



NEWSLETTER

September 2001 Entomology and Nematology News
Entomology and Nematology Student Organization
A University of Florida Publication

CURRENT EVENTS

Be in prayer for those families who lost loved ones in this, one of our nation's greatest tragedies.
September 11, 2001

SMILE

How many different ways can you draw a silverfish? See what 124 comic book artists came up with by visiting <http://www.geocities.com/jqaiii/gallery/gallery.html>

WELCOME

Dr. Awand Persad has joined **Dr. Hoy's** laboratory as a postdoctoral scientist. He will be helping to analyze the establishment of parasitoids of the [Asian citrus psylla](#) and the [brown citrus aphid](#). **Dr. Persad** comes to us from Trinidad, where he worked on biological control of the [pink hibiscus mealybug](#).

Carole Girimont, has joined the department as an Art/Production Publication Specialist. She joined our team on Sept. 4.

Dr. Oscar E. Liburd recently joined the department as a fruit and vegetable IPM specialist. **Dr. Liburd** earned his BS degree in entomology from Florida A & M University in 1991. He later worked with Dr. Joseph Funderburk at the University of Florida, North Florida Research and Education Center in Quincy where he obtained a Master's degree in 1993 granted by Florida A & M University. His work involved evaluating bio-rational insecticides for inclusion in tomato IPM programs in north Florida. Dr. Liburd continued his education at the University of Rhode Island where he earned his Ph.D. in 1997 under Dr. Richard Casagrande. **Dr. Liburd's** Ph.D. dissertation research entailed investigating soil barriers and natural enemies for cole crops as well as other vegetables.

In 1998, **Dr. Liburd** joined the Fruit Entomology Research Laboratory at Michigan State University (MSU) where he did a one-year post-doc focusing on the behavior, ecology, and management of fruit flies belonging to the genus *Rhagoletis*. In 1999 Dr. Liburd was promoted to a tenure-track assistant professor position, which he has held for the past two years. Dr. Liburd's work at MSU involved studying the behavior, ecology, and management of key fruit pests and developing IPM programs for these systems. Dr. Liburd's first MS entomology student graduated recently (May 2001) with honors. To date, Dr. Liburd leaves behind two other MSU students. He will continue to direct their research long-distance as an adjunct professor and advisor until they have completed their studies. Dr. Liburd also brings a fellow Spartan to the department, Erin Finn. Erin recently completed (May 2001) her BS degree in biochemistry and is a first year MS student in entomology.

Dr. Liburd's research at UF will be focusing on fruits and vegetables in north-central Florida. His goals are to study the behavior and ecology of key pests and to develop IPM programs within fruit and vegetable crops. He has a research, 40% extension and 10% teaching appointment. Dr. Liburd's extension activities will be integrated with his research in the form of on-farm demonstrations. He plans to evaluate current systems and to suggest sustainable IPM strategies for management of insect pests. Dr. Liburd's teaching responsibilities may involve a course in IPM.

MEETINGS

Norm Leppla and **David Hall** organized and conducted a symposium at the annual meeting of the Florida Entomological Society held August 5-9, 2001 at Hutchinson Island, Florida. The symposium entitled "Augmentative Biological Control - Is There a Formula For Success?" focused on implementing commercial augmentative biological control (ABC). ABC is certainly a viable pest management approach for pests in some cropping systems and there are a number of beneficial arthropod species currently for sale. We should be able to use periodic releases of these beneficials, rather than potentially dangerous pesticides, to control specific pests. However, ABC guidelines for using beneficial insects currently exist for only a few pest situations and developing them is too challenging for most growers. A wider base of support from university and government researchers is needed to assess the feasibility of ABC for particular applications and developing guidelines for its adoption.

The presentations were divided into the three general topics, need for research and extension support, methods for implementing ABC, and successful ABC projects in Florida. A list of titles and speakers with their addresses is provided to assist you in contacting them for future collaboration:

The need for support in implementing ABC in greenhouse crops. **Dan Cantliffe**, Dept. Hort., University of Florida, Gainesville, FL 32611-0690.

Methodologies of implementing augmentation biological control. **Luis Canas**, Maricopa Agricultural Center, 37860 W. Smith-Enke Road, Maricopa, AZ 85239-3010 and Robert O'Neil, Dept. Ent., Purdue University, West Lafayette, IN 47907

Development of augmentation biological control with *Orius* in Florida bell peppers. **Jerry Brust** and

Charles Mellinger, Glades Crop Care, 949 Turner Quay, Jupiter, FL

Development of augmentation biological control in Florida strawberries. James Price, Dept. Ent., University of Florida, Bradenton, FL

The need for support in implementing ABC - a producer's perspective. **James H. White**, Entomos, 4445 SW 35th Terr., Suite 310, Gainesville, FL 32608

Augmentation biological control in California citrus. Robert Luck, Dept. Ent., College of Natural and Agricultural Sciences, University of California - Riverside, Riverside, CA 92521-0314

Development of augmentation biological control in ornamentals. Lance Osborne, Dept. Ent., University of Florida, Apopka, FL

Extension support for implementing ABC in Florida. **Jim Cuda**, Dept. Ent., University of Florida, Gainesville, FL

Developing site-specific IPM/biological control technologies more rapidly and encouraging their adoption at the local, grassroots level is a major challenge facing Florida. We must simultaneously maintain the productivity and profitability of our agriculture, conserve natural resources, and protect urban environments. New ABC technologies can help make this possible, particularly by building a viable biological control industry. To accomplish these goals, we must have people with the knowledge, talent and determination to succeed, as exemplified by our speakers. We must also have the resources necessary to accomplish the work, i.e., natural enemies, funding and infrastructure. Additionally, there is a special timing to the development and implementation of new technologies, the needs and capabilities coming together at the right place and time. Effective coordination and collaboration are critical to realizing these opportunities. Our speakers have shown us this formula for success in ABC.

Dr. Julio Medal was invited by the Universidad Nacional Agraria (UNA) de Nicaragua to give a talk to the students and professors of the Plant Protection Department. He gave a 2-hr presentation in Spanish on "Biological Control of Weeds: Past, present and future trends." Medal also met with the directors of the Minister of Agriculture (MAG), Minister of Natural Resources and Environment (MARENA), National Institute of Agriculture Research (INTA), and US-AID-Nicaragua to discuss the possibility to initiate biological control programs to control the most invasive aquatic/agricultural weeds in Nicaragua.

Dr. Julio Medal attended the International Symposium on "The Practice of Biological Control: Importation and Management of Natural Enemies and Agents"; organized by Dr. T. Kring (University of Arkansas-Entomology Department). The symposium was held at Montana State University, Bozeman campus from 2 to 5 August. This meeting had the participation of approximately 130 biocontrol practitioners (in the areas of arthropods, weeds, and plant-pathogen control) representing at least 20 countries. Medal also attended the 84 Annual Meeting of the Florida Entomological Society held at the Hutchinson Island Marriott Hotel from 6 to 8 August. Medal gave a poster presentation entitled "Risk assessment of *Gratiana boliviana* (Chrysomelidae), a potential biocontrol agent of tropical soda apple",

coauthored by **Dr. James Cuda**.

Dr. James P. Cuda attended the 84th Annual Meeting of the Florida Entomological Society held at Hutchinson Island, FL, 5-8 August.

Dr. James Maruniak presented a contributed paper at the Society for Invertebrate Pathology 34th Annual Meeting in Noordwijkerhout, The Netherlands, August 25-30. The title of his presentation was: The *Neodiprion sertifer* nucleopolyhedrovirus genome.

Marjorie Hoy will attend the Joint FAO/IAEA Division meeting on "Risk Assessment of Transgenic Arthropods" in Rome, Italy from October 1-5, 2001. The purpose of the meeting is to assess the current status of transgenesis in arthropods; assess biosafety concerns for transgenic arthropod release; provide guidance for future risk assessment protocols for case by case analysis; assess the need for establishing a working group in support of the IPPC Secretariat for setting guidelines for "Development and Use of Transgenic Arthropod Technology".

Andy Rasmussen recently attended the International Joint Conference on Plecoptera and Ephemeroptera held in Perugia, Italy. He presented a poster on stonefly biodiversity in Florida. Also attending was **Manny Pescador**, who presented mayfly research results.

PUBLICATIONS

"The Pest Ants of Florida" by Betty Ferster, **Mark Deyrup** and **Rudolf H. Scheffrahn** is a small book that has become a best seller in the Florida pest control industry.

Brian Cabrera, of the Ft. Lauderdale REC, has added some additional information and illustrations and placed the book on the Web at <http://flrec.ifas.ufl.edu/entomo/ants/Pest%20Ants%20of%20FL/index.htm>. A link is also available from the Florida Pest Alert site.

Alto, B.W. and **S.A. Juliano**. Precipitation and temperature effects on populations of *Aedes albopictus* (Diptera: Culicidae): implications for range expansion. J. Med. Entomol. 38(5): 646-656.

Alto, B.W. and **S.A. Juliano**. Temperature effects on the dynamics of *Aedes albopictus* (Diptera: Culicidae) populations in the laboratory. J. Med. Entomol. 38(4): 548-556.

Dr. James P. Cuda was an invited speaker for a symposium at the Annual Meeting of the Florida Entomological Society on "Augmentation Biological Control: Is There a Formula for Success?" Cuda's presentation entitled, "Delivery of IPM Information and Technology Emphasizing Biological Control" was co-authored by **Dr. Norman C. Leppla**.

MEDIA COVERAGE OF RESEARCH

Alto, B.W., S.A. Juliano, and L.P. Lounibos. ABC News website: <http://abcnews.com>. July 2001. Article titled "Migrating Mosquitoes: Global warming means mosquitoes move north" features two publications in the J. Med. Entomol. 38(4):548-556 and J. Med. Entomol. 38(5): 646-656.

Alto, B.W., and S.A. Juliano. Environmental News Network website: <http://www.enn.com>. July 2001. Article titled "Global warming encourages mosquito invaders" features the publication in the J. Med. Entomol. 38(4): 548-556.

Alto, B.W., S.A. Juliano, and L.P. Lounibos. News release in the Associated Press in Florida. July 2001. Article titled "University of Florida Scientists say global warming could spread mosquito" features article in the J. Med. Entomol. 38(4): 548-556.

Alto, B.W., S.A. Juliano, and L.P. Lounibos. July 2001. Article in the Gainesville Sun Newspaper titled "Dreaded insect may spread out."

Alto, B.W., S.A. Juliano, and L.P. Lounibos. July 2001. Article in the Press Journal Newspaper titled "Study: Warming may spread mosquito."

Alto, B.W. July 2001. Interview aired on National Public Radio "All Things Considered" in Gainesville, FL features the article in the J. Med. Entomol. 38(4): 548-556.

AWARDS

Alison Neeley received a \$500 scholarship to attend the Southeastern Museum Conference in Louisville, Kentucky on October 18 -20.

Aissa Doumbouya was awarded Second Place in the student poster competition sponsored by the Society for Invertebrate Pathology and held in The Netherlands. The title of her poster was: "Genetic Organization of the HindIII-D fragment of the single-nucleocapsid nucleopolyhedrovirus of *Neodiprion sertifer* (NsSNPV)". The prize consisted of 600 dutch guilders (\$250).

Dr. James Maruniak was honored by the National Alliance for Graduate Education and the Professoriate for being an "exemplary graduate advisor and mentor in the National AGEF Doctoral Program". The AGEF program is sponsored by the University of Florida and the National Science Foundation.

Barry Alto was an award recipient in the Student Paper Competition at the Florida Entomological Society Annual Meeting. Stuart, FL.

Service Pins were awarded in recognition of years of continued service to the Department of Entomology and Nematology. Recipients included:

Ute I. Willis - 5 years of service.

Nancy H. Sanders - 15 years of service.

Gilman S. Marshall - 15 years of service.
Paul F. Ruppert - 15 years of service.
Khuong B. Nguyen - 20 years of service.
Kathleen R. Milne - 25 years of service.
John J. Frederick - 30 years of service.
Robert C. Hemenway, Jr. - 30 years of service.

Arjun (Andy) Patel, a high school student participating in the 42nd Annual Student Science Training Program held in Gainesville, 11 June-29 July, won first place in the Best Oral presentation and Best Written paper categories at the Awards Ceremony. Andy worked on a project in **Dr. James P. Cuda's** laboratory and was mentored by Scotty Long and Dr. Cuda.

At its August meeting, the Florida Entomology Society presented the 2001 Team Award to **Drs. Grover Smart, Howard Frank, Norm Leppla, Martin Adjei, and Khuong Nguyen**, "For Their Efforts in Developing and Implementing a Biological Control Program against Mole Crickets." On behalf of the team, we are most grateful for this award and recognition. Grover Smart

DUBIOUS HONORS AWARD

Frank Slansky & L. R. Kenyon's bot fly website has received the dubious honor of being featured on Vopak USA's Bizarre Bug Sites Web page, which warns "People with weak stomachs need not enter." When we recently caught up with him in the midst of this year's busy squirrel bot fly season, Slansky had these words for his envious colleagues-- "This is just pure joy-- there is no fancy plaque or salary bonus attached-- it still hasn't sunk in!" When we pressed him about accepting the awesome notoriety attached to this honor, he responded confidently and succinctly-- "As my mother always told me when I was a kid-- 'Frankie, don't turn the other cheek on a gift kudo', or something like that-- after all, it was a long time ago. Well sorry, I gotta go-- so many bots, so little time." Also listed at the Bizarre Bug website is 'Myiasis Man', a first-hand account by someone who let a human bot fly develop under his skin until it matured and exited to pupate. Check it out! Slansky was also recently interviewed and quoted in an article in the Tampa Tribune on this year's unusually heavy infestations of squirrels by bot flies in Hillsborough County <http://tampatrib.com/FloridaMetro/MGA1UW06UQC.html>.

GRANTS

Dr. James Maruniak was awarded a one year grant for \$23,951 from the USDA, CSREES National Research Initiative Competitive Grants Program to conduct research in baculovirus genomics and phylogeny based upon the DNA sequence of *Neodiprion sertifer* nucleopolyhedrovirus.

Dr. James Maruniak has also received a grant from Lentek International of Orlando for \$10,000. The grant is entitled "Survival of microorganisms to sterilization procedures."

Drs. James P. Cuda and Norman C. Leppla were awarded a grant for \$2,675 from the UF/FAMU Center for Cooperative Agricultural Programs to support a new IPM extension initiative, "Delivery of Training in

IPM Emphasizing Biological Control for Sustainable Agriculture in Florida."

FEATURED CREATURES

The UF Entomology and Nematology Department and the FDACS Division of Plant Industry have added files on the following organisms to the Featured Creatures WWW site at: <http://creatures.ifas.ufl.edu/>

Capinera, J.L. [Saltmarsh caterpillar](#), *Estigmene acrea* (Drury).

Capinera, J.L. [Tobacco budworm](#), *Heliothis virescens* (Fabricius).

Fasulo, T.R. [Terrestrial amphipods - "lawn shrimp."](#)

Lord, C.C. [Brown dog tick](#), *Rhipicephalus sanguineus* Latreille.

Capinera, J.L. [Green peach aphid](#), *Myzus persicae* (Sulzer).

Capinera, J.L. [Cornsilk fly](#), *Euxesta stigmatias* Loew.

Capinera, J.L. [Cowpea curculio](#), *Chalcodermus aeneus* Boheman.

MacLeod, E.G., and L.A. Stange. [Brown lacewings of Florida](#) (Neuroptera: Hemerobiidae).

Woods, S. [Southern chinch bug](#), *Blissus insularis* Barber.

Weems, H.V., and G.B. Edwards. [Golden silk spider](#), *Nephila clavipes* (Linnaeus).

Richman, D.B., and F.W. Mead. [A predatory stink bug](#), *Stiretrus anchorago* (Fab.).

Richman, D.B., and F.W. Mead. [Spined soldier bug](#), *Podisus maculiventris* (Say).

Crow, W.T., and A.S. Brammer. [Lance nematode](#), *Hoplolaimus galeatus* (Cobb, 1913) Thorne, 1935.

Cabrera, B.J. [Cigarette beetle](#), *Lasioderma serricorne* (Fabricius).

Cabrera, B.J. [Drugstore beetle](#), *Stegobium paniceum* (Linnaeus).

Hall, D.W., and J.F. Butler. [Palmetto tortoise beetle](#), *Hemisphaerota cyanea* (Say).

Capinera, J.L. and N.C. Leppla. [Mole crickets](#), *Scapteriscus* spp.

New text and/or photographs were added to the files on: house fly - five new photos; American grasshopper - new adult photo

To save space, these publications are not listed exactly as they should be cited. The complete correct citation is: Author(s). (date of publication). Full title. *UF/IFAS Featured Creatures*. EENY- ##. URL

SOME FEATURED FEATURED CREATURES

"I found one of these in a creek on our ranch in Washington State (probably 40 years ago) and my grandmother called it a "Horsehair Snake". I have never seen or heard of one since and nobody I asked (even the avid fisherman of the area) knew anything about them or recalled seeing one. I searched the Internet for worms and snakes with no success. Finally I thought of parasites and there it was --the [Horsehair worm](#)! The picture (Gordius) looks like what I found. Anyway I just thought you might like to know that I found the site and decided to write and let you know you are not only published, but read! Thanks, - **Karen Orum**

"Your site is such a help to me. I use it a lot." - Kelli Rodda, a writer at NMPro magazine (Nursery Management and Production)

"This is a great WEB site, a real help to all of us." - Dr. Ronald Rice, Crop Nutrition and Water Quality, UF/IFAS

GRADUATE STUDENT NEWS

For the fall semester 2001, the Entomology and Nematology Department has a total of 84 registered graduate students. Of these, 42 are women and 42 are men. In the M.S. degree program, 26 are women and 16 are men. In the Ph.D. program, 16 are women and 26 are men.

A total of 15 students entered for the first time or continued for the Ph.D. degree for the fall semester. The new students, the degree being sought and the advisors are: Matt Aubuchon, PhD, Dr. Koehler; Cara Congdon, MS, Dr. Buss; Mary Donohue, PhD, Dr. Childers; Brian Eisenberg, MS, Dr. Koehler; Erin Finn, MS, Dr. Liburd; Karin Hallborg, MS, Dr. Osborne; Emily Heffernan, MS, Dr. Emmel; Adam Hixson, MS, Dr. Crow; Joe Jonovich, MS, Dr. Koehler; Bhaiya Kanal, PhD, Dr. Emmel; Sonja Peters, MS, Dr. Hogsette; Estaban Rodriguez, PhD, Dr. Stansly; Aaron Weed, MS, Dr. Frank. Continuing students are: Katie Barbara, PhD, Dr. Buss; Aissa Doumbouya, PhD, Dr. Maruniak; David Serrano, PhD, Dr. Foltz.

We have two Presidential Fellowship students, Wade Davidson and Craig Welch, and six Alumni Fellowship students, Aissa Doumbouya, Shane Hill, Karen Young Ingram, Josh King, David Serrano, and Heather Smith.

The Presidential and Alumni Fellowships are for the Ph.D. program and can be awarded only to new Ph.D. students or to M.S. students continuing for the Ph.D. The students are nominated by the Graduate

Coordinator, and nominations must be made in early January of each year. Competition is keen, and selections are made by a committee appointed by Dean Cheek.

Please welcome all of the new students and congratulate those students awarded prestigious fellowships.

Aissa Doumbouya recently returned from 3-months of volunteer service with UNICEF-Turkey. While stationed in Ankara, the nation's capital, she worked in the Health and Nutrition section as a member of the program planning and evaluation team. Her trip was sponsored by the Coca-Cola World Citizens Program at the University of Florida, which sent 19 volunteers to unique international experiences with its humanitarian and environmental partner organizations. For more information on how you can participate contact Michael Parsons at mparsons@ufic.ufl.edu.

Marco A. Toapanta, graduated last month with his Ph.D., under the direction of Dr. D. Schuster. Before graduation, Marco accepted a job offer from Bayer Corporation as the new Research and Development Representative for Florida and the Caribbean. One of his responsibilities is to conduct research on the efficacy of insecticides, fungicides, and herbicides to manage pests in vegetables and fruits. He collaborates with many UF faculty researchers and extension specialists from different research centers across Florida on these experiments. Marco would like to recognize the constant support of Drs. D. Schuster and P. Stansly throughout his research, as well as from his other committee members. He also would like to thank Drs. J. Capinera and S. Webb for providing him with research and laboratory facilities, and all the administrative personnel of the Dept. of Entomology & Nematology. Marco can be reached at his new e-mail address, strictly for professional activities, marco.toapanta.b@bayer.com

INSECT PHOTOS

We all have a need for insect photos that aren't in our own collections. The Florida IPM and Biological Control site has a number of links to galleries of arthropod photographs that can be used for non-commercial, educational purposes as long as credit is given to the photographers and institution. The site is located at <http://ipm.ifas.ufl.edu/> - look under Educational and Extension Materials.

BETTER NETWORKS: LOOK TO NATURE

Telecommunications firms may be able to make their networks more efficient by emulating the techniques of ants to establish the quickest lines of communication. Because data on the Internet is sent in separate packets, researchers say that sending virtual ants through these networks to find the fastest routes could help speed data packets to their destinations. In nature, ants deposit pheromones to keep track of which trails are best. Collectively, these individual tracks focus in on the most efficient routes. Icosystem Chairman and chief scientist Eric Bonabeau is also working on using this ant method to make peer-to-peer networks, distributed computing, and instant messaging technologies even more effective. (New York Times, 13 September 2001)

PEST ALERT

The Florida Pest Alert site at <http://PestAlert.ifas.ufl.edu/> has been keeping the 340 subscribers to its listserv informed about the spread of the West Nile and eastern equine encephalitis viruses through Florida. Links to a number of sites on these viruses, including FL Department of Health press releases on new cases, are available from the site. With the medical alert now covering 34 Florida counties, a number of links to recommendations on the use of arthropod repellents, including some alternatives to DEET, are also available from the site.

For information on the numerous diseases vectored by mosquitoes and other arthropods see the new National Public Health Pest Control manual developed for the USDA by **David Dame** and Thomas Fasulo. This site is located at <http://vector.ifas.ufl.edu/>

BEST OF THE BUGS AWARD

The USGS North Prairie Wildlife Research Center's "Butterflies of North America" Web site is the latest to be awarded our Best of the Bugs award. The Best of the Bugs Web site is located at <http://pests.ifas.ufl.edu/bestbugs/>.

POSITION AVAILABLE

The Department was allocated a teaching position from enrollment growth funds to "replace **Dr. John Zenger**." **Dr. Zenger** was teaching Insect ID, Immature Insects, and Introductory Entomology. These will continue as responsibilities of this new faculty member. The complete position description is on the department's web site, but the closing date for the position will be October 15 and the starting date is early January. Don Hall will head the search committee.

NATL NEWS

Shane Hill is the new ENSO representative on the Natural Area Advisory Committee, a group of students and professors that recommends how the [Natural Area Teaching Laboratory](#) [NATL] should be maintained and improved. Shane replaces longtime member and NATL volunteer Clay Scherer.

Updated brochures that describe NATL and its Stormwater Ecological Enhancement Project (SEEP) are available on the north side of the NATL kiosk, just inside the entrance on Natural Area Drive. The SEEP brochure is now in full color.

Pat Hope of the department's graphics lab printed new, updated copies of four large posters that explain NATL. They can be viewed on the south side of the NATL kiosk.

Dr. John Foltz, assisted by David Almquist (beetle scout) and Erick Smith (UF's urban forester), worked this summer to contain an outbreak of [southern pine beetles](#) in NATL's loblolly pines. Approximately 75 infested trees were felled and either removed or sprayed with pesticide to prevent the emergence of beetles and the loss of additional trees.

Dr. Don Dickson, working with personnel hired by IFAS Facilities Operations, supervised the final clearing of the successional plots immediately south of the Performing Arts Center. Plot A is a 10-year-rotation plot that will be started next year. Plot B will begin to fulfill its role of displaying the earliest stages of secondary succession in years when no other plot is tilled. Pollen from the mature longleaf pines that have been left in these plots will add to the genetic diversity of the next generation of longleaf pines in the upland-pine areas of NATL.

New NATL maps prepared by the UF chapter of the Students Geomatics Association reveal the full extent of NATL and its ecosystems. NATL's total area is 46 acres, with 6 acres devoted to five successional plots, 15 acres to upland pine, 18 acres to hammock, 3 acres to the Stormwater Ecological Enhancement Project (SEEP), and 4 acres to other uses, including a Natural Area Park, a kiosk and assembly area, the 34th Street berm, and mowed trails. The maps can be viewed at <http://natl.ifas.ufl.edu/aerigall.html>.

A master plan for UF's "Cultural Complex" (just north of NATL) is under development. The current, conceptual version of the plan proposes to improve access to NATL from the Complex in two ways. On the west, an inviting entrance to NATL will be achieved by eliminating the pavement presently connecting the areas behind Powell Hall and the Phillips Center. On the east, the plan has an entrance into NATL via a "Natural Area Park" just north of the retention pond.

The Natural Area Advisory Committee is lobbying for an academic pavilion to be built just southwest of the east entrance to NATL. The pavilion will seat and shelter classes of as many as 30 students. To develop specifications and a cost estimate, NAAC is working with the Florida Museum of Natural History, which seeks a similar pavilion, for docent-led groups, at its entrance to NATL, and with Buford Davis, who is preparing the master plan for the Cultural Complex

SINGING INSECTS OF NORTH AMERICA

Singing Insects of North America [SINA], at <http://buzz.ifas.ufl.edu/>, is a Web site intended to help almost anyone identify species of North American crickets, katydids, and cicadas.

The cricket and katydid portion of SINA, being developed by emeritus professor Tom Walker, now has distribution maps for all 127 species of crickets and 258 species of katydids known from North America. It includes pictorial keys to most genera of crickets and katydids and has about 1000 image files, not counting the thumbnail and "jumbo" versions of the "regular size" photographs and drawings. It also has nearly 500 .wav files of songs. SINA lists major taxonomic references for families and subfamilies of crickets and katydids, and some 150 of these references, including many that are old and hard to find, are posted in full text as PDF files.

Walker recently returned from field work in Texas and New Mexico, where he used the Nikon digital camera that was a retirement gift from his colleagues to make photographs of crickets and katydids to be added to SINA.

ESA SELLS IFWA

As reported by Tom Walker in articles in Nature (411: 521-522) and The Scientist (15[11 June]: 43), the Entomological Society of America is profiting from offering its authors Immediate Free Web Access [IFWA]. Authors of journal article want their efforts certified by peer review and made conveniently available to the widest possible readership. This means making refereed articles immediately and freely Web accessible. In January 2000, ESA started offering IFWA as "unlimited PDF reprints"--i.e., as PDF files posted on the Web with no restrictions. ESA set its fee for IFWA at 75% of the price of 100 paper reprints, an attractive price for authors because unlimited paper reprints can be made from the PDF files of articles. It was also a profitable price for ESA, because unlike paper reprints, PDF files are essentially a cost-free byproduct of the present publishing system. Sales of PDF reprints climbed quickly during 2000 and early 2001 and now are purchased for about 50% of the articles published in ESA's four principal journals. If IFWA sales increase to the extent that libraries cancel their subscriptions because of them, ESA will raise its price to compensate for the lost revenues. Thus IFWA sales seem to offer a market driven way to transition to universal IFWA for the journal literature. Strangely, no other scientific society has followed ESA's lead of offering authors (or their sponsors) the option of purchasing IFWA--even though it is a profitable, popular service. For more on this, go to <http://csssrvr.entnem.ufl.edu/~walker/epub/>

UPDATES

Dr. Jim Lloyd's Firefly Companion newsletter is now at a new site - <http://firefly.ifas.ufl.edu/>. Thomas Fasulo reorganized the site and optimized the files - reducing total file size by 65% - while maintaining resolution. As a result, the Firefly Companion is now easier to view from most systems. Angela Brammer will soon be working on the site with Dr. Lloyd, adding new issues and photographs.

THANK YOU

I would like to thank Pam Howell for her time and expert editing skills that make this newsletter possible.

Thanks also goes out for everyone who has aided and will aid the country in its stand against terrorism.

SOMETHING MISSING FROM YOUR NEWSLETTER?

If there is something you would like to see in future editions of the newsletter, please send all thoughts, suggestions and supportive criticisms to: **Rebecca Baldwin**.

A hard copy of this newsletter is given to department members in building 970 only. All others can obtain an electronic subscription by sending a request to listserv@lists.ufl.edu and in the text of the message type:

subscribe UF-bugnews-L yourfirstname yourlastname

Turn off any signature file, if you have one. You will receive instructions for confirming your subscription and further information on the rules for the list server.

This version of the newsletter is prepared for the Web by **Andy Koehler**.

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