

University of Nebraska - Lincoln

DigitalCommons@University of Nebraska - Lincoln

---

Hexapod Herald and Other Entomology  
Department Newsletters

Entomology, Department of

---

12-2011

## Hexapod Herald - Vol. 23, No. 6, December 2011

Follow this and additional works at: <https://digitalcommons.unl.edu/hexapodherald>



Part of the [Entomology Commons](#)

---

"Hexapod Herald - Vol. 23, No. 6, December 2011" (2011). *Hexapod Herald and Other Entomology Department Newsletters*. 34.

<https://digitalcommons.unl.edu/hexapodherald/34>

This Article is brought to you for free and open access by the Entomology, Department of at DigitalCommons@University of Nebraska - Lincoln. It has been accepted for inclusion in Hexapod Herald and Other Entomology Department Newsletters by an authorized administrator of DigitalCommons@University of Nebraska - Lincoln.

# Hexapod Herald

---

Volume 23

December 2011

Number 6

---

## WELCOME

---

New Distance Masters Students:

Spring 2012 - **Kathleen Abraham**, Hendersonville, NC; **Jessica Cancelliere**, Schenectady, NY; **Barbara Herther**, Slinger, WI; **M. Paige Howorth**, San Diego, CA; **Allen Proxmire**, Nogales, AZ  
Summer 2012 - **Beth Eilers**, Westampton, NJ

## CONGRATULATIONS

---

**Drs. Jeff Bradshaw** and **Marion Ellis** received awards at the 2011 Nebraska Extension Annual Conference & Nebraska Cooperative Extension Association Annual Meeting held November 8-10, 2011, in Kearney, NE. Jeff received the Outstanding New Employee Award from UNL Extension, and Marion received the Distinguished Service Award from the Specialist Section of NCEA.

**Dr. Matt Paulsen**, collections manager in the State Museum's Division of Entomology, received the 2010 Lacordaire Prize from the Coleopterists Society at its annual meeting held November 15 in Reno, NV. The Lacordaire Prize is given for the best published monograph on beetles that was the product of a Ph.D. dissertation. The selection was made by a society committee of renowned beetle specialists. Paulsen's monograph was titled, "The Stag Beetles of Southern South America (Coleoptera: Lucanidae)" and was published in the Bulletin of the University of Nebraska State Museum. Matt completed his degree in 2006 under the supervision of **Dr. Brett Ratcliffe**.

**Jim Kalisch** is a grandpa for the first time. Robert Owen Murray was born on October 21, 2011. He weighed in at 7 lbs., 5 oz., and was 21" long. Owen's parents are Elizabeth (Kalisch) and Brendan Murray of Fremont, NE. Jim says Owen is a rather handsome little guy!

**Ken Miwa** and his wife, Ayo, are parents of a new daughter, Sae, born October 31, 2011. Sae weighed 7 lbs., 12 oz., and was 21 inches long. Sae was welcomed home by big brother, Fuki.



Grandpa Jim and Owen



Sae Miwa

## ESA National Meeting News November 13-16, 2011

**Dr. Shripat Kamble** received the 2011 ESA Recognition Award in Urban Entomology. The award includes a cash award and an inscribed plaque.

**Drs. Tom Hunt** and **Bob Wright**, members of the European Corn Borer Team, received the 2011 Integrated Pest Management Team Award. **Dr. Bill Hutchison**, University of Minnesota and an adjunct faculty member in the Entomology Department, was also on the team.

The Entomology Department's Linnaean Team are National Champions. Team members are **Liz Dahlgren**, (alternate) **Tim Husen**, **Jess Jurzenski**, **Ken Miwa**, and **Wayne Ohnesorg**, and last, but certainly not least, coaches, **Drs. Bob Wright** and **Ken Pruess**.



Dahlgren, Miwa, Jurzenski, Ohnesorg, Husen, and ESA President, Dr. Ernest Delfosse, Michigan State University.

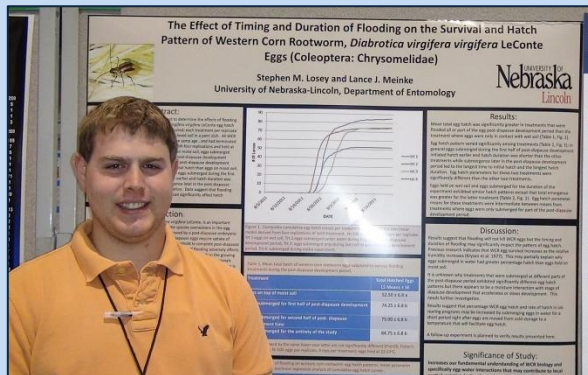
**Tim Husen** received the Jeffrey P. Lafage Graduate Student Research Award.

**Abdul Hafiz Ab Majid** received the 2011 ESA Student Certification Award.

**Ginny Morgal** was awarded the BioQuip \$2,000 Undergraduate Scholarship.

**Justin McMechan** and **Jess Jurzenski** were awarded 1<sup>st</sup> place in the student paper presentations, with **Ana Velez** receiving a 2<sup>nd</sup> place. **Kyle Koch** was awarded 1<sup>st</sup> place in the student poster competition, with **Tim Husen** and **Stephen Losey** receiving a 2<sup>nd</sup> place.

UNL tied with Ohio State for the most student competition awards.



Insect science major, Stephen Losey



M.S. student, Kyle Koch

# GRANTS

---

## **Fred Baxendale and Tiffany Heng-Moss**

- Marrone Bio Innovations, Inc. .... \$11,250  
    *"Turfgrass Pests"*
- Syngenta Corp. .... \$6,750  
    *"Turfgrass Pests"*
- pbi Gordon Corporation. .... \$14,250  
    *"Turfgrass Pests"*

## **Robert Wright**

- AMVAC Chemical Corporation ..... \$4,500  
    *"Crop Insect Management Research"*

## **Xuguo Zhou and Blair Siegfried**

- USDA NIFA, Biotechnology Risk Assessment Grant Program ..... \$500,000  
    *"Developing a framework for assessing the risks of in planta RNAi on non-target arthropods"*

# MEET AN OFF-CAMPUS STUDENT

---



Off-Campus M.S. Student – **Louise Lynch**

Nature has always been a huge part of my life. At the age of 5, I had decidedly chosen my future career: I was going to be a frog. I have since made a few changes to my career aspirations but have remained passionate about the natural sciences. I received a B.S. in Biological Sciences from Fairleigh Dickinson University in Teaneck, New Jersey. In my junior year, I was accepted into an overseas fellowship program through the Dublin Museum of Natural History to study the mayfly, *Ameletus inopinatus*, as a bio-indicator of climate change at the University College Dublin. It was here that I chose my direction in the sciences. Insects!

After graduation, I began work as a mosquito biologist and later as Superintendent for the Essex County Division of Mosquito Control in New Jersey. There I implemented county-wide IPM, water management and viral surveillance programs, carried out monitoring and species identification, and studied the overwintering biology of the frog-feeding *Uranotaenia sapphirina*. It was during my time in Essex County that I decided to strengthen my background and began working towards a M.S. Degree in Entomology with the University of Nebraska-Lincoln. The UNL Distance Program has given me terrific experiences and opportunities galore.

One of my finest UNL experiences has been my Master's Project. I have become increasingly interested in education and public outreach, especially through exhibits and presentations. After being turned down for a local internship relating to exhibit curation, I decided to pursue this interest on my own. I submitted a project for ENTO 888: the curation and installation of an interactive children's exhibit about bee diversity and conservation at a local museum that I have been involved with since childhood. *The World of Bees* opened this past September at the Hudson Highlands Nature Museum in Cornwall on Hudson, New York and it will be up for one year. Working for several months, I was able to travel to various museums and institutions, meet incredible people in the field, and even pick up carpentry and design skills.

I love to teach. UNL's "Insects as Educational Tools" has been yet another key experience, inspiring me to create a line of various K-12 lesson plans about bee diversity, biology and conservation for free use by educators, available on my blog at [loulabella.com](http://loulabella.com). I've been able to take these lessons into local schools to test and modify them. I also teach biology for labs at my alma mater and teach science & technology to ESL students at a nearby international school. In the future, I hope to use my field, education and exhibit experiences to promote insect education and conservation.



Outside of insects, I spend as much time as I can with music, photography and carpentry. The piano is one of my oldest 'friends' but I dabble with whatever instruments I can. I compose music for myself and for a local production company, Visually Hidden. We are currently in post-production for a feature length film that will be out soon. I am an avid amateur photographer. I self-published *Insect Specs*, an insect macrophotography book for an independent study with UNL. I maintain a photography blog and, as of late, have been delving into still photography and cinematography for films. During my work on *The World of Bees*, I amassed a decent collection of tools that I try to employ, making bee houses, puzzles, and candleholders.

## THIS 'N THAT

---

The first-time Halloween event "Fright at the Museum" was held at the University of Nebraska State Museum and was a huge hit with families, as over **3,400** people attended the event held October 26-27. (That is an attendance record for a museum event!!) Thanks to all who volunteered.



**Chelsea** (car mechanic) **Piitz** and **Bob Roselle** show hissing cockroaches to future entomologists.



**Nicole** (ladybug) **Mann** gives everyone a chance to touch Millie the millipede.

## PUBLICATIONS

---

Bastos, C., **S.D. Whipple**, **W.W. Hoback**, and L.G. Higley. 2011. Grasshopper injury to potato: consumption effect on photosynthesis, and economic injury level. *Agronomy Journal* 103(6): 1655-1660.

**Belay, Difabachew K.**, Abebe Zewdu and **John E. Foster**. 2011. Ecology and Management of the Woolly Whitefly (Hemiptera: Aleyrodidae), a New Invasive Citrus Pest in Ethiopia. *Journal of Economic Entomology* 104(4): 1329-1338.

Coates, B.S., D.V. Sumerford, **H. Wang**, C.A. Abel, R.L. Hellmich, and **B.D. Siegfried**. 2011. A single major QTL controls expression of larval Cry1F resistance trait in *Ostrinia nubilalis* (Lepidoptera: Crambidae). *Genetica* 139(8): 961-972.

**Fujikawa A.**, **L. Barksdale**, L.G. Higley, and **D.O. Carter**. (2011) Changes in the morphology and presumptive chemistry of impact and pooled bloodstain patterns by *Lucilia sericata* (Meigen) (Diptera: Calliphoridae). *Journal of Forensic Sciences* 56(5): 1315-1318.

Gasca, H.J. and **B.C. Ratcliffe**. 2011. An annotated checklist of the oryctine rhinoceros beetles (Coleoptera: Scarabaeidae: Dynastinae: Oryctini) of the Neotropical and Nearctic realms. *Zootaxa* 3090(3): 21-40.

Jameson, M.L. and **B.C. Ratcliffe**. 2011. Revision of the Neotropical scarab beetle tribe Anatistini (Coleoptera: Scarabaeidae: Rutelinae). *Bulletin of the University of Nebraska State Museum* 26: 1-100.

**Jurzenski, J.**, D.G. Snethen, **M.L. Brust**, and **W.W. Hoback**. 2011. New records of carrion beetles in Nebraska reveal increased presence of the American burying beetle, *Nicrophorus americanus* Olivier (Coleoptera: Silphidae). Great Plains Research 21(2): 131-143.

**Khajuria, C.**, L.L. Buschman, M. Chen, **B.D. Siegfried**, and K.Y. Zhu. 2011. Identification of a novel aminopeptidase P-like gene (OnAPP ) possibly involved in Bt toxicity and resistance in a major corn pest (*Ostrinia nubilalis*). PLoS ONE 6(8):e23983 .

**Molina-Ochoa, J.**, F.J. Castillo-Ceja, R. Lezama-Gutiérrez, M. González-Ramírez, C.A. Ángel-Sahagún, y **J.E. Foster**. 2010. Efecto antibiótico del extracto acuoso de neem sobre-adultos del picudo del agave *Scyphophorus acupunctatus* Gyllenhal (Coleoptera: Curculionidae). Entomologica Mexicana 9: 614-617.

**Rangasamy, M.** and **B.D. Siegfried**. 2011. Validation of RNA interference in western corn rootworm, *Diabrotica virgifera virgifera* (Coleoptera: Chrysomelidae) adults. Pest Manag. Sci. DOI 10.1002/ps.2301

**Ratcliffe. B.C.**, and P. Skelley. 2011. Description of the larva of *Homophileurus integer* (Burmeister, 1847) (Coleoptera: Scarabaeidae: Dynastinae: Phileurini) with a key to *Homophileurus* larvae and notes on biology. The Coleopterists Bulletin 65(3): 297-304.

Spicka, A., R. Johnson, J. Bushing, L.G. Higley, and **D.O. Carter**. 2011. Carcass mass can regulate rate of decomposition and release of ninhydrin-reactive nitrogen into gravesoil. Forensic Science International 209(1): 80-85.

Tabashnik, B.E., F. Huang, N. Mukti, B. Ghimire, B.R. Leonard, **B.D. Siegfried**, **M. Rangasamy**, Y. Yang, Y. Wu, L.J. Gahan, D.G. Heckel, A. Bravo and M. Soberón. 2011. Efficacy of genetically modified Bt Toxins against insects with different mechanisms of resistance. Nature Biotech. doi: 10.1038/nbt.1988.

Valencia, J.W.A., **A.V. Jimenez**, G. de Siqueira, K.M. Dussan, F.G.M. Restrepo, E.X. Filho, **B.D. Siegfried**, and M.F. Grossi-de-Sa. 2011. Holocellulase activity from *Schizophyllum commune* grown on bamboo: a comparison with different substrates. Curr. Microbiol. 63(6): 581-587.

**Youm, O.**, Y. Maliki, D.R. Hall, D. Farman, **J.E. Foster**. 2011. Pheromone-mediated mating disruption in the millet stem borer, *Coniesta ignefusalis* (Lepidoptera: Pyralidae). Crop Protection 31 (2012), pp. 50-57: DOI information: 10.1016/j.cropro.2011.09.008.

## ***FACULTY NEWS***

---

**Drs. Muhammad Chaudhury** and **Kristina Hale** have been appointed as Graduate Faculty Associates by the Office of Graduate Studies.

## ***STUDENT NEWS***

---

**Liz Dahlgren**, **Lia Marchi**, and **Justin McMechan** were each awarded a Milton E. Mohr Fellowship in the amount of \$2,000. They were honored at a luncheon October 25, 2011 in the Nebraska East Union.

**Abdul Hafiz Ab Majid** and **Ralph Narain** were each awarded the Fred Clute Memorial Fellowship.

**Abdul Hafiz Ab Majid**, **Jess Jurzenski**, **Justin McMechan**, **Silvana Moraes**, **Ralph Narain**, and **Ana Velez** received travel support from the Department of Entomology's Swenk Fund to attend the National ESA meeting in Reno, NV on November 13-16, 2011.

**Jenny Freed** and **Ginny Morgall** have been awarded scholarships from the Earl and Bertha Ramsey Memorial Fund for 2012. **Elias Bloom** and **Jenny Freed** each received a Ephriam and Veallon Hixson Memorial Fund Scholarship. **Kaitlin Armitage**, **Aaron Gilman**, **Stephen Losey**, and **Katie O'Brien** were awarded scholarships from the Insect Science Scholarship Fund.

# ***BLAST FROM THE PAST***

---

**Denise VanRoekel**, who received her M.S. degree in Entomology through the distance program in 2011, is the entomologist for the city of Sioux Falls, SD. In addition, she has embarked on a new business adventure. After hearing numerous concerns and complaints regarding bedbugs, she began searching for information regarding how these pests were being controlled as well as the options for homeowners and businesses. She was dismayed, but not surprised, to discover the Midwest has far fewer resources than either of the coasts. So, this past September, Denise began a business in September called Dakota Bedbug Detection (DBD). The business started with the purchase of a bedbug detection dog, Bo. This made DBD the first and only canine bedbug detection company in South Dakota and North Dakota!

The biggest problem reported, according to Denise, is that by the time people realize they have bedbugs, they are already dealing with large populations. As with any other pest, getting rid of them is not impossible, if you know exactly where they are and what life stage you are dealing with. However, due to their small size and discreet nature – finding them is not as easy as one would think! A dog, as proven in other detection arenas (e.g., drug, mold, bomb, cadaver), is far more sensitive to smells than a human could ever hope to be. They take a “scent picture” when exploring their environment and when trained properly, can identify the pheromones given off by live/viable bedbugs. This is incredibly helpful when trying to locate them in furniture, walls and even electronics.

This has been an exciting adventure as well as an interesting commitment! Bo requires training 2-4 times a day or 16 hours minimum per month to stay in line with court standards for police canines. Having to train Bo with live bedbug specimens daily also requires a live colony. So – in addition to having a new 4 legged pet, Denise has hundreds of 6 legged pets as well! A concept not easily accepted by her family! (Oh the price we pay for science!!)

This service will hopefully give people a viable option to chemical treatments as they are not always necessary. If populations can be isolated in a corner or a piece of furniture, odds are the homeowner or business owner can get rid of them on their own before resorting to exterminators and additional expenses.

To learn more about what Denise and Bo, go to her website – [DakotaBedbugDetection.com](http://DakotaBedbugDetection.com)



Bo, the sniffing bedbug dog - is he cute or what!



Bo is working here. The green board has pvc tubes behind it where vials of bedbugs are hidden...some with bedbugs, some without, and others to trick him. This way Bo's skills can be fine tuned.

# TRAVEL

---

**Dr. Marion Ellis** was the speaker at Science Cafe sponsored by the University of Nebraska Medical Center, Omaha, NE, on October 6, where he discussed factors affecting honey bee health. Marion also traveled to Santiago, Chile for the FEDEFruta conference held September 26–October 3. He spoke on maintaining healthy pollinator populations for fruit production.

**Dr. Matt Paulsen** was collecting in Oregon and Nevada prior to the ESA meetings in Reno.

**Dr. David Stanley** traveled to China November 11–24, 2011. He presented a plenary lecture at the Second International Conference on Biotic Plant Interactions in Kunming, then presented seminars in the Chinese Academy of Sciences, Shanghai and Zhejiang University in Hangzhou.

## *Calendar of Events*

### **December 12–16, 2011**

- Fall Semester Final Exams

### **December 15, 2011**

- Entomology Department Meeting, 3:00 p.m., Nebraska East Union

### **December 16, 2011**

- Department Graduate Reception, 11:00 a.m., Nebraska East Union
- Fall Semester Graduate Commencement and Doctoral Hooding Ceremony, 3:00 p.m., Bob Devaney Sports Center

### **December 17, 2011**

- Fall Semester Undergraduate Commencement, 9:30 a.m., Bob Devaney Sports Center

### **December 26–January 2, 2012**

- Holiday Closedown (UNL offices closed)

### **January 9, 2012**

- Spring Semester begins

### **January 16, 2012**

- Martin Luther King Day (Student and Staff Holiday – UNL offices closed)

### **January 27, 2012**

- Entomology Department Meeting, 10:00 a.m., ENTO 110

### **February 14–15, 2012**

- 20<sup>th</sup> Annual Urban Pest Management Conference, The Cornhusker-Marriott Hotel, Lincoln, NE

### **February 18, 2012**

- Beginning Beekeeping Workshop, Nebraska City, NE

### **February 24, 2012**

- Entomology Department Meeting, 10:00 a.m., ENTO 110