



## January 2005

### Faculty News

Dr. **Dan Hahn** joined the Gainesville faculty as an Assistant Professor specializing in Insect Physiology. His appointment is 50% research and 50% teaching with instruction responsibilities including a graduate course in insect physiology and graduate and undergraduate courses on selected topics in entomology and biology. Dan's research integrates physiology, biochemistry, and evolutionary ecology to address a range of questions in insect biology. Current topics of interest are: 1) physiological mechanisms underlying phenotypic plasticity in insects with a focus on diapause and reproduction, 2) regulation of metabolism and nutrient allocation in insects emphasizing the regulation of storage and subsequent utilization, 3) insects as model systems to study fertility, diabetes, and obesity. Dan received his B.S. from Florida State, his Ph.D. from University of Arizona, and comes to Gainesville from a postdoctoral fellowship at Ohio State. Dan is joined by his wife Jen, a biologist and science educator, and their toddler Ben.

### Student News

On 12 December 2004, graduate student **Ricky Vazquez** was commissioned a First Lieutenant in the U.S. Army Reserves. He served as an enlisted Marine from 1989 to

1993, when he was a communications center operator. Now he is the medical entomologist for the 342nd Army Medical Detachment in Gainesville, but plans to go on active duty at the conclusion of his Ph.D. studies.

**Olga Kostromytska** is a new M.S. student working with Dr. Buss. Olga is interested in landscape and turfgrass entomology, but she is specifically interested in white grubs, especially *Tomarus subtropicus*.

### Staff News

**Suzie Adams** began work as a Fiscal Assistant in the business office during December. After a period of training, she will handle credit card payments and travel.

### Alumni News

**Jay Cee Turner**, who received her M.S. working under Dr. Eileen Buss, will start working as a Biological Scientist for Dr. Oscar Liburd as of 10 January.

### Publications

**Branham M.** (December 2004). Glow-worms, railroad-worms, Coleoptera: Phengodidae. *UF/IFAS Featured Creatures*. EENY-332. <http://creatures.ifas.ufl.edu/misc/beetles/glow-worms.htm>

**Crow WT, Welch JK.** 2005. Root reductions of St. Augustinegrass (*Stenotaphrum secundatum*) and hybrid bermudagrass (*Cynodon dactylon* x *C. transvaalensis*) induced by *Trichodorus obtusus* and *Paratrichodorus minor*. *Nematropica* 34:31-37.

**Crow WT.** 2005. How bad are nematode problems on Florida's golf courses? *Florida Turf Digest* 22:10-12.

**Crow WT.** 2005. Biologically derived alternatives to Nema-cur. *Golf Course Management* 73: 147-150.

**Luc JE, Crow WT.** 2004. Sting nematode: Not a steward of the environment. *Golf Course Management* 72:86-88.

**Luc JE, Crow WT.** 2004. Nematode and nitrogen management. *Golf Course Management* 72:97-100.

**Crow WT.** (2004). Plant-parasitic nematodes on sugarcane in Florida. *EDIS*. <http://edis.ifas.ufl.edu/IN529>

## **Madam Librarian**

**Tara Tobin Cataldo** is the new Biological/Life Sciences Librarian at the Marston Science Library. She attended the December entomology and nematology faculty meeting and gave a presentation on changes at the library and the services they offer. Some of the information she presented is available at <http://www.uflib.ufl.edu/msl/entfac.html>. A listing of new books in biological science added by the Library is available at <http://web.uflib.ufl.edu/msl/newbooksbio.html>. Contact Ms. Cataldo at (352) 392-2784 or [tara@uflib.ufl.edu](mailto:tara@uflib.ufl.edu).

## **Expert Witness**

For her M.S. degree, **Sue Gruner** conducted the largest forensic entomological decomposition study (to date) using pigs as human models. Over a four year period, sixty-nine pigs were placed out at Greathouse Butterfly Farm in Earleton, Florida. One of the first species of Calliphoridae to arrive at a corpse (in approximately 1/3 of the U.S.) is *Lucilia* (= *Phaenicia*) *coeruleiviridis*. When *L. coeruleiviridis* larval specimens are found at a crime scene, forensic entomologists historically have used the phenology from *L. sericata*, a closely related species, to determine time since death because there are no rearing data for *L. coeruleiviridis*. Successful rearing of this particular species of fly has eluded entomologists for decades, but Sue "discovered" a pupation substrate, using organic materials and a mulching machine, that resulted in successful rearing of thousands of adult specimens. In July 2004, Sue attended the Second Annual North American Forensic Entomology Conference held at UC-Davis, California, and presented her M.S. research data, which included information about the pupation substrate. Among the attendees were forensic entomologists from Europe, Australia, Canada and South America and Richard Merritt, president of the American Board of Forensic Entomologists (ABFE).

In October 2003, the body of an 11 year old girl, who had been missing for a month, was found behind an old, vacant factory in Cleveland, Ohio. As usual in many crime scenes, the police did not know what to do with the entomological evidence. A zoologist was hired to collect entomological specimens during the autopsy - evidence that should have been collected at the crime scene. The

live larval specimens did not survive so the zoologist assumed they were *L. coeruleiviridis*. He also had some poorly preserved specimens in alcohol which were later identified by Neal Haskell (for the defense) as *L. coeruleiviridis*. In December 2004, one of the prosecuting attorneys called Dr. Merritt to determine which ABFE member was the "expert" on *L. coeruleiviridis*. However, there being none, Dr. Merritt referred the prosecutor to Sue Gruner, who is an expert due to her research. Shortly thereafter, Sue flew to Cleveland where she testified for the first time as an "expert witness." Her testimony centered around the behavior and biology of *L. coeruleiviridis*.

## Entomology Seminars

Seminar coordinators this semester are graduate students Luis Matos, Sean McCann, Veronica Manrique and Murugesan Rangasamy.

Jan/13 - Dr. **Marina Telonis-Scott**, UF Zoology. "The genetics of adaptation to the climatic stress desiccation in *Drosophila melanogaster*."

Jan/20 - Dr. **Sanford Porter**, USDA-ARS, Gainesville. "Fire ant biological control."

Jan/27 - Dr. **Robert Wiedenmann**, University of Illinois. "Ecological and physiological factors determining suitability of *Cotesia flavipes*-complex parasitoids."

Feb/3 - Dr. **Michael E. Scharf**, UF/IFAS. "Toxicology and termites? How functional genomics can be used to develop the termiticides of tomorrow."

Feb/10 - Dr. **Paul Linser**, UF Whitney Marine Laboratory. TBA.

Feb/17 - Dr. **Bill Snyder**, Washington State University. "Exploring the relationship between biodiversity and successful biological control."

Feb/24 - Dr. **Geoffrey Zehnder**, Clemson University, SC. "Alternative management strategies for aphid transmitted diseases in melons."

Mar/10 - Dr. **Stephen Hight**, USDA-ARS, FAMU. "The beast within: Management strategies for *Cactoblastis cactorum* in the U.S., a biological control agent turned invasive pest."

Mar/17 - Dr. **Fernando Lenis**, USDA-APHIS, Miami. TBA

Mar/24 - Dr. **May Berenbaum**, University of Illinois. "Parsnip webworms and wild parsnips: Web sites on the evolutionary superhighway."

Mar/31 - Dr. **Jaret Daniels**, UF McGuire Center. "Ecology and conservation biology of the state-endangered Miami blue butterfly, *Cyclargus thomasi bethunebakeri* (Lepidoptera: Lycaenidae)."

Apr/7 - Dr. **Eric A. Schmelz**, USDA-ARS, Gainesville. "Interactions at the plant-herbivore interface: insect elicitors, phytohormone signaling, and induced plant defense responses."

Apr/14 - Dr. **John Hattle**, University of North Florida. "Plasticity in long-term adult development in lubber grasshoppers."

## Reading Room

The Reading Room committee once again reminds us that **no one is allowed to take materials out** of the reading room, and **no one is allowed to take food or drink in**. You are also reminded that Reading Room users are monitored on closed-circuit TV, so wave and say hi. In addition, the committee asks that you to tidy up after yourself before leaving the room. Those who wish to use the in-room copier should visit the stock room to get a PIN from Nick Hostettler.

## Bug Quote

**Caterpillar:** *Pilare* is the Latin for "to grow hair" and gives an adjective *pilosus*, meaning "hairy." From this and their own word *chat*, a cat, the French formed *chatepelose*, "hairy cat," which may be compared to "wooly bear," the common name by which English children refer to the same fuzzy creature, the *caterpillar*. The French word, *chatepelose*, was in due course taken into English; but the significance of the latter part of the word was not recognized. It was actually confused with the stem of the old English word "to pill," meaning "to strip or plunder," the idea being that the caterpillar strips the bark (leaves? - ed.) off trees. This is the reason why the spelling of the word has departed so far from the French form. - from **Thereby Hangs a Tale: Stories of Curious Word Origins** by **Charles Earle Funk**

## Fly-eating Robot

Scientists have developed a robot that powers itself by eating house flies, but they need some help determining the correct species of fly (as you will see in the photograph), let alone how to write the common name. CNN.com has the article at <http://www.cnn.com/2004/TECH/12/27/explorers.ecobot/index.html>.

## Sex

What better to fight post-holiday depression than with some good sex advice? **Dr. Tatiana's Sex Advice to All Creation: The Definitive Guide to the Evolutionary Biology of Sex**, is available for your reading pleasure. This award-winning book is actually by Dr. **Olivia Judson**, an Oxford-educated, evolutionary biologist, journalist, and research fellow at London's Imperial College. Dr. Judson uses a tongue-in-cheek approach to teach principles and theories of sexual reproduction by posing as a sex advice columnist. For example,

"Dear Dr. Tatiana, I'm a furious fruit fly, *Drosophila melangaster*. When I was a maggot, I was told that sperm were a dime a dozen, easy to make and easy to spend. So, on reaching maturity, I spent. With reckless abandon. But I was told a lie: I'm only partway through my life as a grown-up fly, yet I've completely run out of sperm and no girls will come near me. Who can I sue? - Dried Up in London."

Dr. Judson uses examples from insects, fish, birds, etc. For more information sample questions and answers, see <http://www.drTatiana.com/>. The book lists for US \$24.00, but is available as low as \$2.50 (+ s/h) for a

“like new” copy on Amazon.com or Half.com. Or you can buy a new copy at <http://www.daedalusbooks.com/Default.asp> for \$4.98 (+ s/h).

## **Newsletter Minutia**

**Thomas Fasulo** is the newsletter editor. Send submissions to him at [fasulo@ufl.edu](mailto:fasulo@ufl.edu). Issues are published the middle of each month. Submit items for an issue by the 7<sup>th</sup> of

that month.

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