



# AG SCIENCES 2009

A Monthly Newsletter for the College of Agricultural Sciences

May 2009

## News in Brief

### Stauffer Speaks to Darwin

Duquesne University and the Carnegie Museum of Natural History recently celebrated Charles Darwin's 200th birthday and the 150th anniversary of the publication of "Origin of Species." Jay Stauffer, Distinguished Professor of Ichthyology in the college, was a speaker at the celebration.

In a video display the museum is putting together, a series of questions are put to an actor portraying Darwin, who answers them based on information available when he published his famous work. Stauffer then answers the same questions, based on current knowledge.

### Showcase, Horse Sale Held April 25

The Penn State equine program hosted its seventh annual Equine Science Showcase and Select Breeders Sale April 25 in the Snider Agricultural Arena.

This year's horse sale offered more than 20 animals from the university's program, including five yearlings, 13 green-broke two-year-olds and two three-year-olds. In addition to university animals, a group of outside breeders also were featured in the sale, adding 15 prospect and trained horses to the auction.

### Turfgrass Technician Program

The fall 2009 session of the Turfgrass and Agricultural Equipment Service Technician Program begins at the University Park campus in October. The program consists of four, eight-week sessions over two years designed to train and place high-quality technicians in the turfgrass and agricultural industries.

The curriculum covers engines, hydraulics, electrical systems and equipment operation and adjustment, while incorporating computer and business skills. More information is available online at <http://abe.psu.edu/TAE>.

## Wyman's of Maine Provides Gift for College's Honeybee Research

The nation's largest grower of wild blueberries—a crop that relies on honeybees for pollination—has thrown its support behind Penn State research aimed at finding solutions to the health crisis facing the nation's honeybee colonies.

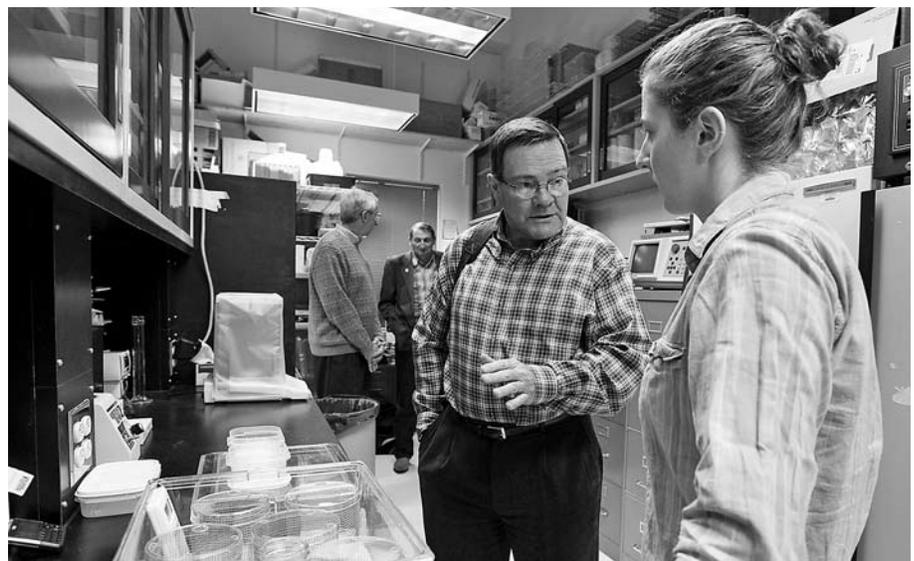
Ed Flanagan, president of Wyman's of Maine, visited the entomology department recently to present a check for \$50,000 to Robert Steele, dean of the college. The funds will support research on Colony Collapse Disorder, or CCD, a mysterious ailment that has led to the disappearance of up to one-third of U.S. commercial honeybee hives since late 2006.

Every berry that Wyman's of Maine grows owes its existence to the essential pollination that comes from the honeybee's dance from flower to flower, noted Flanagan. "There is no more direct or urgent sustainable food issue than CCD facing the wild blueberry crop,"

he said. "There is no effective alternative to honeybees. It's simple: no bees, no blueberries!"

Maryann Frazier, Penn State extension bee specialist, said the gift from Wyman's will provide critical support. "This funding will allow us to extend projects, collect and analyze more data and make the most of what we're doing," she said. "In particular, it will help us continue looking at how the complex interaction between pesticides and diseases is contributing to pollinator decline and possibly to CCD."

Wyman's of Maine has been growing and marketing wild blueberries for more than 125 years. Still family owned, the company's fruit comes from more than 10,000 acres of its own wild blueberry barrens and from the coastal hills, ridge lines and fields of other Wyman growers from Maine, New Brunswick, Nova Scotia and Prince Edward Island. ■



▲ Ed Flanagan, president of blueberry grower Wyman's of Maine, speaks with Penn State research technician Sara Ashcraft about studies to assess the effects of pesticides on honeybees.

## Familiar Faces

**QUESTION:** When electricity rate caps expire later this year, many people will see their bills rise by 30 percent or more. Have you thought about what you might do to cut energy use and costs?



**Randall Bock, engineering associate and instructor in agricultural engineering**

"I just installed a geothermal heat pump. I've heard that if you install windmills or solar panels you can receive 30 percent of the cost as a tax credit, so I am looking into small wind-electrical systems."



**Beth Irwin, graduate student, Entomology Department**

"It is a big concern for many people, including myself. Making solar energy and other alternative energy options more cost effective is ideal, but in the meantime I plan to unplug appliances and conserve electricity."



**Kelli Hoover, associate professor of entomology**

"Two years ago we anticipated this and installed a geothermal heating and cooling system, in addition to re-insulating our house. We also replaced all of our old light bulbs with compact fluorescent light bulbs and are more careful about turning off lights, computers and so on."



**Erica Cowan, research associate, Department of Dairy and Animal Science**

"I'm downsizing my residence currently and my electricity costs will decrease, but I am also looking into prepay options to earn 7.5 percent on prepayments to lessen electric bills after the cap expires."



**David Wolfgang, extension veterinarian, Veterinary and Biomedical Sciences**

"We installed new windows, added more insulation and installed compact fluorescent light bulbs. Since it is only my wife and myself, we try to be logical when we cook and try to use less energy. We are also careful to only do full dishwasher and laundry loads."

## Farmland Wildlife Publication Available

A new publication available from the college provides a guide for agricultural property owners who want to develop a wildlife-management plan for their farmland.

Written by Margaret Brittingham, professor of wildlife resources, and graduate student Amanda Yeager, "Farmlands and Wildlife of Pennsylvania and the Northeast" is a 67-page booklet loaded with information to help landowners manage their properties in a wildlife-friendly way.

"We wrote this guide to let farmland owners know how important their land is to a suite of wildlife species that have undergone population declines and to

encourage owners of agricultural land to make, in many cases, minor changes in how their farmland is managed to enhance habitat quality for these species," Brittingham said.

Beginning with a history of farmlands in the Northeast, the \$9 publication covers subjects such as wildlife species, methods to manage cropland and pasture, and ways of enhancing the land for the benefit of wildlife and damage control. As one of the United States' major farming regions, the Northeast is home to more than 175,000 individual farms, according to Brittingham. "Whether they are producing agricultural crops or livestock, these farm operators need effective strategies for dealing with the wildlife that surrounds their land," she said.

The goal of the booklet is to help landowners achieve their agricultural goals while at the same time providing quality habitat for wildlife, noted Brittingham. "We hope this booklet will provide insight for readers who are trying to minimize conflicts with wildlife and better coexist with wild animals."

Copies of "Farmlands and Wildlife of Pennsylvania and the Northeast" are available for \$9 (plus \$5 for U.S. shipping and handling) from the college's Publications Distribution Center. For ordering information, call (814) 865-6713 or visit the college's publications Web site at <http://pubs.cas.psu.edu>. To order using Mastercard, Visa, American Express or Discover, call (877) 345-0691 toll-free. (Pennsylvania residents pay 6 percent sales tax.) ■



▲ Margaret Brittingham

## Graduate Students Get University-Wide Awards

Three graduate students in the college recently received prestigious university-wide awards recognizing their research and teaching achievements.

Jonathan Lelito, a doctoral candidate in Entomology, won an Alumni Association Dissertation Award for his research on the mating behaviors of the emerald ash borer, an invasive insect that attacks North American ash trees.

Lelito's findings on visual mating cues led him to test and improve novel insect traps used to monitor pest populations. His alterations have helped regulatory officials

improve pest-monitoring methodology and trap design.

Food Science postdoctoral scholar Tanuj Motwani also won an Alumni Association Dissertation Award for his dissertation on starch gelatinization and the feasibility of new monitoring technology for the industrial processing of starch. Starch gelatinization is a complex physico-chemical process that can affect a food's texture and digestibility. Motwani's research addressed the industry's need to monitor starch gelatinization rapidly

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## From Dean Steele

Here we are just a few days away from our spring commencement and about to send another group of graduates out into the world. I've been talking with a number of students about their plans beyond graduation, and I am impressed with the wide array of career opportunities that our students have. They are confident and ready to "take on the world." I am confident that our students will do just that, because we have prepared them well. The people who employ our students tell me that routinely. Yes, we can always do a better job and we will, but our graduates today are as well prepared as ever.

Dr. Bruce McPheron and I continue to work on his transition into the dean's position, effective July 1, 2009. With approximately two months to go, I anticipate a continued seamless transition as Bruce prepares to take on this key position. The college is fortunate to have such a seasoned and strong leader ready to take the helm.

Looking back over this academic year, I can point to a number of highlights, but what stands out most in my mind is how many times we saw our student clubs, judging teams and other organizations gain national recognition for being at or near the top in regional and national competitions. We've consistently been recognized as having top students participating in these activities, and year in and year out, they've earned the recognition of their peers for being some of the very best. It is a strong testament to the quality of our faculty, staff, facilities and programs interacting with our great students. It is what a university is all about, and it gives me great pride in Penn State and our College of Agricultural Sciences.

Finally, remember that the end of the semester and final exam period can be an extremely stressful time for our students. When you have the opportunity, give them a smile and words of encouragement and support. They've worked hard this year and they've done well, and they very much appreciate knowing that you care about them. Thank you for the roles that you've played this year in educating our talented young graduates. ■



**Name:** Jim Shortle.

**Hometown:** The north valley of Albuquerque, N.M.

**Job title:** Distinguished Professor of Agricultural and Environmental Economics, and director of the college's Environment and Natural Resources Institute.

**Office:** 112 Armsby Building.

**Working at Penn State:** Since 1981.

**Spouse or partner:** Lou Anne Shortle.

**Children:** Deidre, a 2005 Penn State graduate now managing restaurants

for ARAMARK in Philly; Sam, a musician and currently an Anthropology major at Penn State.

**Pets:** "Jack, a very old but still spry golden retriever."

**Last book read:** Charles Mann's "1491: New Revelations Before Columbus."

**CD currently in your car's player:** Oscar Peterson's "Night Train."

**Favorite musician:** "I cannot name one as such, but Jesse Cook, Strunz and Farah, the Gypsy Kings, and Young and Rawlins are who I listen to most."

**Favorite movie:** "The Good, the Bad, and the Ugly."

**Favorite actor:** Clint Eastwood.

**Favorite food:** Southwestern.

**Favorite restaurant or**

**hang-out:** Zamas on the beach in Tulum, Mexico.

**Hobbies:** Music.

**Little-known claim to fame:** "I can cook."

**What you are proudest of:** "The people my children have become."

**How you relax:** "Play guitar or bass with Sam or friends, ride my motorcycle with Lou Anne, work outside."

**Favorite part of job:** "Working with graduate students. They grow and blossom before your eyes."

## Graduate Students . . . *(continued from page 2)*

and non-invasively during processing. He examined the potential implementation of dielectric relaxation methods and factors within the starch system that might affect this method.

Michael Fortunato, doctoral candidate in Rural Sociology, received one of 10 university-wide Harold F. Martin Graduate Assistant Outstanding Teaching Awards for his work as a graduate assistant over the last two years. The Graduate School and the Office of the Vice President and Dean for Undergraduate Education co-sponsor

the \$500 annual award, which recognizes graduate students who have demonstrated outstanding performance as teaching assistants for at least two semesters.

Fortunato has been an assistant and guest lecturer for six courses during his graduate career. He completed two undergraduate degrees in Finance/International Business and International Studies with a minor in French from Penn State in 2001. He earned a master's degree in Economic and Community Development from Penn State in 2008. ■

Up and Coming...

**May 2-3.** Central Pennsylvania Orchid Society Show, Ag Arena, UP. Contact Jay Holcomb, (814) 863-2258.

**May 9-12.** AAUW Used Book Sale, Ag Arena, UP. 9 a.m.- 9 p.m. daily. Contact Suzanne Kerlin, (814) 237-5271.

**May 20.** Pasto Agricultural Museum annual meeting, Special Events Building, Rock Springs, 10 a.m. to 2 p.m. Contact Vinnie Scanlon, (814) 863-1383.

**May 23-24.** 4-H Horseman-ship Skills Clinic, Ag Arena, UP. Contact Pat Comerford, (814) 863-3657.

FACULTY/STAFF ALERTS

**May 2009 Learning Lunch: Outreach Health Initiative**

Dr. Chris Calkins, director of outreach health initiatives, will host an overview of the initiative, including past accomplishments, current focus and potential future growth, at the May 2009 Outreach Learning Lunch on May 13 from noon until 1:30 p.m. in 119 Outreach Building in Innovation Park or via video teleconference (where available). In his role, Calkins works to expand health initiatives already underway in Outreach. He also identifies opportunities to increase Outreach participation in teaching, research and outreach efforts related to health across the University.

Video teleconference participation is available for employees outside of the University Park campus for this event. To participate from a remote location, complete the online registration, and choose the VTC session option. You then will be contacted by Outreach Professional Development to verify your VTC location and contact information. A complete listing of Penn State VTC locations is available online at <http://tnstest.its.psu.edu/videoconferencing/videoConfRoomsContactList.asp>.

**Helen Bell Scholarship**

The Family and Consumer Science Scholarship in honor

of Helen E. Bell was established to provide scholarships for Penn State extension educators and faculty who are responsible for family or youth programming and wish to pursue graduate degrees or to engage in other professional development opportunities related to their extension responsibilities. Applications are now being accepted for this scholarship.

Any regularly employed staff or faculty member with an extension appointment who has had at least 12 months of full time, continuing employment with Penn State Cooperative Extension is eligible to apply. First consideration will be given to a staff or faculty member enrolled either in a full- or part-time graduate degree program that relates to his/her extension family and consumer science program responsibilities. Secondary consideration will be given to individuals participating in other continuing professional-development experiences offered for graduate credit. Scholarship funds may be used during fall semester 2009, spring semester 2010 or summer semester 2010.

Applications should be forwarded to Dennis Calvin, associate director of Cooperative Extension, at 323 Agricultural Administration Building or by e-mail to [dcalvin@psu.edu](mailto:dcalvin@psu.edu) by May 22. Contributions to this endowed scholarship fund are welcomed and should be sent to the Office of Development in the College of Agricultural Sciences.

**Roofing Project Odors**

"I smell roofing odors. Does this mean I am being overexposed to harmful fumes?"

No. The sulfur compounds in roofing asphalt or coal tar have very low odor thresholds (in the parts-per-billion range). An odor threshold is the lowest concentration at which the odor of a substance can be detected by the human olfactory system. For building occupants, smelling the odors of nearby roof work does not indicate a harmful exposure.

Roof work is a necessary part of building preservation on Penn State campuses. Often, roofing odors are generated during these

projects when hot asphalt or coal tar is used as water-proofing material. You can find more information online at <http://www.ehs.psu.edu/occhealth/RoofingProjectOdors.pdf>.

ON THE MOVE

**New Faces**

**Elizabeth Laurenzana**, research associate in veterinary and biomedical sciences.

**Carol Ann Loveland**, program associate in Lycoming County.

**Kenneth Reed**, assistant unit manager in dairy and animal science.

**Lydia Schaffer**, research support technician III in entomology.

**Rebecca Sellers**, extension program educator in Clinton County.

**Partings**

**Tammy Lihan**, administrative support assistant in Westmoreland County.

**Susanna Wenner**, administrative support assistant in undergraduate education.

**Promotions**

**Morgan Firestine**, assistant extension educator in Berks County.

**Antonia Redigan**, program assistant in Westmoreland County.

**Retirements**

**John Ayers**, professor of plant pathology.

**James Brigman**, research support technologist III in the Agricultural Analytical Services Lab.

**John Peplinski**, coordinator of the Plant Disease Clinic in plant pathology.

MORE ABOUT US

**Deaths**

**James Beattie**, professor emeritus of horticulture and dean of the College of Agricultural Sciences from 1973 until his retirement in 1981, died March 4 at the age of 88.

**Margaret Haines**, home economist for Tioga County Cooperative Extension from 1936 until her retirement in 1968, died Feb. 20 at the age of 97.

**Vivien Griffith**, staff assistant IV in distance education from 1977 until 1987, died March 19 at the age of 78.

**Noteworthy**

**Marc Abrams**, professor of forest ecology and physiology and Steimer Professor of Agricultural Sciences, recently presented a paper on "The Demise of Fire and Mesophication of the Eastern U.S. Forest Biome" at the Fourth International Wildland Fire Conference in Seville, Spain. He also presented talks on "Using Dendroecology to Monitor Long-Term Forest Change and Restoration Ecology Efforts in Oak Forests of the Eastern U.S." at the first international meeting of the Asian Dendrochronology Association in Bangkok, Thailand, and spoke on "Age and Growth Rate Relationships: Are Young Trees Growing Faster than Their Predecessors?" at the TRACE 2008 tree ring meeting in Zakopane, Poland. Abrams also participated in seminars at the School of Forestry of Kasetsart University in Bangkok, Thailand, and at the Institute of Forestry of the National Agricultural University in Kiev, Ukraine.

This publication is available in alternative media on request.

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