Rhinthon cubana*, which are among the rarest butterflies in Cuba.

Slotten, Jeffrey R., 5421 NW 69th Lane, Gainesville, FL 32653
(jslotten@bellsouth.net)

“Life History Notes on *Hyparpax perophaeroides* (Strecker, 1876)”

Slotten, Jeffrey R., 5421 NW 69th Lane, Gainesville, FL 32653
(jslotten@bellsouth.net)

"A funny thing happened on the way up, on and from the Wind River Mountains."

This presentation is supposed to be a comical account of what not to do when traveling to the Wind River Region for butterfly/moth surveying/collecting.

Tharp, Brent W., Georgia Southern University Museum, Statesboro, GA
(btharp@georgiasouthern.edu)

“John Abbot water colors and prints at Georgia Southern University”

The recent acquisition by the Georgia Southern University Museum and a showing of an original of John Abbot’s “103 of the rare lepidopterous insects of Georgia,” will be highlighted.

Van Zandt, Peter. Department of Biology, Birmingham-Southern College, 900 Arkadelphia Rd. Birmingham, AL 35254-9022 (pvanzand@bsc.edu)

“Floral visitors of Kohuhu (*Pittosporum tenuifolium*) in Canterbury, New Zealand”

Recent literature reviews have recognized the potentially important roles of moths as pollinators of plants worldwide. However, because of their nocturnal activity, moths and the plants they visit are vastly understudied. Kohuhu (*Pittosporum tenuifolium*) is a common woody species in New Zealand and is described in the literature as fly and beetle pollinated. I monitored a small population of Kohuhu for the entire flowering season of ca. 2 weeks, collected representatives of flower visiting moths, and sampled the proboscises of specimens for pollen. Of the 14 moth species collected, most specimens carried extensive pollen loads, suggesting that they might be effective pollinators. Understanding their ecological roles as well as documenting the contributions of other moths to pollination rises in importance as biodiversity continues to erode.

Willmott, Keith R.¹, Jason P. W. Hall, Jamie I. Robinson Willmott,

¹McGuire Center for Lepidoptera and Biodiversity, Florida Museum of Natural History, University of Florida, Gainesville, FL 32611-2710
(kwillmott@flmnh.ufl.edu)

“Butterfly Caterpillars of Ecuador”

Research on the systematics and biology of Ecuadorian butterflies over the last few decades has resulted in the discovery and descriptions of hundreds of new species, observations of adult behavior in thousands of species, and tens of thousands of new distribution records. As with all butterfly faunas, however, knowledge of the immature stages remains fragmentary, despite efforts by several researchers, including ourselves, focused on several regions or on certain taxa. During field trips to Ecuador over the last few years we have thus attempted to find and rear the immature stages of as many butterfly species as possible, alongside other field work, contributing new information for a small but growing number of species. We describe these efforts and highlight some of the more intriguing discoveries.