



February 2004

Faculty News

It seems that some people just don't know how to relax. Take Dr. **James Nation** for instance. He served over 30 years as an insect physiologist in our department with research and teaching responsibilities. Just when it seemed he would start taking it easy, with a well-deserved retirement last year, he volunteered to become the editor of the Florida Entomologist and assumed those duties effective January 1, 2004.

Dr. **Marjorie Hoy** reported that inquiries for the **Insect Physiologist** position are coming in and some look very promising. The deadline for applications is March 1.

As of the end of January, all three final candidates for the **Insect Toxicologist** position were interviewed and the faculty will soon vote on whom to select.

Dr. **Jim Maruniak** reported that the two candidates for the Assistant/Associate Professor position at Vero Beach will give a seminar on campus and meet with the faculty. Dr. **Kevin M. Myles** was here on February 3rd, and Dr. **Christopher Mores** will speak on February 20th. While we will provide some input, the faculty at the UF/IFAS Medical Entomology Lab at Vero Beach will make the final decision.

Dr. **Skip Choate** reported on the applications for the Lepidoptera Curator position and stated that the closing date is March 1. This individual will be housed in the new Lepidoptera building which is nearing completion and be a staff member of the Museum of Natural History.

McGuire Center Nears Completion

On the skyline about a thousand feet west of the Department of Entomology and Nematology appears the distinctive new silhouette of McGuire Hall, the soon-to-be-occupied home of the McGuire Center for Lepidoptera and Environmental Research. The 46,000 square-foot (sf) building complex is wrapped around the north and west sides of Powell Hall, the public exhibit facility of the Florida Museum of Natural History, in the heart of the University's Cultural Plaza.

Most obvious in view from the east or north is the Vivarium, or Butterfly Rainforest, a huge screen and glass enclosure of 6,400 sf which will shortly (late February-March) be planted in subtropical and tropical trees, shrubs, and other perennials and will support a living assemblage of some 2,000 butterflies by late spring. The Vivarium will serve both a research and public education function. Scientific studies of flight behavior, territoriality, courtship, mating, etc., can be

conducted within its 65-foot height. The general public will be able to walk through it and begin to read a series of exhibit panels, scattered along its 400-foot trail, which will feature scientific information about Lepidoptera as well as rainforests. Six waterfalls and five streams will cascade into a central pond, while 200 fog nozzles will add humidity and warmth during the winter, along with climate control by radiant heating and recirculated air from adjacent McGuire Hall.

Within McGuire Hall will be over 7,000 sf of public exhibit space and four large laboratories (Molecular Genetics, Scanning Electron Microscopy, Image Analysis & Optical Microscopy, and Specimen Preparation) with window views into them from the public Hall of Human Culture and Lepidoptera. The other major public hall will feature a spectacular Wall of Wings some 22 feet high and 200 feet long, with over 350 Cornell cases of high-resolution scanned specimens above and actual Lepidoptera specimens at eye level, plus numerous embedded information panels, three plasma screens of video imagery. and an opposite World of Wings wall featuring 12 to 14 story panels on the ways in which Lepidoptera are contributing to research efforts in entomology worldwide.

In the principal part of the building, over 39,000 sf of research and collection space are devoted to three 4,000 sf adult specimen collection rooms (on three floors), many laboratories and offices for 12 faculty and curators and two collection managers, an immature-specimen collection room, a 25,000 volume library room, a large Conference Room with adjacent kitchen, a Bioacoustics and Sensory Analytical Laboratory, a Physiology Laboratory, and

various support facilities, such as a 12 x 18 foot cryofreezer room to treat incoming collections, preserve tissue samples, etc. A 1,000 sf glass greenhouse and a large cubicle-divided screenhouse are being constructed at the south end of the building, and a service road/walkway is being completed to provide ready access from the Doyle Conner Building area.

Each collection room is built as a windowless vault and can be totally isolated from the rest of the building; each has its own a/c and heating system. A large emergency generator can supply power to the whole complex.

Eight entomology faculty working with Lepidoptera subjects, graduate students, and/or techniques that are highly useful in Lepidoptera research are presently planned for office space and/or laboratory space in McGuire Hall. Graduate students from Entomology, Zoology, Wildlife Ecology, Latin American Studies and other units who plan to work with Lepidoptera will have the opportunity to utilize space in McGuire Hall as well. We estimate that 24 to 40 graduate students will ultimately be utilizing facilities in McGuire Hall at any one time. All entomology and nematology faculty, graduate students and undergraduate students who may wish to avail themselves of these new support facilities such as the Library, two SEMs, or other equipment will be most welcome to discuss their needs with Dr. **Tom Emmel**, the Center's Director, at any time. A 918 sf Multipurpose Laboratory room will be used to teach courses in such areas as biology of Lepidoptera, systematics, and conservation biology.

The certificate of occupancy is expected in mid March and we will be moving in during the rest of Spring 2004 (and probably into the summer). Collections, equipment, library materials, and offices will be moved from more than a dozen present scattered locations, including the entire **Allyn Museum of Entomology** from Sarasota, Florida, so our projected general public opening date is August 1st. A more formal Dedication and Grand Opening is tentatively scheduled for October 8th, and all entomology and nematology personnel will receive invitations when we know the date for certain.

In the meantime, an Entomology and Nematology Student Organization (ENSO)-organized graduate student tour is being organized by ENSO officers, and informal faculty-staff groups of any size (up to 12 people) are welcome to arrange a convenient time for a tour of the building by contacting **Tom Emmel** or **James Schlachta** at 392-5894 at the Endangered Species Laboratory building. (The only limitation on group size is the number of hard hats we can supply at one time!)

The McGuire Center and these new facilities promise to provide an exciting new addition towards both logistical and financial support for faculty and graduate students in our Department of Entomology and Nematology, and we look forward to the opportunity to show you what is available both now and after the construction is finished. - **Thomas C. Emmel**

New Teaching Lab

As of early February, it appears that the electrical, water and a/c and heating duct work is mostly completed. Workers are now

adding cabinets and other furniture items in the construction phase of the renovation of Dr. **Jim Nation**'s research labs (3117-3118-3119) to a teaching lab..

Publications

Baldwin R, Fasulo TR. (June 2003). Red flour beetle, *Tribolium castaneum* (Herbst), and confused flour beetle, *Tribolium confusum* Jacquelin du Val. *UF/IFAS Featured Creatures*. EENY-289.
http://creatures.ifas.ufl.edu/urban/beetles/red_flour_beetle.htm

Buss EA. (December 2003). Sugarcane grub, *Tomarus subtropicus* Blatchley. *UF/IFAS Featured Creatures*. EENY-318.
http://creatures.ifas.ufl.edu/orn/turf/sugarcane_grub.htm

Diaz R, Overholt WA, Cuda JP. 2003. Wetland weeds: West Indian marsh grass. *Aquatics* 25: 8-12.

Dixon WN. (January 2004). Pine sawflies, *Neodiprion* spp. *UF/IFAS Featured Creatures*. EENY-317.
http://creatures.ifas.ufl.edu/trees/sawfly/pine_sawflies.htm

Sarzynski EM, Liburd OE. 2003. Techniques for monitoring cranberry tipworm (Diptera: Cecidomyiidae) in rabbiteye and southern highbush blueberries. *Journal of Economic Entomology* 96: (6) 1821-1827.

Awards

Six staff members were selected to receive Bonus Awards from Provost and IFAS funds. Those selected to receive a one-time award of \$500 were **Debbie Hall, Raquel**

McTiernan, Kathy Milne, Khuong Nguyen, Nancy Sanders and Frank Woods. Congratulations to all of them! The Bonus Award Committee stated that it was very difficult to decide who would receive these awards. They suggested that this award be given on a regular basis and not just once in a while. Dr. **John Capinera** stated that we previously set aside funds from our budget for this purpose, but currently lack the funds to do this. If faculty wish to contribute to a pool to award staff for their hard work, this could be arranged.

Debbie Hall reports that the following students were nominated by our Graduate Committee for the IFAS Thesis and Dissertation Award of Excellence 2003. While we certainly hope they win this award, just being selected, from all those who received their degrees in 2003, to represent our department is in itself an honor. M.S. level - **Erin Finn**, under the direction of Dr. **Oscar Liburd**. Ph.D. level - **Matthew Messenger**, under the direction of Dr. **Nan-Yao Su**. Ms. Finn is now attending medical school in Michigan, while Dr. Messenger returned to his position with the City of New Orleans Mosquito and Control Board.

Meetings and Presentations

The department is once again staffing its booth at the Florida State Fair, held in Tampa during February 5-16, as part of a larger display called "Insect Encounters." The building comprises displays and personnel from the USDA, FDACS-Division of Plant Industry and the Florida Mosquito Association. Dr. **John Capinera** stated that Fair officials ask the department to have a booth every year and this is a great opportunity to interface with the public and

let them know what we are doing. Faculty, staff and students who volunteer for booth duty can also take their families. In the past, staff who volunteered enjoyed their stay at the fair. People often team up for the same day so each can take a few hours to enjoy the Fair. So don't forget to visit the Nubian goats in the agriculture building.

Dr. **Susan Webb**, and graduate students **Shubin Saha** and **Daniel Frank**, presented a Vegetable Insect Identification Workshop at the Southern Sustainable Agriculture Working Group (SSAWG) meeting on January 24th at the Paramount Resort in Gainesville. Approximately 60 people attended the mostly hands-on session and had a great time. Thanks to everyone who provided live insects: sweetpotato weevils and beet armyworms from **Dak Seal's** lab, southern mole crickets from **Howard Frank's** lab, leafminers and mites from **Marjorie Hoy's** lab, cabbage loopers and diamondback moth larvae from **Gary Leibee's** lab, tomato pinworms and a pepper weevil parasitoid from **Dave Schuster's** lab, pepper weevils from **Esteban Rodriguez**, and silverleaf whiteflies, a whitefly parasitoid, and cucumber beetles from **Heather McAuslane's** lab. Susan Webb's lab provided thrips and aphids and pinned Colorado potato beetles. **IPM Laboratories** supplied lacewing larvae, predacious mites, and *Podisus maculiventris* nymphs.

Dr. **James P. Cuda** was invited to attend the 85th Convention of the American Farm Bureau Federation held at the Hawaii Convention Center, Honolulu, Hawaii, 11-14 January 2004. Cuda gave a poster presentation entitled, "TAME Melaleuca: The Areawide Management Evaluation of the Invasive Weed Melaleuca quinquenervia in Florida". The presentation was

co-authored by **Amy Ferriter, Paul Pratt, Ken Langeland, Paul Pratt, Kristina Serbesoff-King** and **Cressida Silvers**.

Dr. **James P. Cuda** participated in the Regional Tropical Soda Apple Task Force Meeting held at the University of Georgia Conference Center, Tifton, Ga, on 22 January. Cuda presented a status report on the biological control of tropical soda apple project for Dr. **Julio Medal**. Medal was in South America collecting natural enemies for both the tropical soda apple and Brazilian peppertree biological control projects.

Dr. **James P. Cuda**, a member of the UF/IFAS Invasive Plants Working Group, attended the first quarterly meeting of the Working Group in Gainesville, 23 January. The purpose of this meeting was to identify plant species for analysis by the IFAS Assessment of Non-Native Plants in Florida's natural Areas (hereafter referred to as the IFAS Assessment). The IFAS Assessment document was developed in 1999 (revised in 2001) by a subcommittee of the IFAS Invasive Plants Working Group, and is available to view and down-load from the UF/IFAS Agronomy Department Web site (<http://agronomy.ifas.ufl.edu/IFASassessmt.html>). The primary purpose of the IFAS Assessment is to provide a mechanism to be used within UF to develop consistent descriptions of, and recommendations for, the use and management of non-native plants in Florida.

Dr. **James P. Cuda** attended a workshop in Denver, Colorado, 27-29 January, entitled, "Science and Decision-Making in Biological Control of Weeds". This working conference on the benefits and risks of biological control was sponsored by the USDA, Agricultural Research Service's Exotic and Invasive

Weeds Research Unit in conjunction with the USDA-CSREES-IFAFS and the Center for Invasive Plant Management, Bozeman, MT.

Entomology Seminars

2/12 - Dr. **Brust** (research entomologist, Glades Crop Care) "Can area-wide pest management be used in pepper weevil control?"

2/19 - Dr. **Fisher** (USDA, Corvallis, OR)
Title Pending

2/26 - Dr. **Davis** (USDA, Tifton, GA)
"Nematode management in cotton with an emphasis on host plant resistance."

2/27 - Dr. **Sithiprasasna** (US Army Research Lab, Bangkok) "Remote sensing and geographic information system applications on malaria research in Thailand." (Special Seminar)

3/4 - Dr. **Hunter** (USDA Fort Pierce)
"Glassy-winged sharpshooters and Pierce's disease."

3/11 - Spring Break

3/18 - Dr. **Joe Eger** (Dow AgroSciences)
"Pentatomoidea of Rancho Grande, Rondônia, Brazil."

3/25 - Dr. **Lluberas** (medical entomology consultant, Jacksonville) Title Pending

4/1 - Dr. **Burckhardt** (Naturhistorisches Museum, Basel, Switzerland) Title Pending

4/8 - Dr. **Dan Suiter** (University of Georgia-Griffin research station) "Formosan termites in Atlanta GA: Thank you Louisiana!"

4/15 - Dr. **Oscar Liburd** (University of Florida, Entomology/Nematology) “Developing an IPM program in Small Fruit and Vegetables.”

Nematology Seminars

2/16 - **John O’Bannon** “Cold case files - burrowing nematode - factor or fiction: The BN myth spreading decline mystery solved and management strategies.”

2/23 - **Janete Brito** “Distribution and host status of *Meloidogyne mayaguensis* from Florida.”

3/1 - **Fahiem El-Borai Kora** Title pending

3/15 - **Karen Ingram** “Biological control of the cactus moth (*Cactoblastis cactorum*) on *Opuntia* spp. using endemic and commercially available entomopathogenic nematodes.”

3/22 - **Wade Davidson** “The effects of simulated acid rain on nematode communities.”

3/29 - **George Kariuki** “Management of peanut root-knot nematode. A biocontrol approach.”

4/5 - **Jon Hamill** “Population dynamics of the sting nematode in commercial strawberry fields in Dover, FL.”

4/12 - **Roi Levin** “Woody and perennial ornamental plants susceptibility to four *Meloidogyne* spp.”

4/19 - **Marisol Davila** “Heat units required for *Meloidogyne* spp. for development.”

Grants

The strawberry IPM team received a new EPA grant for \$110,000. Dr. **Oscar Liburd** is the Principal Investigator and Co-investigators include Dr. **Silvia Rondon**, a Research Associate in Horticultural Sciences and Roger Francis a fruit extension agent at Clemson University. The project involves conducting on-farm demonstration trials to investigate the potential of using predatory mite species and reduced-risk pesticides to control twospotted spider mites in strawberries. The project is cooperating with Drs. **Norm Leppa**, **Barbara Larson**, and **Daniel Cantliffe**.

Alumni News

Dr. **Nancy Epsky**, a research entomologist with the USDA, transferred (a year or so ago) from the Gainesville lab to one in Miami, located along Biscayne Bay. While she says she doesn’t have beach access, and can’t even see the water, the lab is located on about 200 acres of tropical fruit and ornamental trees, so it is more like living in the country than the city. She reports that the lab’s research mission is in mitigation of exotic pests, so she is mostly working on fruit flies - Medfly and several *Anastrepha* species. She is also working on a few moths (cactus moth), beetles (Sri Lanka weevil) and scales (lobate lac scale) among other critters. For some, they are working on basic biology, but, for others, they are researching pheromone and attractant identification. Her new e-mail is NEpsky@saa.ars.usda.gov.

Outreach Activities

On January 28th, Erika Andersen participated in an educational fair at

Newberry Elementary, presenting to about 100 fifth graders. There are many upcoming events scheduled for February, so contact Erika at UFBugs@ifas.ufl.edu if you would like to help with an outreach event.

Erika Andersen is our Insect Outreach Program Coordinator. You can contact her at 352-392-1901 or UFBugs@ifas.ufl.edu for information and scheduling.

Future Entomologists?

Outreach activities are not always an official function of this or any department. Many departmental personnel, who do not have mentoring as an official part of their job description, spend time assisting those outside the department who ask out help. For example, **Pete Coon**, Ph.D student, takes time from his field research, writing his dissertation and his full time teaching load to help high school students with science fairs.

Pete has been assisting **Cassie Wagner** since fall 2003 with her science experiment, Cassie, who lives in Rotunda West, Florida below Fort Myers, has been working on a project using 100% organic catnip as a mosquito repellent. Cassie and her mother have come to the department several times to test her repellent in the olfactometer. Recently, Cassie's mother reported to Pete about Cassie's accomplishments. "Last night Cassie went to the Regional Science Fair Awards, and we are so proud of her! She won \$50 cash from the Corp of Engineering; Family annual memberships to the Children's Science Center and Imaginiarium, a hands on science museum in Fort Myers; a \$50 savings bond from Edison National Bank; \$100 savings bond from Kiwanis; Sony Personal Palm Organizer; The Argonauta Award, which includes a \$500 scholarship,

banquet, and additional opportunity to display her project; a two week research scholarship to Florida Gulf Coast University this summer; the Discovery Channel National Science Challenge Nomination; 1st place in Zoology, and Grand Champion of Junior Division in the fair! She also won a \$4000 scholarship to the school of her choice. She also has the right to ride in a convertible with her name on the side in the Edison Lights of Life parade.

"At the Inventors Fair awards she took home a KB Toys gift card; Family membership to Imaginiarium; Year membership to the Edison Inventors Society; Uncommon Friends video from last year and this year (she is in the one for this year); Inventors Hall of Fame book with autographs; Sony Walkman; Sony Digital camera; \$100 cash; 1st place 8th grade; and Grand Prize, Junior Division, which came with a \$4000 scholarship to the college of her choice!"

Cassie also won the right to compete in the State Science Fair held April 14 - 16 in Jacksonville. You can find pictures and newspaper articles on Cassie on the hallway bulletin board outside Pete Coon's office (Room #3212).

Nordic Entomology Trivia

"In Nordic countries Indianmeal moth was originally incorrectly translated in Swedish as 'Indiskt mjölmott' (where the first word refers to India). Later the same mistake was copied to all the other Nordic countries. It was really a pleasure to discover the origin of the name, because we changed the Finnish name some years ago to 'kitchen moth' as I knew that the species belongs to American species group (definitely not to any Asian one). I was really happy to find the

truth behind this idiotic name of our 'Indianmeal moth.'" - from **Jaakko Kullberg**, Collection Manager, Finnish Museum of Natural History, referring to how the Indianmeal moth got its name, which he found in the file on this pest at the Featured Creatures Web site.

Students?

"...I wanted to see you about one of the students, master," the Bursar said

"Students?" barked the Archchancellor.

"Yes. You know, they're the thinner ones with the pale faces. We're a *university*. They come with the whole thing, like rats."

- from the novel **Moving Pictures**, by Terry Pratchett

Newsletter Minutia

Thomas Fasulo is the newsletter editor. Please send submissions to him at **fasulo@ufl.edu**. Issues are published about the middle of each month. Items for each month's issue should be sent no later than the 10th of that month.

Printed copies are distributed only within Building 970. A notice is sent to all those on the **UF-Bugnews-I** listserv when HTML and PDF copies are posted on the newsletter Web site at <http://entnews.ifas.ufl.edu/>, which contains instructions for subscribing and unsubscribing to the listserv. **Andy Koehler** does the coding for the HTML version.

During January, the newsletter Web site recorded 2,914 distinct visitors and 4,862 page views. The newsletter listserv has 228 subscribers, with at least 30 subscribers from .edu domains other than UF.