

Bugged

FROM
MSU DEPARTMENT
OF ENTOMOLOGY

2012 Review



Photo: Casey Rowley, MSU

FROM THE CHAIR

Our latest newsletter highlights some of the many accomplishments of faculty, staff and students, and awards they have received.

Barb Stinnett, our outreach coordinator, retired this fall and was honored with a departmental luncheon. Barb helped bring our Bug House and Bug Camps to national prominence and will be missed. See photos from the luncheon at: <http://bit.ly/ourLunch>

The Bug House was highlighted by ESPN's *Road Trip* show before the Notre Dame - MSU football game. The *Road Trip* show highlights unusual activities at campuses that take place before football games. Ryan

Kimbirauskas was wonderfully deadpan as he explained entomophagy to the somewhat-reluctant reporters, and they won't soon forget his comment, "I can't believe you really ate it!" View some behind-the-scenes shots with ESPN in the photo section of the Bug House Facebook page.

I'm delighted to announce that **Dr. Jared G. Ali** has accepted our offer to join the faculty of the Department of Entomology as an assistant professor. Jared will be working on multi-trophic plant-herbivore interactions and will teach courses in nematology. Jared received his Ph.D. from the University of Florida and is currently completing a post-doc at Cornell University. He will start officially with MSU on January 1, 2014, but will visit campus several

times before then to start his program. This is a very exciting development for the department.

I hope you enjoy this issue of *Bugged!* Be sure to stop in the next time you are in East Lansing!

Ernest S. Delfosse

RESEARCH & PROJECTS

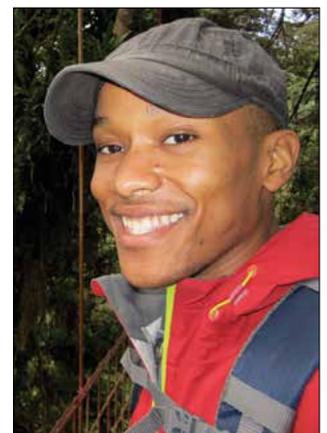
Ned Walker and Mike Kaufman successfully renewed their lab's core project, *Larval Mosquito Feeding and Microbial Interactions*, through the NIH-NIAID MERIT award system. The project was funded at a level of \$1.9 million for five years beginning July 1, 2013. **Amanda Lorenz**, a graduate student on the



Department chairs Scriber, Delfosse and Grafius with Barb Stinnett.



Ryan Kimbirauskas in the Bug House with the cast and crew of ESPN's *Road Trip*.



Jared Ali on a recent trip to Costa Rica.

project completed her M.S. thesis work with a successful defense and has published her first paper in the *Journal of Medical Entomology*. She will be pursuing a Ph.D. in Entomology starting this year, focusing on science education.

Rufus Isaacs is leading a \$1.6 million project to help farmers diversify pollination



sources and maintain consistent yields. The team's findings during the five-year project will support

long-term sustainability of U.S. specialty crops by increasing growers' ability to better manage pollinators for improved crop yield. By working in many different crop landscapes, they plan to develop widely-applicable information for growers to maximize crop yields.

Larry Olsen recently gained new support for his agricultural development work in Marco, Peru, through the appointment of two Peace Corps volunteers.



Larry Olsen looks at potato flea beetle damage with Peruvian farmers.

growing efforts within a subsistence community in the central highlands of Peru. Olsen has spent four years bringing in collaborators to address a priority of the local people, increasing their potato harvests to allow selling more potatoes at market. He and his colleagues at the CIPS research center in Lima and INIA in Huancayo have tested improved lines for better pest management and suitability to weather conditions and have worked with local citizens to judge taste and cooking desirability. The Peace Corps volunteers will help the people of the village in their priority projects and will help sustain Olsen's collaborations.

Matthew Aardema and Mark Scriber published "No evidence that male choice contributes to the maintenance of a shared, sex-limited trait in mimetic and non-mimetic female tiger swallowtail butterflies, *Papilio glaucus*" in *Evolutionary Biology* (DOI 10.1007/s11692-012-9190-7).

A new video features the work of John Wise's lab on trunk injections as a discriminating delivery system for tree fruit IPM. The video highlights work that will be continued with a \$78,831 USDA Pest Management Alternatives grant during 2012-2013. View the video at <http://youtu.be/vT221tv5PYw>

Doctoral student Megan Woltz along with professors Doug Landis and Rufus Isaacs published a study that shows increasing predator-friendly land throughout the landscape can help farmers reduce costs. Appearing in *Agriculture, Ecosystem and Environment*, the study shows that having predator-attracting habitat adjacent to crops is a partial solution for increasing beneficial insect populations as many beneficial insects travel long distances. For example, the amount of

grasslands and forests within 1.5 miles of the soybean fields determined how many ladybugs ended up in the field.

AWARD-WINNING DEPARTMENT

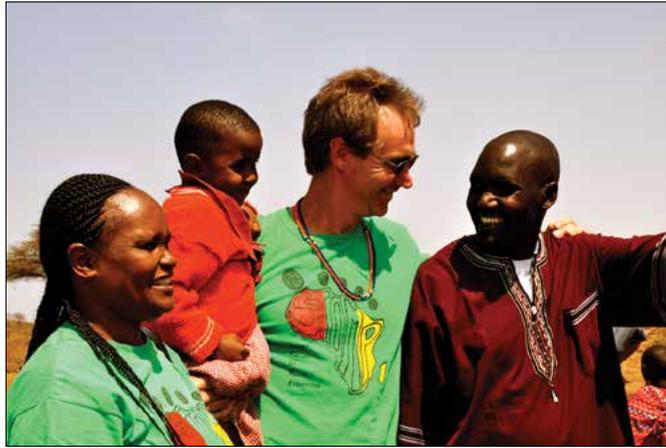
This year for the first time in memory, **the IR-4 North Central Region approved a special recognition award. It was awarded to Satoru Miyazaki** in recognition of his 34 years of service as regional field research director. Miyazaki was recognized for his outstanding dedication to providing safe and effective pest management tools for minor crop growers. **Eina Abouzi** was also recognized with an **Award for Meritorious Service**. She is a senior analyst in MSU's IR-4 laboratory and was cited for her extraordinary efforts in developing, modifying and troubleshooting analytical methodologies for the IR-4 program in pursuit of robust and high quality data supporting minor-use pesticide registration.

George Bird was honored with a Distinguished Service Award from the Board of Directors of the Rodale Institute for his service from 1993-2012.

Christina DiFonzo received the Educator of the Year Award from The Mid-America Croplife Association in Omaha, NE, during their annual meeting. She was recognized for her commitment to both producers and the industry, especially her strong relationships and communication skills.



Gabe Ording's 2011 efforts were recognized with an MSU Curricular Service-Learning and Civic Engagement Award. Each primary college dean was asked by the MSU Center for Service-Learning and Civic Engagement to name a faculty or academic specialist who has demonstrated innovative or sustained efforts in the areas of academic, curricular or co-curricular service-learning and civic engagement. Gabe was selected by College of Natural Science Dean James Kirkpatrick and Associate Dean Kathy Doig.



Gabe Ording (center) in Kenya with his students' project: STOMP - Students Taking On Malaria and Poverty.

The Department had three student winners in the Plant-Insect Ecosystems Section at the 2012 Entomological Society of America meeting in Knoxville, TN:

- **Megan Chludzinski:** First place presentation in the P-IE-9 section
- **Brett Blaauw:** First place poster in the P-IE-1 section
- **Nate Walton:** Second place poster in the P-IE-4 section

Brett Blaauw was also honored with the International Organization of Biological Control's Best Doctoral Student Award.

Larry Olsen and **Lynnae Jess** were part of the Regional IPM Centers team that received the **International IPM Award of Excellence at the 2012 International IPM Symposium.** The Centers were cited for having demonstrated the capacity and commitment necessary to dramatically increase multistate, regional, and national collaborations.

We are pleased that our student organization GUESS has carried on the tradition of hosting the annual spring picnic. This year the Department honored the following students at the event:

- **Meg Chludzinski** (C. DiFonzo) – Guyer Award for outstanding student contribution in Extension
- **Brett Blaauw** (R. Isaacs) – Guyer Award for outstanding student contribution in Extension
- **Megan Woltz** (D. Landis) – Driesbach Award for outstanding accomplishment in total Ph.D. program
- **Mitch Lettow** (D. Landis) – Outstanding Bug House Volunteer
- **Bernice DeMarco** (A. Cognato) – Outstanding Bug House Volunteer
- **T. Michael Kates** (C. DiFonzo) – Wooley Award for outstanding achievement in overall M.S. program
- **Emily Pastula** (R. Merritt) – McDaniel Award for outstanding excellent, dedication and achievement in teaching

Also, congratulations to these staff recipients:

- **Mike Haas** – Bath Award for excellence and morale among staff
- **Steve Van Timmeren** – Bath Award for excellence and morale among staff

Several department members received 2012 awards from the international Association for Communication Excellence (ACE). Communicators **Joy Landis**

and **Mallory Fournier** were part of a team awarded a gold award for best innovative use of communication technology for development of the MSU Extension News for Ag website. The new website received over 190,000 visits last year. **Anna Fiedler, Rufus Isaacs, Joy Landis** and **Doug Landis** received a bronze award in four-color popular publications for their bulletin *Native Plants and Ecosystem Services*.

PEOPLE

Rob Morrison, a graduate student with Zsafia Szendrei, was awarded a \$75,000 competitive USDA National Institute of Food and Agriculture Pre-doctoral Fellowship to fund the last two years of his Ph.D. research. Rob's work investigates how to better control asparagus miner, a vector for pathogenic species of fungi, through increased biological control, manipulating the volatiles that asparagus produces (incorporating these into baits) and by developing a degree-day model to better time insecticide applications for adult populations. Overall, Rob's research aims to decrease reliance on traditional insecticides in an integrated pest management program to strengthen Michigan's asparagus industry.



Rob Morrison

Karim Maredia has been appointed to represent the international community on a new high-level African Union panel that advises a larger task force developing Africa's common framework for advancing science, technology and innovation. The adopted plan will be presented to the AU heads of state at a summit for approval in 2013.

Congratulations to our Entomology students graduating at the 2012 Spring Semester Commencement. The graduates and their future plans are listed below.

Bachelors of Science

- Curtis Abell, graduate studies at Ohio State University
- Craig Bateman, graduate studies at Florida State University
- Travis McClure Olans, graduate studies at North Carolina State University
- Matt Quenaudon's plans are being determined
- Eric Reum, dental school at Wayne State University
- Joshua Thomas, U.S. Army officer training
- Ryan Young, graduate studies at MSU in fisheries and wildlife

Masters of Science

- Amanda Lorenz is working as a technical aide with Dr. Mike Kaufman
- Emily Pastula is earning a teaching certificate from Eastern Michigan University
- Emily Pochubay is a research technician for Dr. Matt Grieshop
- Anthony VanWoerkom is a technical aide for Dr. John Wise
- Liu Yang has entered a doctoral program at Ohio State University

Doctors of Philosophy

- Chris Hamm is a post-doc at UC Davis with Dr. David Begun working on population genetics
- Mike Reinke is employed by ISCA Technologies, Riverside, CA.

In December 2012, we were also pleased to have Entomology undergraduates Steven Nichols and Diana Miller graduate with the winter commencement.



Mike Kaufman



Zsofia Szendrei



Matt Grieshop

Zsofia Szendrei and **Matt Grieshop** were reappointed this spring and **Mike Kaufman** was promoted to fixed-term, associate professor.

The IPM Program welcomed **Julianna Wilson** as the new tree fruit IPM integrator. Wilson most recently earned her doctorate with Rufus Isaacs. Her focus now is to address the needs of the Michigan tree fruit industry. Her broad interests are how to build better farm systems with particular emphasis on how farm management practices intersect with ecosystem services to produce healthy, marketable tree fruit.

Entomology's team was a winner at the MSU College of Agriculture and Natural Resources Alumni Association's Annual Golfing for Scholarships this past summer. Our golf team included (in order as pictured with Sparty!): **Tommy Gut** (Entomology undergrad), **Larry Gut, George Bird, and Don Stefanko** (student). They won



the George Stachwick Memorial Extension Cup with a 16 under par score of 56. The fundraiser is held every June.

Students in **Gary Parson's** ENT 838 Immature Insects class have created a 2013 calendar from images they took for the class. The calendar includes noteworthy events, such as holidays and important MSU dates, along with colorful photos of immature insects, including the one on the cover of this newsletter by **Casey Rowley**. Print the calendar in an 8.5" x 11" format from this link: <http://bit.ly/WULeFU>.

Ten new graduate students were welcomed into the Department of Entomology at a pizza lunch on September 17. Students, staff and faculty mingled with the new students who bring our current graduate student count up to 41.

ALUMNI NEWS

Jiri Hulcr is now an assistant professor in the School of Forest Resources and Conservation, University of Florida, Gainesville, directing a research program in the symbiotic complex among beetles, fungi and bacteria (www.ambrosiasymbiosis.org).

Aaron Smith was awarded his first NSF grant to research the systematics of the darkling beetle genus *Eleodes* (Coleoptera: Tenebrionidae) – a diverse genus of flightless beetles endemic to

western North America. He is a post-doctoral researcher in the School of Life Sciences at Arizona State University.

Jim Webster, USDA-ARS adjunct faculty member (1968-81) with the cereal leaf beetle research program, received the Lifetime Achievement Award at the International Plant Resistance to Insects meeting in Minneapolis, MN, in April 2012. Jim and Arletta are retired and live in Stillwater, OK.

Lori Carris, associate professor of mycology at Washington State University, received the 2011 Excellence in Teaching Award from the American Phytopathological Society.

Larry Duncan, professor of nematology at the University of Florida, was awarded the 2012 Distinguished Service Award from the Organization of Tropical American Nematologists.

Diana Londono recently joined BASF in North Carolina as a research scientist.

Ryan Kimbirauskas is a specialist-teacher with MSU's Center for Integrative Studies where his primary responsibilities are coordinating ISB 208L (Applications in Biological Science) courses and instructing ISB 200 - History of Life.

Oswaldo Hernandez has returned to MSU working as a specialist-teacher for the Center for Integrative Studies in General Science. He teaches and coordinates ISP 203L (Geology Human Environment Lab) and instructs ISP 203 (Global Change) lecture courses.

Rebecca Gore was promoted to program manager of MSU's Human Research Protection Program.



Photo: MSU Photography

Maria Davis, provost and dean at Olivet College, and **Dave Smitley** were featured in the Fall/Winter 2012 issue of AgBioResearch's *Futures* magazine about mentoring. Dave recalls that as a graduate student, Maria "... was a good researcher, but she had even more talent in teaching. I just made sure she had plenty of opportunities to get teaching experience, and she took right off." Maria notes that "Dave allowed me to explore teaching and that's no small thing. Teaching takes time way from the research." The two continue to interact with some Olivet students working summers in the Smitley lab at MSU. Read more at: <http://bit.ly/TgXGVu>

Ben Werling has joined MSU Extension as a vegetable educator based in west central Michigan.

Craig Bateman, a former undergraduate employee in the Walker-Kaufman-Tsao lab, is now a graduate student in the area of beetle-fungus interactions at the University of Florida.

Fumio Matsumura died on December 6. He was director of MSU's Pesticide Research Center for about 10 years before moving to UC Davis in 1987. There he was a director of the Center for Environmental Health Sciences; editor-in-chief of the journal *Pesticide Biochemistry and Physiology*; and wrote the textbook *Toxicology of Insecticides*, first published in 1975 and used by generations of college students around the world.

THE BUG HOUSE

The Department's Bug House was a hot stop during Lansing's "Be a Tourist in your Own Town" on June 2. Former coordinator **Barb Stinnett** reported that 1,185 people visited during the seven-hour event. They were greeted and introduced to Bug House "residents" by student and lab volunteers: **Amanda Lorenz**, **Ian Lane**, **Coral Townsend**, **Rachel Olson**, and **Steve Nichols**.

With Stinnett's retirement, **Courtney Smith** is now coordinating Bug House outreach. View the Bug House website (www.bughouse.msu.edu) or visit its Facebook page for details on events. **Please consider contributing** to this great outreach for introducing children and their parents to some of the coolest organisms on earth - insects.

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SAVE PAPER AND STAY IN TOUCH

We love to hear from our alumni. Please send us your news – promotions, job changes, life milestones and just general fun interactions with entomology. Images are welcomed, too. News can be sent to entnews@msu.edu or the mailing address at the top of this page.

If you'd like to share your email address with us, we'll save trees and budgets by sending you an email link to future *Bugged* newsletters rather than a print copy. Thanks!



Photo: MSU Photography

