

MCGUIRE CENTER NEWS

A newsletter of the McGuire Center for Lepidoptera and Biodiversity - Florida Museum of Natural History - APRIL 2012

VOLUNTEER PROFILE: Jacqueline Kessler

How long have you been volunteering at the Museum?

I first volunteered last year. I chose to work there for my week-long eighth-grade internship. Then, over the summer, I worked in collections for the Junior Volunteer Program.

What made you start volunteering here?

I have always been interested in science and have participated in several regional and state science fairs. Dr. Sourakov and Dr. Willmott invited me to work with them on some very interesting projects, and I saw this as a great opportunity.

What do you do for the Museum?

I worked in the butterfly collections. I pinned butterfly specimens from Ecuador, and arranged others into the display cases. I also helped with research on classification by preparing specimens for genetic analysis and creating detailed drawings using a microscope.

What kind of training did you receive when you first started volunteering?

First, Dr. Sourakov would demonstrate how to do each project. I had to learn many processes including how to pin the butterflies, use the microscope, and properly label the specimens. Then, when I was comfortable with them, I was able to continue with the rest on my own. In butterfly collections, most of the training is specific to the individual projects.

Has volunteering at the Museum helped you develop any new skills?

Many of the tasks I had to do were very timeconsuming and challenging. I had to be extremely patient in order to do everything accurately. One of my projects was organizing the butterflies into species based on appearance. At first glance, they all seemed the same, but I learned to pay close attention to minor details to categorize them correctly.

What activities are you involved in outside of the Museum?

I am a freshman in the International Baccalaureate program at Eastside High School. The clubs I am involved in include the EHS Striders (for breast cancer awareness) and Spanish Club. Outside of school, I take



Jacqueline Kessler prepares butterfly specimens.

dance classes at Pofahl's Studios and perform in Next Generation, a student dance group.

What do you enjoy the most about volunteering?

It is a unique opportunity for me to learn directly from scientists who have many years of experience. The questions they are trying to find answers to are new and interesting.

Do you have any advice or words of wisdom for people thinking about volunteering here?

I would advise people thinking about volunteering here to check out the Junior Volunteer Program for the summer. There are many different options as to the positions, and the program enables people to choose a variety of jobs or just one. Also, don't be intimidated by the interview when you apply. The process is simple and the people are really friendly.

IN THIS ISSUE:

- Volunteer Profiles
- Staff News
- Student News
- Publications

FROM THE EDITOR:

Volunteers play a vital role in many of the McGuire Center's research programs. Every spring and fall, new volunteers may interview for positions to assist McGuire Center staff in the collections or laboratories. During the last two years, select students from area schools have also been recruited to work in the collections as part of the Florida Museum's Junior Volunteer Program. These students help researchers with their projects while learning to handle specimens and appreciate collections-based scientific research. Considering the shortage of funds for paid technical assistants, the number of research projects and the size of the McGuire Center's collections. the contributions of our volunteers are invaluable.

Readers have the opportunity to meet some of these special volunteers in this issue. Questions about volunteer opportunities should be directed to Florida Museum Volunteer Coordinator Amy Hester, **ahester@flmnh.ufl.edu**, whose help with conducting the following interviews is greatly appreciated.

MCGUIRE CENTER NEWS

Jacqueline Y. Miller

Chad T. Douglas

ISSN # 1938-3029

Editorial Board:

Christine M. Eliazar Jaret C. Daniels Thomas C. Emmel Andrei Sourakov

Editor: Andrei Sourakov asourakov@flmnh.ufl.edu

Copy Editor: Paul Ramey

Graphic Designers:

Elecia Crumpton Leah Welch

Photography:

Alexandr Chuvilin Andrei Sourakov Sebastián Padrón Kate Martin Keith Willmott Deborah Matthews

McGuire Center Staff

Badon, Jade, Graduate Asst. Barszczak, Lukasz, Technical Research Asst. Bliss, Andrew, Technical Research Asst Checa, Maria Fernanda, Graduate Asst. Covell, Charles V., Curator of Lepidoptera Daniels, Jaret C., Asst. Curator & Asst. Director of Education Douglas, Chad T., Technical Research Asst. Douglas, Colin M., Technical Research Asst. Dovle, Jonathan, Technical Research Asst. Eliazar, Christine M., Program Asst. Emmel, Thomas C., Director Gallice, Geoffrey, Graduate Asst. Hay-Roe, Mirian Medina, Research Associate Hayden, James, FSCA Curator of Lepidoptera, Immature Collection Heppner, John B., Curator of Lepidoptera Huber, Stacey, Technical Research Asst. Kawahara, Akito Y., Asst. Curator of Lepidoptera Koi, Sandy, Graduate Asst. Lewis, Delano, Asst. Research Scientist, Lepidoptera Lott, Deborah Matthews, Biological Scientist Lukhtanov, Vladimir, Visiting Scientist & Curator Miller, Jacqueline Y., Curator of Lepidoptera Ortíz, Elena, Graduate Asst. Padron, Pablo, Graduate Asst. Park, K.T., Research Associate Pence, J. Akers, Research Associate Ponce, Francesca, Technical Research Asst. Ponce, Joan, Technical Research Asst. Romero, Cassandra, Technical Research Asst. Rossetti, Kristin, Technical Research Asst. Sanchez, Stephanie, Technical Research Asst., **Endangered Species** Schlachta, James B., Operations, Asst. Director Segebarth, Craig L., Technical Research Asst. Segebarth, Ian K., Technical Research Asst. Sourakov, Andrei, Collections Coordinator Standridge, Matthew, Technical Research Asst. Thomas, Kelly, Technical Research Asst. Turner, J.D., Research Associate Turner, Nancy C., Research Associate Warren, Andrew D., Senior Collections Manager Whelan, John 'Court,' Graduate Research Asst. Willmott, Keith R., Associate Curator of Lepidoptera Xiao, Lei, Genetics Lab Manager

VOLUNTEER PROFILE: Michael McCowan

How long have you been volunteering at the Museum?

I've just passed the three-year mark in January.

What made you start volunteering here?

I grew up a country kid in the area inland of San Diego and I developed a deep appreciation for nature. Going to museums and zoos were always my favorite outing trips when I was young. When I re-located to Gainesville, I wanted to establish some kind of link to UF because of my interest in attending here to finish my degree. The Museum was the "tractor beam" that I naturally gravitated to.

What do you do for the Museum?

My duties here presently involve working in the collections room assisting Dr. Sourakov in sorting and accessioning a large moth collection from Papua New Guinea. Of the 34,000 moths in the collection, I've sorted them down to approximately 4,083 species. I'm now in the process of pulling as many species representatives as possible for DNA bar coding referencing.

What kind of training did you receive when you first started volunteering?

I received a crash course in specimen collection acquisitions and how they're processed, and you also get a broad introduction to Lepidoptera taxonomy--which is a little overwhelming at first. A big help to the particular tasks I perform is being very meticulous with coordinated motor skills.

Has volunteering at the Museum helped you develop any new skills?

Working in the refrigerated collection room helps you hone your cold tolerance (grin). I eventually brought in a designated sorting jacket which makes the environment a lot more tolerable, but that just comes with the trade. What you gradually start to pick up are the characteristics of the Lepidoptera families the collections managers use to distinguish one family from another. Some of the unique features of some of the genera are just so unusual, it makes them easy to remember.

What activities are you involved in outside of the Museum?

Outside of my volunteer time. I work as a technician in a medical research lab at the College of Medicine where I take care of most of the lab management tasks. My boss, who's a neuroscientist, studies the neural circuitry involved in stress response and the mechanisms/ factors contributing to hypertension. Because it's physiologically linked, it's a field of research that doesn't really conform to the 9-5 time frame; and the duration of our experiments typically last weeks and months instead of hours and days. I don't know if you could call it a benefit or job "perk," but I normally get to handle brain tissue as part of my routine at work. (That's not something I usually walk up to every person and share!) Some of my other conventional hobbies include cooking and trying new recipes, and gardening--which is a whole other world in itself.

What do you enjoy the most about volunteering?

One of the most rewarding things in life is just contributing time to a much bigger worthy cause. What I like about the Museum environment is that you're constantly working around people who are very passionate about what they do; and it's just a welcome setting to be around. My biggest hindrance to the amount of time I can contribute to the Museum is my availability during the day; and I have to give honorable mention to Dr. James Hayden (the on-site curator for DPI) who I've coordinated with to go in and work late a couple of nights during the week. It's really given me an available window to getting the project finished around my demanding work schedule



Michael McCowan sorts moths in the collections.

Do you have any advice or words of wisdom for people thinking about volunteering here?

If I was "fresh off the bus from out-oftown" with an interest in nature and keen on volunteering at the Museum, I would do myself the favor and spend some time on the Museum website and just marvel at all the different departments. If you have an interest in a particular subject, I wouldn't let that stop you from trying to connect with one of the staff members through the volunteer coordinator about a possible position opening. The staff members that I've encountered are always welcoming and responsive to anybody willing to contribute time toward a big project they might be in the middle of. There are usually more projects than there are hands to do them.

VOLUNTEER PROFILE: Chris Simeur

How long have you been volunteering at the *Museum*?

About two and a half years.

What made you start volunteering here?

I'm a non-traditional biology student, returning to school after working in the medical field in the Shands Transplant program. It took me a while to realize that what I love to do is science and I think having the hands-on volunteer experience will help me. When I complete school I hope to work in science advocacy. Also, I grew up in a small, Midwest town in a time before internet. Museums gave me a chance to see more of the world.

What do you do for the Museum?

Currently, I am accessioning one of the donated collections. This involves adding labels and sorting a collection of butterflies and moths. These particular specimens resulted from rearing caterpillars in Costa Rica which was done to learn about life histories of these animals. The vouchers are deposited at this Museum in perpetuity because they will be safe here and accessible to researchers if questions arise.

Has volunteering at the Museum helped you develop any new skills?

The Museum has given me more focus and has made me a better student.

What activities are you involved in outside of the Museum?

Despite health issues due to cystic fibrosis (I had three organ transplants), I have a wide range of

VOLUNTEER PROFILE: Jane Blanchard

How long have you been volunteering at the Museum?

Four years.

What made you start volunteering here?

Before retiring I worked in neuro-anatomy for University Hospital in Stonybrook, NY. When we moved down here, I knew that I wanted to do something meaningful to keep busy.

What do you do for the Museum?

I curate the McGuire Center's collections for Dr. Keith Willmott. Also, I used to volunteer for Dr. Hongshan Wang in Paleobotany, but he was able to hire me part time last summer.

Has volunteering at the Museum helped you develop any new skills?

Before volunteering here I didn't know how butterfly collections worked and now I understand the process.

What activities are you involved in outside of the Museum

All of our hobbies focus on natural history. We're focused on butterflies, birds and plants. We like to make observations and have traveled both locally and internationally to observe butterflies.

What do you enjoy the most about volunteering?

I enjoy making order out of chaos. It's also impressive that the volunteer program is a coordinated system.



Chris Simeur works in the collections.

interests, from comics and Dragoncon to backpacking through Europe.

What do you enjoy the most about volunteering?

I really like all of my coworkers. I also enjoy seeing people getting paid for doing a job that I hope to have one day after graduation.





Jane Blanchard (top) curates ithomiine butterflies (bottom).



Horama oedippus (Central America)



Viviennea tegyra (Central America)



Trosia nigropunctigera (Central America)



Methona curvifascia (South America)



Tithorea tarricina (South America)



Veladyris pardalis (South America)



Volunteer Coordinator Amy Hester watches as volunteer Tomas Bustamante prepares specimens.



These moth specimens were collected by David Bauer and databased by Teena Jain.



Teena Jain works in the collections.

VOLUNTEER PROFILE: Tomas Bustamante

How long have you been volunteering at the Museum?

About two weeks

What made you start volunteering here?

I had some free time and I am graduating soon. I wanted to fill it with something that would be beneficial for me after I graduate, where I would be learning new skills and be involved with something that is close to my field of study. Plus, I love visiting the Museum and thought it would be a fun place to do this. So far, I haven't been disappointed.

What do you do for the Museum?

I spread butterflies and moths. It's really cool.

What kind of training did you receive when you first started volunteering?

I actually went to many of the training sessions for a lot of different volunteer positions. I got training on touring as a docent, interacting with people as a Butterfly Rainforest interpreter, and spreading and pinning butterflies and moths, which is what I decided to stick with.

VOLUNTEER PROFILE: Teena Jain

How long have you been volunteering at the *Museum*?

Almost a year.

What made you start volunteering here?

I received my Bachelor's degree in biology and Master's in zoology, so I always had a fascination with the natural world.

Did you go to UF for your Master's? No, it was from Harisignh Gour Universty in Sagar, India.

What was your specialty?

My main interest was wildlife conservation and I did a project on small mammals.

What do you do for the Museum?

I am data basing a large moth collection from California that was recently donated to the Museum.

What will be the outcome of this work?

I am working, together with my supervisor Dr. Andrei Sourakov, toward a publication that will list all the species collected by the now deceased David Bauer during a long survey. This is important for understanding community ecology.

What kind of training did you receive when you first started volunteering?

I was shown how to handle specimens, how to accession them into the collection (add special accession labels to the specimen on a pin), how to check the identifications using web-based resources, and how to enter data into spreadsheets.

Has volunteering at the Museum helped you develop any new skills?

I knew a little about spreading butterflies and moths before coming here, but I've since been able to refine that skill further.

What activities are you involved in outside of the Museum?

I am a senior zoology undergraduate student at UF. Also, and as corny as it might sound, I've devoted my life to the Lord Jesus Christ and am an active member in his church. Those two things are what take up most of my time outside of volunteering. Occasionally, I also like to play board games and card games when I do have spare time.

What do you enjoy the most about it?

I like the laid-back atmosphere and the sense of accomplishment I get from what I do.

Do you have any advice or words of wisdom for people thinking about volunteering here?

I would say to go to all of the training sessions for as many of the volunteer positions as you can to get exposed to as much as you can. Then, you can decide which of the volunteer opportunities fits you the best. That's where you focus afterward.

Has volunteering at the Museum helped you develop any new skills?

Yes, particularly handling the specimens and their identification.



This photograph illustrates the variation among specimens of *Hemileuca eglanterina*, a silk moth from California, in David Bauer's collection.

What do you enjoy the most about it?

I was especially excited to learn about the diversity of moths that is out there.

What activities are you involved in outside of the Museum?

I stay at home while my husband goes to UF to work on his Ph.D. I like reading and spend time on Facebook. But, I am hoping to pass my GRE exams and become a student in the Department of Entomology here.

Entomology? So, you are changing your area of study to insects? Did volunteering with the moth collection contribute to this decision?

Yes, to a great extent.

VOLUNTEER PROFILE: Rupali Pande

How long have you been volunteering at the *Museum*?

Just under a year.

What made you start volunteering here?

I wanted something to do while my husband was at UF finishing school.

What do you do for the Museum?

I pin specimens in the McGuire Center collection. What it means is that I prepare specimens that were stored dry in paper envelopes (sometimes for many years), so that they can be studied and housed in the main collection. The specimens are relaxed (hydrated) in a moist environment and become soft enough to be mounted on a spreading board. Then, when they are dry, I take them off the boards, add a label and they are ready to be curated into the collection.

What kind of training did you receive when you first started volunteering?

I received hands-on training when I first started in McGuire.

What activities are you involved in outside of the Museum?

I like watching comedy movies and shows. Also, I like crafting, baking and shopping.

What do you enjoy the most about volunteering?

I like the order and precision that the pinning offers. I am moving away to New Hampshire soon. I

VOLUNTEER PROFILE: Minjia Zhong

How long have you been volunteering at the Museum?

Three years

What made you start volunteering here?

I wanted to volunteer somewhere that I felt made a difference.

What do you do for the Museum?

As a JV, I started on the Discovery Cart and as an exhibit docent and camp assistant. I then moved to the McGuire Center's collections and am currently working in Dr. Kawahara's lab. I am creating wing vouchers, which means that when the DNA of the insect is used for the analysis, it corresponds to a voucher specimen. In this case, it is a pair of wings that are held inside a special holder and stored in an album. The DNA sequence that will be used in research can be traced back to this voucher as well as to its picture on the internet.

What kind of training did you receive when you first started volunteering?

All of the training has been very hands-on and straight forward.

Has volunteering at the Museum helped you develop any new skills?

Working in the DNA lab has given me skills I hope to use in college. I hope to attend Harvard or Yale and would like to work in science either in the medical or environmental engineering field. am going to miss my volunteering, but hopefully I will find something similar there. I really had good time preparing specimens and am thankful for the wonderful opportunity to work in the Museum. I hope that I did good work.



Rupali Pande prepares moth specimens.

What activities are you involved in outside of the Museum?

I enjoy playing the piano, drawing and reading.

What do you enjoy the most about volunteering?

I enjoy learning and helping. Working in the molecular biology lab makes me feel like I'm helping the Museum overall and not just the summer camps.

Do you have any advice or words of wisdom for people thinking about volunteering here? Do it if you like it. Don't force yourself for a resume.



Junior volunteer Minjia Zhong works in the collections.



Mating Zygaena carniolica moths (Russia)



Lysandra coridon (Russia)



Pale Tussock moth caterpillar, *Calliteara* pudibunda (Russia)



Thecla betulae hairstreak (Russia)



Coenonympha pamphilus lyllus (Armenia)



athodes designalis (Florida)



cles imperialis (Florida)



liothis subflexa (Florida)



etheisa ornatrix (Florida)

VOLUNTEER PROFILE: Yuxin Zhang

How long have you been volunteering at the Museum?

I have been volunteering at the Museum the past three summers.

What made you start volunteering here?

I started volunteering here because I heard that the program was an enjoyable experience with many opportunities to learn while a great way to earn volunteering hours for my school.

What do you do for the Museum?

Throughout these years, I have helped out in the Discovery Room, shown visitors around the Butterfly Rainforest, and assisted in the butterfly collections.

What kind of training did you receive when you first started volunteering?

I received training to help me greet strangers and to familiarize myself with the various exhibitions in the Museum.

Has volunteering at the Museum helped you develop any new skills?

Volunteering here has taught me how to care for butterflies in a controlled environment as well as the right way to preserve them. It has also made me more outgoing when meeting new people.

What activities are you involved in outside of the *Museum*?

Outside the Museum, I'm working hard at the I.B. Program at Eastside High School. In my spare time, I like to run and also play with the local youth orchestra.

VOLUNTEER PROFILE: Natasha Cruz

How long have you been volunteering at the Museum?

I've volunteered as a JV for four summers. Before that, I attended the summer camps and was a purple panther.

What made you start volunteering here?

I started volunteering here because when I was attending the summer camps I wanted to be a JV. It always looked like they were having a blast.

What do you do for the Museum?

I worked the fossil cart, as a Butterfly Rainforest interpreter, with the summer camps and pinning specimens in McGuire Center collections.

What kind of training did you receive when you first started volunteering?

I received hands-on training. Mr. Craig Segebarth in the McGuire Center was very patient with all of us when teaching us how to pin. There was also on-thejob training. It is especially important to have a good memory when working in the Butterfly Rainforest.

Has volunteering at the Museum helped you develop any new skills?

Volunteering has helped me learn to be more patient and sociable. I enjoy interacting with people. It also taught me to always act professionally because you never know who you are talking to.



Yuxin Zhang prepares moths in the McGuire Center collections.

What do you enjoy the most about volunteering?

The thing I enjoy most is the variety of people I have a chance to meet and work with. Personally, I like working in the butterfly collections the most since it's peaceful, quiet and intriguing.

Do you have any advice or words of wisdom for people thinking about volunteering here?

For someone who's thinking about volunteering here, I would tell them that there are many different ways to help out at the Museum, and they should find the one that they enjoy the most!



Natasha Cruz has worked four summers as a junior volunteer.

What activities are you involved in outside of the Museum?

I am very academically focused. For college, I want to major in biology and then attend vet school. But I also make time to hang out with my friends.

What do you enjoy the most about volunteering? I enjoy meeting all types of people, both employees and visitors.

Do you have any advice or words of wisdom for people thinking about volunteering here?

You need to be ready to learn quickly and know that you're going to have to interact with people.







Actias luna (Florida)







Enyo lugubris (Florida)



Argyrostrotis anilis (Florida)



Antheraea polyphemus







JUNIOR VOLUNTEERS

The Museum recruited Junior Volunteers to work in the McGuire Center collections for the first time during the summer of 2011. Of the more than 100 applicants, 25 were selected and trained to handle delicate specimens. The students learned to prepare dried moth specimens collected in light traps as part of a biodiversity survey of the Gainesville area. The volunteers worked in small groups during half-day sessions, usually for two to three weeks, to pin and label more than 5,000 specimens which were added to the collection. The work of these Junior Volunteers is greatly appreciated.



Recent Publications (2011-2012)

Atwater, M. M., and T. Lott. 2011. A simple technique to sample pollen from moths and its applications to ecological studies. Journal of the Lepidopterists' Society, 65(4): 265-267.

Bolaños M., I. A., G. G. Zambrano, and K. R. Willmott. 2011. Descripción de los estados inmaduros de *Pteronymia zerlina zerlina, P. zerlina machay, P. medellina y P. veia* n. ssp. (Lepidoptera: Nymphalidae: Ithomiini) de Colombia y del Ecuador. Tropical Lepidoptera Research, 21: 27-33 (June).

Calhoun, J. V., and **A. D. Warren**. 2011. Clement W. Baker (1886-1959) and the transfer of his Lepidoptera collection to the McGuire Center. News of the Lepidopterists' Society, 53(1):26-28.

Cho, S., A. Zwick, J. C. Regier, C. Mitter, M. P. Cummings, J. Yao, Z. Du, H. Zha, **A. Y. Kawahara**, S. Weller, D. R. Davis, J. Baixeras, J. W. Brown, and S. Parr. 2011. Can deliberately incomplete gene sample augmentation improve a phylogeny estimate for the advanced moths and butterflies (Hexapoda: Lepidoptera)? Systematic Biology, 60(6): 782-796.

Covell, Charles V. Jr. 2011. *Idaea asceta* (Prout) (Geometridae: Sterrhinae) from Texas, new to the North American fauna. News of the Lepidopterists Society, 53 (3): 79, 2 figs.

Dickel, T. S., and J. B. Heppner. 2011. Notes on *Gondysia consobrina*, *G. smithi* and *G. telma*in Florida (Lepidoptera: Noctuidae: Catocalinae: Euclidiini). Lepidoptera Novae (Gainesville), 4(1):55-56.

Dinca, V., **V. A. Lukhtanov**, G. Talavera, R. Vila. 2011. Unexpected layers of cryptic diversity in Wood White *Leptidea* butterflies. Nature Communications, 2: 234 (DOI: 10.1038/ ncomms1329).

Emmel T. C., J.C. Daniels. 2011. Biology and ecology: Fact Sheet on the Jamaican Giant Swallowtail butterfly. Pp. 9-13. *In* Proceedings of the Symposium on the Conservation of the Homerus Swallowtail and Cockpit Country, Jamaica. Kingston, Jamaica April 19, 2010. 32 pp. Fribourg, Switzerland.

Gompert, Z., **K. R. Willmott**, and M. Elias. 2011. Heterogeneity in predator micro-habitat use and the maintenance of Müllerian mimicry diversity. Journal of Theoretical Biology, 281: 39-46 (April).

Greeney, H. F., and **A. D. Warren.** 2011. The natural history, immature stages, and shelter building behavior of *Dion carmenta* (Lepidoptera: Hesperiidae: Hesperiinae) in eastern Ecuador. Annals of the Entomological Society of America, 104(6):1128-1134.

Han, H. L., Y. S. Park, B. W. Lee, **K. T. Park**. 2011. Description of *Sabra harpagula euroista* subsp. nov. from Korea (Lepidoptera, Drepanidae). SHILAP Revta. lepid., 39: 345-350.

Hay-Roe, M.M., R. L. Meagher and R.N. Nagoshi. 2011. Effects of cyanogenic plants on fitness in two host strains of the fall armyworm (*Spodoptera frugiperda*). Journal of Chemical Ecology, 37:1314-1322.

Hayden, J. E. 2011. Revision of *Cliniodes* Guenée (Lepidoptera: Crambidae: Odontiinae). Annals of Carnegie Museum, 79(4):231-347.

Hayden, J.E., P. Dennehy & J. Vargo. 2011. *Pyrausta cardinalis*, a new continental record (Lepidoptera: Crambidae). News of the Lepidopterists' Society, 53(2):58-59.

Heppner, J. B. 2011. A new *Odites* from Malawi (Lepidoptera: Lecithoceridae: Oditinae). Lepidoptera Novae (Gainesville), 4(1):51-54.

Heppner, J. B. 2011. Guatemala moth notes, 5. Lychnocrates leucocapna in Guatemala and

Belize (Lepidoptera: Oecophoridae: Stenomatinae). Lepidoptera Novae (Gainesville), 4(1):33-36.

Heppner, J. B. 2011. New records of *Choristoneura argentifasciata* from the southeastern United States (Lepidoptera: Tortricidae). Lepidoptera Novae (Gainesville), 4(1):50.

Heppner, J. B. 2011. Notes on the East Asian genus *Lepidotarphius* (Lepidoptera: Glyphipterigidae). Lepidoptera Novae (Gainesville), 4(1):27-31.



Remarkable chromosome change was described in these and other *Leptidia* butterflies by Lukhtanov et al. in 2011.

Heppner, J. B. 2011. Panama research at 100: Smithsonian Tropical Research Institute and Panama biodiversity. Lepidoptera Novae (Gainesville), 4(1):1-8.

Heppner, J. B. 2011. Lepidoptera of Florida checklist. Lepidoptera Novae (Gainesville), 4(2-4):61-192.

Heppner, J. B. 2011. Nearctic metalmark moths, 3. Genus Anthophila (Lepidoptera: Choreutidae: Choreutinae). Lepidoptera Novae (Gainesville), 4(1):9-18.

Heppner, J. B. 2011. Notes on *Hyperskeles* choreutidea in Argentina and Chile (Lepidoptera: Oecophoridae: Oecophorinae). Lepidoptera Novae (Gainesville), 4(1):60.

Heppner, J. B. 2011. Notes on leg and wing ornamentation in tropical longhorned moths (Lepidoptera: Lecithoceridae). Lepidoptera Novae (Gainesville), 4(1):26.

Heppner, J. B. 2011. Notes on *Philtonoma roseicorpus* in Panama and the Neotropics (Lepidoptera: Oecophoridae: Depressariinae). Lepidoptera Novae (Gainesville), 4(1):21-25.

Heppner, J. B. 2011. *Profilinota* in Ecuador, with notes on female *P. notaula* (Lepidoptera: Oecophoridae: Depressariinae). Lepidoptera Novae (Gainesville), 4(1):19-20.

Heppner, J. B. 2011. The genus *Homadaula* and *Homadaula anisocentra*, the mimosa webworm (Lepidoptera: Urodidae: Galacticinae). Lepidoptera Novae (Gainesville), 4(1):37-49.

Heppner, J. B. 2011. Wing fringes in microlepidoptera and *Stathmopoda* moths (Lepidoptera: Oecophoridae: Oecophorinae: Stathmopodini). Lepidoptera Novae (Gainesville), 4(1):32. **Kawahara, A. Y.** 2011. Review of A. Martin, Soares, J. A. Bizarro. Guide to the hawkmoths of the Serra dos Órgãos, South-eastern Brazil. Tropical Lepidoptera Research, 21(2): 105.

Kawahara, A. Y. 2011. Review of M. R. Goldsmith and F. Marec. (eds). Genetics and Molecular Biology of Lepidoptera. Florida Entomologist, 94(1): 119-120.

Kawahara, A.Y., T. C. Emmel, J. Y. Miller, and A. D. Warren. 2012. A new institution devoted to insect science: The Florida Museum of Natural History, McGuire Center for Lepidoptera and Biodiversity. Insect Science, 10: 1-3.

Kawahara, A. Y., K. Nishida, and D. Rubinof. 2011. The behavior of the Hawaiian dancing moth, *Dryadaula terpischorella* (Lepidoptera: Tineidae). Journal of the Lepidopterists' *Society*, 65(2): 133-135.

Kawahara, A. Y., and D. Rubinoff. 2012. Three new species of Hawaiian Fancy Case caterpillars from threatened forests of Hawaii (Lepidoptera: Cosmopterigidae: *Hyposmocoma*). ZooKeys, 170: 1-20.

Kawahara, A. Y., I. Ohshima, A. Kawakita, C. Mitter, J. C. Regier,, D. Davis, D. L. Wagner, J. De Prins, and C. Lopez-Vaamonde. 2011. Increased gene sampling strengthens support for higher-level groups within leaf-mining moths and relatives (Lepidoptera: Gracillariidae). BMC Evolutionary Biology, 11:182. DOI:10.1186/1471-2148-11-182.

Kawahara, A.Y., N. Tangali., and D. Rubinoff. 2011. Life-history notes on the fern-mining endemic *Hyposmocoma* (*Euperissus*) *trivitella* Swezey 1913 (Lepidoptera: Cosmopterigidae) from Kauai and a report of associated parasitoids (Hymenoptera: Bethylidae). Proceedings of the Hawaiian Entomological Society, 43: 9-12.

Landry, B., L. Roque-Albelo, and **J. E. Hayden**. 2011. A new genus and species of Spilomelinae (Lepidoptera, Pyralidae) from the Galapagos Islands, Ecuador. Revue suisse de zoologie (Genève), 118(4):639-649.

Lehnert, M. S., B. O. Balaban, and **T. C. Emmel**. 2011. A New Method for Quantifying Color of Insects. Florida Entomologist, 94(4): 201-207.

Lewis, D. S., J. Cuda, and B. R. Stevens. 2011. A Novel Biorational Pesticide: Efficacy of Methionine Against *Heraclides (Papilio) cresphontes*, a Surrogate of the Invasive *Princeps (Papilio) demoleus* (Lepidoptera: Papilionidae). Journal of Economic Entomology, 104(6):1986-1990.

Lewis, D. S. 2011. Lepidoptera Identification Workshop Manual. Regional Lepidoptera Identification Workshop, St. Georges University, Grenada, Sept. 19-23, 2011.

Lewis, D. S. 2011. User's Manual for the Motorized Microptic Camera System. McGuire Center for Lepidoptera and Biodiversity, Florida Museum of Natural History, University of Florida.

Lukhtanov, V.A., V. Dinca, G. Talavera, R. Vila. 2011. Unprecedented within-species chromosome number cline in the Wood White butterfly *Leptidea sinapis* and its significance for karyotype evolution and speciation. BMC Evolutionary Biology, 11:109 (doi:10.1186/1471-2148-11-109).

Lukhtanov, V.A. 2011. Geography of speciation in butterflies (Lepidoptera, Papilionoidea): empirical test of theoretical models. Entomol. Obozr., 90 (4): 809 - 820.

Matthews, D. L., and R. A. Watkins. 2011. Extralimital records of the sage plume moth, *Anstenoptilia marmarodactyla* (Lepidoptera: Pterophoridae). Southern Lepidopterists' News, 33(4): 175-177.

Recent Publications (2011-2012)

Matthews, D. L., J. Y. Miller, and J. Razowski. 2011. Scientific note: *Mictopsichia cubae* recorded from Honduras (Lepidoptera: Tortricidae). Tropical Lepidoptera Research, 21(1): 43-45.

Miller, J. Y., D. L. Matthews, A. D. Warren, M. A. Solis, D. J. Harvey, P. Gentili-Poole, R. Lehman, T. C. Emmel, and C. V. Covell. 2012. An annotated list of the Lepidoptera of Honduras. Insecta Mundi, 0205: 1-72.

Mitter, K. T., T. B. Larsen, S. Collins, G. Vande Weghe, J. De Prins, W. De Prins, S. Sfian, E. Zakharov, D. J. Hawthorne, **A. Y. Kawahara**, and J. C. Regier. 2011. Genetic evidence for multiple cryptic species of *Pseudopontia* (Pieridae: Pseudopontiinae). Systematic Entomology, 36(1): 139-163.

Moraes, S. S., M. Duarte, **J. Y. Miller**. 2011. Revision of the Neotropical genus *Yagra* Oiticia (Lepidoptera: Castniidae). Journal of Natural History, Nos. 25-28: 1511-1531.

Nieukerken, E.J., **K. T. Park** et al. 2011. In: Zhang, Z.-Q (Ed.). Lepidoptera for Zootaxa Animal Classification. Zootaxa, 3148: 212-221.

Nieukerken, E.J., L. Kaila, I. J. Kitching, N. P. Kristensen, D. C. Lees, J. Minet, C. Mitter, M. Mutanen, J. C. Regier, T. J. Simonsen, N. Wahlberg, S.-H. Yen, R. Zahiri, D. Adamski, J. Baixeras, D. Bartsch, B. A. Bengtsson, J. W. Brown, S. R. Bucheli, D. R. Davis, J. De Prins, W. De Prins, M. E. Epstein, P. Gentili-Poole, C. Gielis, P. Hättenschwiler, A. Hausmann, J. D. Holloway, A. Kallies, O. Karsholt, A. Y. Kawahara, S. J. C. Koster, M. Kozlov, J. D. Lafontaine, G. Lamas, J. F. Landry, S. Lee, M. Nuss, K. T. Park, C. Penz, J. Rota, B. C. Schmidt, A. Schintlmeister, J. C. Sohn, M. A. Solis, G. M. Tarmann, A. D. Warren, S. Weller, R. V. Yakovlev, V. V. Zolotuhin, and A. Zwick, 2011. Order Lepidoptera Linnaeus, 1758. In: Zhang, Z.-Q. (Ed.), Animal biodiversity: An outline of higher-level classification and survey of taxonomic richness. Zootaxa, 3148: 212-221

Núñez Bustos E., P. Favre, M. P. Bertolini, J. D. Turner, and A. Sourakov. 2011. Mariposas diurnas (Lepidoptera: Papilionoidea y Hesperioidea) de la reserva privada Osununu-Parque Provincial Teyu Cuare y alrededores de San Ignacio, Provincia de Misiones, Argentina. Tropical Lepidoptera Research, 21(1): 34-42.

Park, K. T. 2011. Lecithoceridae (Lepidoptera, Gelechioidea) of New Guinea, Part III: *Scolizona* with description of two new species. Florida Entomol., 94(2): 303-310.



Hyposcada illinissa is a member of the caterpillar mimicry complex described by Willmott et al in 2011.



This photograph was taken along the Gualaceo-Limon Road in Ecuador.

Park, K. T. 2011. Two new species of the genus *Telephata* Meyrick (Lepidoptera, Lecithoceridae) from Papua New Guinea with notes on *T. nitens* (Daikonoff), comb. nov. Ent. Science, 14: 82-86.

Park, K. T. 2011. Lecithoceridae (Lepidoptera, Gelechioidea) of New Guinea, Part V: Descriptions of Two New Genera, *Neotimyra* gen. nov. and *Strombiola* gen. nov. J Asia-Pac. Entom., 14: 417-421.

Park, K. T. 2011. Lecithoceridae (Lepidoptera, Gelechioidea) of New Guinea, Part IV: Genus *Pectinimura* Park, with descriptions of four new species and four new combinations. Zootaxa, 3040: 43-54.

Park, K. T. 2011. Lecithoceridae (Lepidoptera, Gelechioidea) of New Guinea, Part VII: *Crocanthes pancala* species complex in New Guinea and Australia. Florida Ent., 94:779-786.

Park, K. T. 2011. Three new species of Lecithoceridae from New Guinea (Lepidoptera). Lep. Novae, 4: 57-59.

Park, K. T. 2012. Lecithoceridae (Lepidoptera, Gelechioidea) of New Guinea, Part VI: *Lecithocera sublunata* species complex. Ent. Sci., 15: 68-73.

Park, K. T., Y. D. Kwon, M. Y. Kim, and E. M. Ji. 2011. A review of *Oreta* Walker in Korea (Lepidoptera, Drepanidae), with description of a new species. J. Asia-Pacific Entom., 14: 311-316.

Pyrcz, T., H. F. Greeney, **K. R. Willmott**, and J. Wojtusiak. 2011. A taxonomic revision of the genus *Daedalma* Hewitson with the descriptions of twenty new taxa and the immature stages of two species (Lepidoptera: Nymphalidae: Satyrinae). Zootaxa, 2898: 1-68 (May).

Rosser, N., A. B. Phillimore, B. Huertas, K. R. Willmott, and J. Mallet. 2012. Testing historical explanations for gradients in species richness in heliconiine butterflies of tropical America. Biological Journal of the Linnean Society, 105: 479-497 (January) DOI: 10.1111/j.1095-8312.2011.01814.x.

Rubinoff, D., M. San-Jose, and **A. Y. Kawahara**. 2012. Phylogenetics and species status of Hawaii's endangered Blackburn's Sphinx Moth, *Manduca blackburni* (Lepidoptera: Sphingidae). Pacific Science, 66(1): 31-41.

Sourakov, A. 2011. Faster than a flash: the fastest visual startle reflex response is found in a long-legged fly, *Condylostylus* sp. (Dolichopodidae). Florida Entomologist, 94(2): 367-369.

Sourakov, A. 2012. Erythrina moths: *Terastia meticulosalis* Guenée and *Agathodes designalis* Guenée (Lepidoptera: Crambidae: Spilomelinae). *Featured Creatures* Website, http://entnemdept. ufl.edu/creatures/, University of Florida. Publication Number: EENY-516. **Sourakov, A.** 2011. Niche partitioning, coevolution and life histories of Erythrina moths, *Terastia meticulosalis* and *Agathodes designalis* (Lepidoptera: Crambidae). Tropical Lepidoptera Research, 21(2): 84-94.

Sourakov, A. 2011. Report of partial bilateral gynandromorph of *Dismorphia spio* with notes on adult sexual dimorphism and illustrations of immature stages. J. Lepidopterists' Society, 65(3): 196-199.

Sourakov A., and E. V. Zakharov. 2011. "Darwin's butterflies"? DNA barcoding and the radiation of the endemic Caribbean butterfly genus *Calisto* (Lepidoptera, Nymphalidae, Satyrinae). Comparative Cytogenetics, 5: 191-210. doi: 10.3897/compcytogen.v5i3.1730

Trager, M.D., and **J.C. Daniels**. 2011. Size effects on mating and egg production in the Miami blue butterfly. Journal of Insect Behavior, 24:34-43.

Warren, A. D. 2011. A new species of *Atryto-nopsis* from Jalisco, Mexico (Lepidoptera, Hesperiidae, Hesperiinae, Heseriini). Tropical Lepidoptera Research, 21(1):1-6.

Warren, A. D. 2011. Comments on the proposed designation of a neotype for the nominal species *Chionobas chryxus* Doubleday, 1849 (currently *Oeneis chryxus*; Insecta, Lepidoptera, Nymphalidae) (Case 3495; see BZN 67:121-128). Bulletin of Zoological Nomenclature, 68(2):137-138.

Warren, A. D., and J. V. Calhoun. 2011. Notes on the historical occurrence of *Aphrissa neleis* in southern Florida, USA (Lepidoptera, Pieridae, Coliadinae). News of the Lepidopterists' Society, 53(1):3-7.

Warren, A. D., and J. V. Calhoun. 2012. A treasure hidden in plain sight: *Aphrissa neleis* is a resident in southern Florida, USA (Lepidoptera: Pieridae: Coliadinae). News of the Lepidopterists' Society, 53(4):133-134.

Warren, A. D., and R. G. De la Maza. 2011. A new species of *Dalla* from Chiapas, Mexico (Lepidoptera, Hesperiidae, Heteropterinae). Tropical Lepidoptera Research, 21(1):7-11.

Warren, V., J. C. Daniels, and D. A. Hahn. 2011. Aquatic Respiration as a Potential Survival Mechanism of *Brephidium pseudofea* (Lepidoptera: Lycaenidae) Larvae to Intertidal Environments. Environmental Entomology, 40:1295-1302.

Willmott, K. R., M. Elias, and A. Sourakov. 2011. Two possible caterpillar mimicry complexes in neotropical danaine butterflies (Nymphalidae, Danainae: Danaini, Ithomiini). Annals of the Entomological Society of America, 104: 1108-1118 (December).

MCGUIRE CENTER SEMINAR SCHEDULE, FALL SEMESTER, 2011

Sept. 13. John Heppner, Akito Kawahara, Jaret Daniels and Geoff Gallice, The McGuire Center: **"What I Did Last** Summer."

Sept. 27: Charlie Covell, The McGuire Center: "The 2011 Lepidopterists' Society Annual Meeting and Earlier Meetings: Notes in Preparation for Our 2013 Annual Meeting."

Oct. 11: Andy Warren, The McGuire Center: **"Colorado Butterflies 2011, With Tips on Live Butterfly Photography."**

Oct. 18: Sandy Koi, Department of Entomology & Nematology: **"Biology and Conservation of Eumaeus atala in South Florida."**

Nov. 1: Marc Minno, Gainesville, Fla.: **"Butterfly** Decline in the Florida Keys."

Nov. 15: Andrei Sourakov, The McGuire Center: "Darwin's Butterflies? Spectacular Species Radiation in the Caribbean Studied with 'DNA Barcoding.' "

Nov. 29: Glenn Hall, UF Dept. of Entomology & Nematology: **"Research on Native Bees at the University of Florida."**

Dec. 6: Krushnamegh Kunte, Harvard University: **"Natural** Selection, Evolution, and Genetics: Lessons from Butterfly Mimicry."

Staff News

Courses Taught - Delano Lewis replaced Jaret Daniels teaching Insect Conservation, and Daniels has been helping with the transition. In September 2011, Lewis also served as a facilitator in the Regional Lepidoptera Identification Workshop at St. George's University, Grenada. In January 2011, Debbie Matthews conducted a Lepidoptera Workshop for children of the U.S. military at the Guantanamo Bay Naval Base. In spring 2011, Keith Willmott taught a course in evolutionary biogeography with Nico Cellinese, Florida Museum assistant curator of informatics, in the University of Florida Department of Biology. Willmott also co-taught Biology of Lepidoptera with Andrei Sourakov during spring 2012 in the UF Department of Entomology & Nematology. Vladimir Lukhtanov, who has been working part of the year in the McGuire Center, taught two courses in his native Russia: Molecular Evolution and Phylogenetics and Molecular Systematics. Daniels once again taught a highly popular Grant Writing course.

Grants Received - Akito Kawahara received a National Science Foundation Research Experience for Undergraduates Supplement aimed at involving undergraduates in research. He also was PI on an NSF-funded Integrative Organismal Systems Grant to study ultrasonic stridulation in hawkmoths (behavior aimed at avoiding bats). A grant from the Florida Museum allowed Kawahara to expand DNA storage and use of the McGuire Center Molecular Laboratory. Kawahara also received a Franklin Research Grant from the American Philosophical Society for his research on hawk moths. Vladimir Lukhtanov received a travel grant from the Russian Foundation for Basic Research for his expedition to study reproductive isolation in blue butterflies. The same foundation funded his research on taxonomical diversity and distributional patterns of Lepidoptera in the Russian Federation. Jaret Daniels received a grant for Operation Pollinator Florida from the Coalition for Urban Rural Environmental Stewardship, and



Daphnis nerii (Israel)

funding from the Florida Wildflower Foundation for the Plant for Wildlife project. Daniels also serves as a co-PI on a U.S. Fish and Wildlife Foundation grant to evaluate native and non-native plants (seed mixtures) in agricultural landscapes for the conservation of pollinators. He will continue surveys of the endangered Miami Blue and Schaus Swallowtail butterflies with funding from two additional U.S. Fish and Wildlife Service grants. Delano Lewis is a co-PI on another of Daniel's Florida Department of Transportation grants for a Roadside Vegetation Management/ Pollinator Study aimed at exploring the effect of roadside mowing and wildflower augmentation on native pollinators.

Collecting Expeditions and Fieldwork – During the past year, John Heppner worked in Cambodia, Guatemala, Panama, Peru and Vietnam, and visited the collections of the Smithsonian National Museum of Natural History in Washington, D.C. Akito Kawahara worked in Ecuador, Hawaii and Malaysia. Debbie Matthews and Jacqueline Miller went on collecting trips to the Bahamas and Honduras. They also took the resulting specimens for identification to the Smithsonian and worked briefly at the museum of Escuela Agrícola Panamericana in Zamorano, Honduras. Keith Willmott conducted field work in Ecuador in July and August, while Vladimir Lukhtanov worked in the mountains of Kazakhstan. Andy Warren worked in North Carolina's Outer Banks and Colorado. Warren also led an expedition to Isla de Cedros in Baja California, Mexico. James Hayden, Kawahara and Andrei Sourakov conducted fieldwork throughout Florida, studying the state's diverse moth fauna.

Awards – Akito Kawahara received a John Henry Comstock Award from the Entomological Society of America. He also received the Alexander B. Klots Award from the Lepidopterists' Society of America, and Henry H. Work Science Award from the Cosmos Club Foundation in Washington, D.C. Kawahara was also named a Joint Assistant Professor in the UF departments of Biology and Entomology & Nematology, and the School of Natural Resources and Environment. Miller also was named an honorary Life Member of the Lepidopterists' Society of America.

Conferences – Jackie Miller and **Debbie Matthews** served as program co-chairs for the **Southern Lepidopterists' Society/Association for Tropical Lepidoptera** annual meeting held at the McGuire Center in October, which attracted nearly 50 participants and featured 20 presentations, many from McGuire Center faculty and staff. **Keith Willmott** presented on the *Evolutionary history and the equatorial peak in Neotropical butterfly species richness*, and **Miller** and **Matthews** presented about Lepidoptera associated with the plant genus *Melanthera* in northern Honduras. **Andy Warren** also gave a talk about a Crystal Skipper – the East Coast's only endemic sand dune obligate

Staff News

butterfly, and another talk about Euphilotes Blues of the Pacific Northwest. Warren also presented a talk at the 60th Annual Meeting of The Lepidopterists' Society at Yale University about the progress and goals of The Butterflies of America website, which he co-authors with several others. This website currently includes 7,000 species, features 167,000 images and is considered by many the greatest resource of its kind. Miller and Matthews also co-presented at the annual meeting of the Entomological Society of America in Reno, Nev., on the cacao plume moth in Honduras. Akito Kawahara co-authored presentations with Dan Rubinoff from the University of Hawaii about their work on evolution and conservation of Hyposmocoma moths in Hawaii. They also presented at the Pacific Entomological Society Conference in Honolulu, at the Entomological Society of America annual meeting in Reno, Nev., and at the Southern Lepidopterists' Society/Association for Tropical Lepidoptera conference. Kawahara also spoke about the megadiverse radiation of butterflies and moths during his seminar at the UF Department of Biology. During the Florida Museum's ButterflyFest, he delivered an address about The butterflies and moths of Japan: Japanese culture, collecting, and research. Kawahara also co-authored a presentation on rapid taxonomic inventory in French Guiana via DNA barcoding at the European Congress of Lepidopterology in Luxembourg. Vladimir Lukhtanov spoke about genetic and ecological mechanisms of speciation in insects and about modern methods of systematics at the conference titled "Basic problems of entomology in the 21st century" in St. Petersburg, Russia, in May. He also co-authored presentations on Exploring ecological causes behind the Palaearctic radiation of the Polyommatus blues at the meeting of the Zoological Society of London and on Agrodiaetus Blues at the International Conference on Biological Diversity and Conservation Problems of the Fauna of the Caucasus that took place in Armenia in September 2011. Charles Covell presented at the February 2012 biennial meeting of Forum Herbulot in South Africa. He also gave a report on his Lepidoptera survey visit to the Cosnipata Valley in Peru during the Lepidopterists' Society Annual Meeting. James Hayden spoke at the Southern Lepidopterists' Society/ Association for Tropical Lepidoptera meeting about Penestola and Sufetula crambid moths in Florida and at the Entomological Society of America meeting on systematics of the European Pepper Moth. Mirian Hay-Roe spoke about butterfly farming in the Yanesha Native Community in Peru during the Southern Lepidopterists' Society/Association for Tropical Lepidoptera meeting, and gave a presentation to teachers at the Florida Museum of Natural History about acoustic signals in Lepidoptera.

New Projects – Akito Kawahara started several new projects on the evolution of hawkmoth and leafminers. The Kawahara Lab currently includes 13 students working on various projects pertaining to Lepidoptera evolution. Debbie Matthews, Jackie



Caterpillar of D. nerii

Miller and other Florida Museum colleagues initiated an inventory of Lepidoptera on the Guantanamo Bay Naval Base, Cuba. Miller also began collaboration with the America Public University in Liberia by identifying Lepidoptera specimens from various forests in this country. Vladimir Lukhtanov continues his work on chromosome evolution and speciation in the butterfly genus Leptidea that has recently received extensive attention after being featured in prominent scientific journals including Nature Communications and BMC Evolutionary Biology. Jaret Daniels completed the third year of the Imperiled Butterfly Conservation and Management program funded by the Institute of Museum and Library Services, an intensive training program designed for staff members of zoos, natural history museums, botanical gardens and state and federal wildlife agencies in butterfly conservation. Mirian Hay-Roe is working on haplotype analysis to map migration patterns of the fall armyworm moths. She has also developed a new protocol for lipid analysis to understand the patterns of lipid utilization of the moth during migration.



Proserpinus roserpina (Russia)

MCGUIRE CENTER SEMINAR SCHEDULE SPRING SEMESTER, 2012

Jan. 10. Sora Kim, University of Seoul, Korea: **"Systematics** of Microlepidoptera Families Oecophoridae and Pterophoridae in Korea."

Jan. 24. Keith Willmott, The McGuire Center: "The Use of DNA Sequence Data in Andean Butterfly Taxonomy: Panacea, or Pandora's box?"

Feb. 7: Andrei Sourakov, The McGuire Center: **"Lunchtime Research Behind the Museum: Niche Partitioning, Coevolution and Life Histories of Erythrina Moths.**"

Feb. 21: J.D. Turner, The McGuire Center: **"Territorial Behavior in Butterflies."**

March 13: Jennifer Gillett-Kaufman, UF Department of Entomology & Nematology: "University of Florida's Natural Area Teaching Lab: Biodiversity and Use."

March 27: Charles V. Covell Jr., The McGuire Center: "Report on the Recent Forum Herbulot Meeting of Geometrid Moth Specialists at a South African Biodiversity Center."

April 10: David L. Wagner, University of Connecticut. "Barking up New Trees -Letting Immatures (Caterpillars) Have their Say."

April 24: Lary Reeves, UF Department of Entomology & Nematology. "Lepidoptera and Ecological Issues of the Philippine Archipelago."



McGuire Center for Lepidoptera and Biodiversity Florida Museum of Natural History University of Florida Cultural Plaza PO Box 112710 Gainesville, FL 32611-2710





New Guinea moths (see p. 2)



Preparing specimens (see p. 5)



McGuire Center in the News

Delano Lewis was featured in UF News and other media outlets including WCJB-TV 20 for his discovery of a "green" pesticide effective against citrus pests. A paper on systematics of *Calisto* butterflies as an example of the utility of barcoding methodology for taxonomy by **Andrei Sourakov** was featured in *Current Biology* and on many websites including *Science Daily*. An article on caterpillar mimicry that Sourakov co-authored with **Keith Willmott** and Marianne Elias from the Muséum National d'Histoire Naturelle in Paris was featured in UF News, *Science Daily* and other media outlets.

Graduate Student News

Geoff Galice received a travel grant from UF's Graduate Student Council, a research fellowship from the Organization for Tropical Studies and a scholarship from Innovation through Institutional Integration. He gave an invited talk at the Organization for Tropical Studies, Heredia, Costa Rica, On the Relationship Between Abundance and Distribution of Neotropical Butterflies (Nymphalidae: Ithomiini) and the same presentation at the Ecological Society of America annual meeting in Austin, Texas. He also was a winner in the Faces of Biology Photo Contest organized by the American Institute of Biological Sciences. Galice conducted fieldwork in Costa Rica, Panama, Peru and Puerto Rico, and gave an invited guest lecture and lab on Insect Sampling Techniques and Applications in the UF Department of Wildlife Ecology and Conservation. In addition to his work on butterflies, Galice started a new project on non-target effects of introduced parasitoids on native saturniid moths in North Florida. Sebastián Padrón visited a number of collecting sites in Ecuador for his work on the butterfly genus Catasticta. Elena Ortiz graduated with her Master's degree and was admitted to the Ph.D. program in the UF Department of Entomology & Nematology with a research assistantship in the McGuire Center. She received a grant from the Center for Systematic Entomology and an award from the Systematics Research Fund to support her Master's project titled "Molecular Systematics of the Butterfly Tribe Preponini (Nymphalidae: Charaxinae)." She also presented results of her Master's research at the Southern Lepidopterists' Society/Association for Tropical Lepidoptera annual meeting. Montana Atwater successfully defended her thesis, "Diversity and Pollination Ecology of Small Flower Settling Moths within Florida Sandhill Ecosystems." She joined her husband and former McGuire Center student, Christian Salcedo, at the Chinese Academy

of Sciences, Institute of Zoology, in Beijing, China, working as a visiting scholar, editing manuscripts and tutoring students in scientific writing. She also met with the Lepidoptera Systematics Group to discuss the Chinese moth fauna and to assist with preparation of microlepidoptera. Recently, **Salcedo** finished his



This satyrine butterfly caterpillar was found during a field trip to Zamora, Ecuador.

postdoctoral appointment at the **Chinese Academy of Sciences**, with several publications about the chemical ecology of red turpentine beetles. He accepted a job with **Dow AgroSciences** in Puerto Rico as the leader of the newly established Integrated Pest Management unit, and moved there with **Atwater**, who will begin a moth survey in Puerto Rico.