

PLEASE DO NOT PRINT THIS!

## SU Biology Students Study Louisiana Peepers During Winter Break



In January, Kyle Wilhite (M.S. student shown left), and undergraduate students Samantha Aylor, Matt Delgrosso, and Alicia Frye traveled to Louisiana to collect recordings of male courtship vocalizations by spring peepers (*Pseudacris crucifer*). The calls are being analyzed for comparisons with Maryland populations. Pictured, Kyle Wilhite and Alicia Frye collect morphometric data from a frog whose vocalization was recorded. Call analysis shown in inset. Photo courtesy of Brad Moon, University of Louisiana Lafayette.

### ANNOUNCEMENTS AND AWARDS

#### Relay For Life: April 29-30.

The SU Biology Department is participating in Relay for Life of SU on April 29<sup>th</sup>, 2011. Last year we raised over \$2400.00. If you would like to join the team or make a donation, please contact Dr. Price [dlprice@salisbury.edu](mailto:dlprice@salisbury.edu) or go to the Salisbury Relay for Life website and click on the SU Biology team.

We will be selling biodegradable coffee mugs (\$10.00) with the SU Biology Logo to raise money and awareness. If you would like a mug, please stop Dr. Price's office.

### REDUCE - REFILL - RECYCLE



### ANNOUNCEMENTS AND AWARDS Cont.

This Month's Featured Faculty is Dr. Dana L. Price. Dr. Price has been with the Biology Department at Salisbury University for three years. Dr. Price's research focuses on dung beetle behavior, ecology and evolution. However, more recently she has been working with her research students to examine the species diversity of all "Scarabs" (Superfamily Scarabaeoidea) in Maryland. To learn more about **Dr. Price's research lab go to page 7.**



Photo by P. Coin.

### Student Research Conference

The Salisbury University Student Research Conference (SUSRC) committee announces the 10th annual SUSRC on Friday, April 29, 2011. The conference is free and the public is invited. For more information visit <http://www.salisbury.edu/susrc>



### Thinking and Doing Genetics Field Trip to Biology Department

Dr. Patti Erickson has been working with Wicomico County's 3rd-5th grade TAD (Thinking and Doing) program. Over two hundred students and their teachers will visit the Henson Science building on two consecutive Fridays, April 1 and April 8, for a genetics field trip. Students will participate in 4 lab stations, which will be run by SU Biology instructors and students and Science Education students. The stations will include observing plants, animals, and bacteria expressing the green fluorescent protein (GFP), isolation and preservation of students' DNA from cheek cells in necklaces, DNA gel electrophoresis using FlashGels, a mimic genetic screen for the disease phenylketonuria (PKU), and a tour of Henson's second-floor environmental growth rooms and the greenhouse.

### Admission to Vet School for Fall 2011

Meghan Neal (May 2011 Graduate) has been accepted to the Virginia/Maryland Vet School at Virginia Tech.

**ANNOUNCEMENTS AND AWARDS Cont.**

**Winter Session**

**Biology 399 International Field Studies: Coral Reef Biology**

If you are interested in the BIOL 399 class, Coral Reef Biology, applications are being accepted NOW. Completed applications are due no later than April 25, however soonest is best. If you are interested, please contact Dr. Ann Barse. Henson Hall 233: [ambarse@salisbury.edu](mailto:ambarse@salisbury.edu)



**Wicomico Creek Watchers**

The Wicomico Creekwatchers are starting up again! Tuesday March 29th was the first sampling day of the 2011 season, and students, citizen volunteers, the City of Salisbury, and the Wicomico Environmental Trust are working together to make this a valuable year for monitoring water quality on the river.

For more information on the program or to volunteer, contact Dr. Judith Stribling.

Photo: Michele Thiess, Michelle Meininger, Laura Hundy and Lauren Brenneman presented the results of the 2009 season at the Maryland Water Monitoring Council Conference.



## UPCOMING EVENTS

### **eBird Fridays**

SU's Ward Museum of Wildfowl Art and Biological Sciences Department introduce eBird Fridays program at the Ward Museum 11:30 am-12:30 pm Fridays April 1-May 6. Enjoy the fresh air and company of others during lunch hour as you look for birds around Schumaker Pond and learn about the free, online citizen science program called eBird. eBird, launched in 2002 by the Cornell Lab of Ornithology and the National Audubon Society, helps provide real-time data on bird distribution and abundance. Learn how to use this online bird checklist program to contribute to science and the conservation of birds. eBird Fridays are free and open to the public. Pre-registration is not required. For more information, contact [wardeducation@salisbury.edu](mailto:wardeducation@salisbury.edu) or 410-742-4988, ext.104.

### **The Spring 2011 Biology and Chemistry Seminar Series:**

[http://faculty.salisbury.edu/~rlgutberlet/biology\\_seminars.html](http://faculty.salisbury.edu/~rlgutberlet/biology_seminars.html)

April 7, Jay Nelson (Towson University) will present "Intraspecific Physiological Variation, does it matter? Ecological Performance of European Sea Bass (*Dicentrarchus labrax*)". Hosted by Gene Williams.

April 14, Eileen Hebets (University of Nebraska-Lincoln) will present "The Evolution of Complex Courtship Signaling in Wolf Spiders". Hosted by Ryan Taylor.

April 21, David Teie (National Symphony Orchestra-Cellist) will present "Making Music for Monkeys". Hosted by Gene Williams.

April 28, Bernard Lohr (UMBC). Hosted by Ryan Taylor.

May 5, Leila Hamdan US Naval Research Lab. Hosted by Judith Stribling.

### **Earth Day Live Aloha Clean Up: Saturday April 16, 8:30 am**

Maryland Coastal Bays Program

Saturday, April 16 is the 2nd Annual Live Aloha Earth Day Clean Up with the Surfriders. Please try to register ahead of time by calling or emailing Sandi - [sandis@mdcoastalbays.org](mailto:sandis@mdcoastalbays.org) or 410-213-2297 ext 107. We will be hosting a little party at noon at Fager's Island. We ask that you give us an estimate on how many pounds you think you picked up. And bring the most unusual item you found as we have a few prizes!

### **Canoe, Kayak, Bike and Paddle Board Stand Open House: Tuesday, April 19, 4 - 6 pm**

Come check out our Canoe, Kayak, Bike and now Paddle Board stand at the Assateague Island National Seashore! Proceeds from this stand raises funds for our program. We're hosting this open house to build more awareness of our stand to the business community. Please tell your friends and family to come out and find us on Assateague. Entry fees to the park are free this week and weather permitting you can even take test ride on one of our vessels!

### Ward Museum Activities

- **Screen Painting Workshop:** Saturday, April 9, 10 am - 5 pm  
John Iampieri, a celebrated painted screen artist from Bishopville, MD, teaches participants about the history and functionality of the painted screen as they create their own 22" x 32" painted screen. Space is limited and pre-registration is required. Registration deadline is Wednesday, April 6. Cost is \$80 for Ward members, \$95 for non-members, \$55 for youth ages 12 to 18. For more information call 410-742-4988, ext. 110, or e-mail [wardeducation@salisbury.edu](mailto:wardeducation@salisbury.edu).
- **Flying Wild Educator Training:** April 9, 10:00 am - 2:00 pm  
**Delmarva Discovery Center, Pocomoke City, MD**  
The Flying Wild curriculum, developed by the Council for Environmental Education, introduces students to bird conservation through standards-based, interdisciplinary classroom activities and environmental stewardship projects. Learn about the curriculum, try some activities, and meet other educators interested in introducing bird education in the classroom. This **FREE** workshop is held at the Delmarva Discovery Center in Pocomoke City, Maryland, and is open to scout leaders and other non-formal educators. Pre-registration is required for this opportunity. For more information or to register, contact: Brian Garrett, Executive Director of the Delmarva Discovery Center at 410-957-9933 or email [bgarrett@delmarvadiscoverycenter.org](mailto:bgarrett@delmarvadiscoverycenter.org)
- **Growing Up WILD Educator Training:** April 16, 9:00 am - 12:00 pm  
Growing Up WILD is an early childhood education program that builds on children's sense of wonder about nature and invites them to explore wildlife and the world around them. Through a wide range of activities and experiences, Growing Up WILD provides an early foundation for developing positive impressions about the natural world and lifelong social and academic skills. Cost is \$20 and pre-registration for this training is required. For more information or to register, contact the Ward Museum's Education Department at 410-742-4988 x110 or email [wardeducation@salisbury.edu](mailto:wardeducation@salisbury.edu).
- **Learn with SU: Delmarva's Birds from Beach to Bay:** April 21, 7:00 am - 12:00 pm  
With more than 300 bird species found on the Delmarva peninsula, it's easy to feel overwhelmed by identification. Join our team of local experts for a series of field birding adventures as we travel to four different birding hotspots. Learn where to locate birds, the keys to identification, and the ecosystems they inhabit. Cost is \$10 per session/ \$25 for 3 sessions (member) or \$12 per session/\$30 for 3 sessions (non-member) and pre-registration is required.

### **Birding Weekend:** April 28 - May 1

The Delmarva Birding Weekend celebrates the spring migration of thousands of warblers, shorebirds, waterfowl and raptors. The weekend combines a boat trip, paddling treks and expeditions by foot. For more information [www.delmarvabirding.org](http://www.delmarvabirding.org)

### OPPORTUNITIES

#### **University of Georgia: Sea Grant Education Internships**

<http://www.marex.uga.edu/aquarium/internPrograms.html>

The University of Georgia's Marine Education Center and Aquarium (MECA) offers annual post-baccalaureate internships in marine education. Interns train and work for 50 weeks at MECA, near Savannah, Georgia. Four interns will be selected for the period of September 5, 2011 - August 15, 2012. Deadline(s): 04/05/2011

**Vermont Space Grant Consortium: VSGC Undergraduate Scholarship Program**

E-mail: [zeno@cems.uvm.edu](mailto:zeno@cems.uvm.edu); Web Site: <http://www.vtspacegrant.org/>

The sponsor will provide up to ten scholarships per academic year, each worth \$2,500; and they will be awarded on the basis of academic standing, letters of recommendation, and an essay detailing career goals. Deadline: 04/13/2011. <http://www.vtspacegrant.org/scholarship.php>

**South Carolina Aquatic Plant Management Society: Scholarship Program**

E-mail: [sdekoz2@gmail.com](mailto:sdekoz2@gmail.com)

<http://www.scapms.org/scapmsscholarship.htm>

The sponsor awards an annual scholarship grant. The Society intends to award a \$3,000 grant to the successful applicant in the Fall of 2010. Deadline(s): 05/01/2011

**Bermuda Institute of Ocean Sciences**

**Undergraduate Fellowships in Marine Science, Oceanography, and Global Climate Change**

E-mail: [education@bios.edu](mailto:education@bios.edu); Program URL: <http://www.bios.edu/education/reu.html>

The sponsor has received National Science Foundation Research Experiences for Undergraduates (REU) funding to support 8 fellowships for undergraduate student research at BIOS during the 2011 fall semester. Students will begin work on August 30 and end on November 23. Students will design and conduct independent projects under faculty supervision within several research areas including: Biology, chemistry and physics of the open ocean; Biology, physiology and biochemistry of reef building corals and reef ecosystems; Aspects of the molecular biology of marine organisms; Environmental chemistry of Bermuda's atmosphere and inshore waters; Effects and consequences of global environmental change. Students who have completed at least two years of undergraduate study and will still be undergraduates in the fall of 2011 are eligible to apply. Applicants must be U.S. citizens. Deadline(s): 05/30/2011

**City Year**

City Year unites young people of all backgrounds for a year of full-time service, giving them skills and opportunities to change the world. City Year corps members serve full-time at one of 20 locations across the United States as tutors and mentors, running after-school programs and leading youth leadership programs. The direct web address is [www.cityyear.org](http://www.cityyear.org). DC's is [www.cityyear.org/dc](http://www.cityyear.org/dc)

**Western Society of Malacologists: Student Research Grants in Malacology**

<http://biology.fullerton.edu/orgs/wsm/grants.html>

The sponsor offers grants to support student research in malacology. Deadline(s): 05/01/2011

**Stipend Volunteers are sought for the Chesapeake Conservation Corps**

The purpose of the Corps is 1) to enable stipend volunteers to work with host organizations and communities throughout Maryland to implement on-the-ground restoration and energy conservation projects, and 2) to provide leadership and training opportunities for young adults pursuing environmental and conservation careers. Corps volunteers will work on projects in the realms of watershed restoration, energy conservation, agriculture, forestry, and environmental education. At least 16 Corps Volunteers will be placed. Corps Volunteers will receive a stipend of \$19,000 for the year of service. More information and application materials can be found at [www.cbtrust.org/chesapeakeconservationcorps](http://www.cbtrust.org/chesapeakeconservationcorps).

**National Aquarium volunteers**

The National Aquarium is now recruiting volunteers for wetland planting on Poplar Island, June 8-11. Please visit [http://www.aqua.org/conservationevents\\_poplarisland.html](http://www.aqua.org/conservationevents_poplarisland.html) for more information.

## FEATURED FACULTY

### DR. DANA PRICE

Photo taken in French Guiana.  
Hunting big game (dung beetles and dragonflies)!

**Courses taught at SU:** Insects and Human Society (Biology and Society 105), Introductory Biology for Majors (Biol 210), Zoology (Biol 213), General Entomology (Biol 316), Research in Biology (415, 416), Seminar (Biol 418), Readings in Biology (Biol 420). During Spring 2012 I will be teaching Biology and the Environment (Biol 502).



*Phanaeus vindex*



*Phanaeus demon* ([www.eol.org](http://www.eol.org))

**Research Interests:** I am an organismal biologist trained in entomology, ecology, evolution, and systematics. My PhD work focused on the phylogenetics of the New World dung beetle genus *Phanaeus*. The genus is a beautiful group of dung beetles with bright colors ranging from red to maroon, to blue, green and black (See photos to the left). They feed mainly on mammalian dung, but some are attracted to carrion and mushrooms.

Dung beetles are both ecologically and economically important insects for several reasons. They play a critical role in nutrient recycling, soil structure, and the removal of dung, which could otherwise be a habitat for dung breeding pests. Dung beetles are also used for monitoring biodiversity and consequently are considered a model group for understanding broad biodiversity trends. Recent publications from my dissertation research are shown below.

**Price, D. L. and M. L. May. 2009.** Behavioral Ecology of *Phanaeus* Dung Beetles (Scarabaeidae: Scarabaeinae): Review and New Observations. *Acta Zoologica Mexicana*, 25(1): 211-238.

**Price, D. L. 2009.** Phylogeny and Biogeography of the Dung Beetle Genus *Phanaeus* (Coleoptera: Scarabaeidae). *Systematic Entomology* 34: 137-150.

### Current Research

My research at Salisbury University has taken me in several different directions. For two years now, my research students and I have been collecting dung beetles in Wicomico, and Worcester Counties in order to create a reference collection of the dung beetles of Maryland's Eastern Shore. Data collected from this research will report on species diversity and abundance, habitat preference and seasonality.

On a larger scale, I am working with students to begin collections of all Scarabaeoid beetles in each of the 23 counties of Maryland with an emphasis on the Eastern Shore. Collection materials will be further supplemented with historical records from museum collections, USDA holdings, and personal collections from Maryland. Data accumulated from this project will ultimately be used to create a taxonomic guide to the Scarabaeoidea of Maryland. SU Biology undergraduate and graduate students, SU Alumni, Maryland Naturalists, and individuals that have a general interest in beetle collection are participating in the collection of beetles across Maryland's diverse terrain. If you are interested in conducting beetle research or would like to participate in the collection of Scarab beetles, please contact Dr. Price ([dlprice@salisbury.edu](mailto:dlprice@salisbury.edu)). Below are four "Scarabs" collected from Wicomico County.



Common Stag beetle (*Lucanus capreolus*)



Eastern Hercules Beetle (*Dynastes tityus*)



Grapevine beetle (*Pelidnota punctata*)



Green June beetle (*Cotinis nitida*)

### Recent Presentations:

**Price, D.L. 2011.** An Inordinate Fondness for Dung Beetles. University of Delaware, Graduate Program of Entomology and Wildlife Ecology. Invited Speaker.

**Price, D.L., L. Brenneman, and R. Johnston. 2011.** Dung Beetles of Eastern Maryland's Eastern Shore. Entomological Society of America, Eastern Branch Conference, Harrisburg, PA. [Poster]

### Recent Publications:

**Price, D.L., L. Brenneman, and R.E. Johnston. In Prep.** Dung Beetles of Maryland's Eastern Shore. To be submitted to Proceedings of the Entomological Society of Washington.



## MEETINGS/ PRESENTATIONS/ TRAVEL

**Ryan Johnston** (SU Biology Senior) presented his research “Scarabaeoidea of Eastern Maryland” at the Entomological Society of America, Eastern Branch Conference in Harrisburg, PA, March 19, 2011.

**Dr. Clement Counts** is acting as a reviewer for the Northeastern Naturalist.

**Dr. Clement Counts** gave a poster presentation titled "Land Gastropoda in Maryland: Do we know enough to estimate biodiversity" at the Mid-Atlantic Malacology Meeting at the Delaware Museum of Natural History, Greenville. The group photo from the meeting is shown below.



**Photo: Mid-Atlantic Malacology Meeting**

**MEETINGS/ PRESENTATIONS/ TRAVEL Cont.**

This spring, SU Biology students and faculty visited the Smithsonian Museum of Natural History and the mid-Atlantic section of the American Society of Plant Biology winter dinner meeting. They had a behind the scenes tour of the Smithsonian Museum of Natural History herbarium, as well as a chance to see their unique rare books collection (see photos below).



Photo: Taken in front of the Smithsonian: (Left to right) Stacey Willey, Kim Hunter, Richard Hunter, Georgiana Porter, Brittany Brockett, Mark Holland, Patti Erickson, Ryan Poe, Alex Dorman, Gene Williams (not shown).



Smithsonian Rare Book Library: Mark Holland, Patti Erickson, Richard Hunter, Brittany Brockett, Smithsonian Rare Book Librarian Leslie

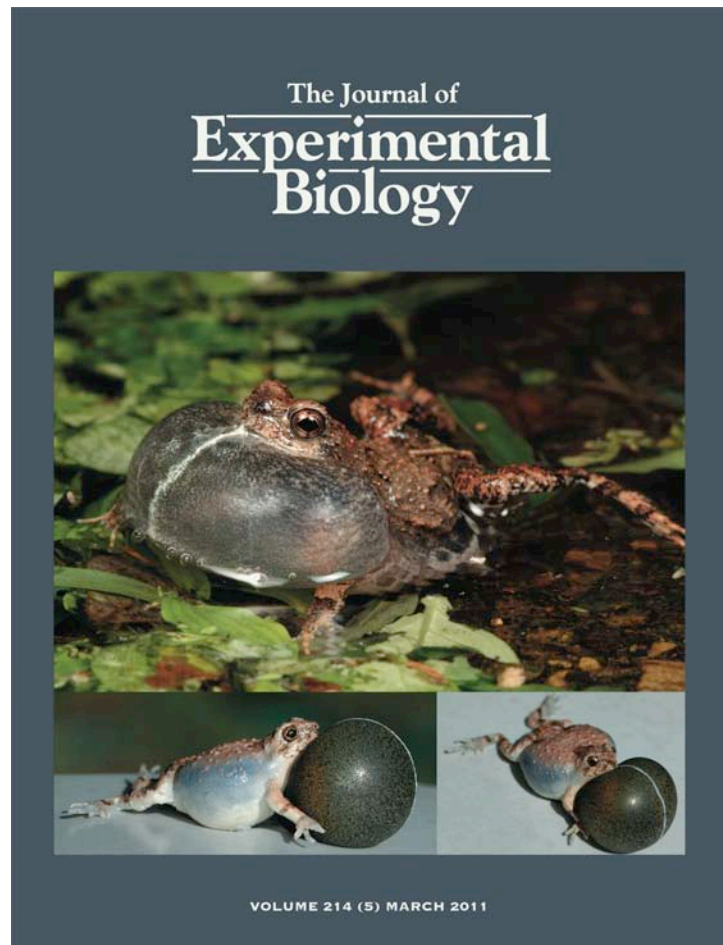


Tortilla Café: Stacey Willey, Ryan Poe, Mark Holland, Patti Erickson, Alex Dorman, Kim Hunter, Richard Hunter

## PUBLICATIONS

Dr. Taylor's recent publication was featured on the cover of the *Journal of Experimental Biology* (See photo below).

Taylor, R. C., Klein, B. A., Stein, J., and M. J. Ryan. 2011. Spatial and temporal variation in multimodal signal assessment in the túngara frog, *Physalaemus pustulosus*: How important is matching a signal with its signaler? *Journal of Experimental Biology*, 214:815-820.



## ALUMNI

Ainsley (Storm) Todd (2010 Graduated) has been accepted to the University of Missouri, College of Vet medicine.

**If you have announcements to add or general comments regarding the Newsletter, please email [dlprice@salisbury.edu](mailto:dlprice@salisbury.edu). Your opinion matters!**

**Editor:** Dr. Dana Price

**Coeditor:** Dr. Ronald Gutberlet