Department of Ecology, Evolution, and Natural Resources and Ecology and Evolution Graduate Program Newsletter

June 2013

Previous newsletters may be found at:

http://www-rci.rutgers.edu/~deenr/news.html

Congratulations!!

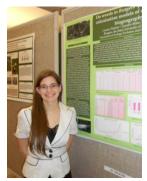


Congratulations to Rae Winfree on the receipt of a Board of Trustees Research Fellowship for Scholarly Excellence. The award notes Rae's "influential work on focusing on native bees, including pollinator behavior, diversity, ecosystem services, and economic impact." An award ceremony was held May 8th at the Rutgers Visitor Center.

Congratulations to Bonnie McCay (Human Ecology) who was inducted as a new member of the National Academy of Sciences on April 27, 2013. The photo is of Bonnie at the ceremony, signing the book that President Abraham Lincoln first signed when he created the National Academy of Science 150 years ago.



Lauren Palatini, DEENR major and Byrne Aresty stipend recipient worked with Lena



Struwe on a research project on the biodiversity of weeds in parking lots on Rutgers Campus' during Summer 2012. The data was analyzed in collaboration with E&E graduate student Jennifer Blake during Fall 2012, and the results were presented by Lauren during two poster shows in April 2013: the SEBS research poster exhibit, and the university-wide Aresty undergraduate poster show. Lauren was awarded the SEBS prize for the best poster presented on field-based research by a SEBS undergraduate.

The title of the poster was "Do weeds in Rutgers' parking lots fit colonization models of classic island biogeography?"

(This photo, taken by Lena Struwe, shows Lauren at the Aresty poster show, with the same poster as at the SEBS show.)

New Endowed Chair

A new faculty position – *The Johnson Family Chair in Water Resources and Watershed Ecology* – has been endowed in the Department of Ecology, Evolution, and Natural Resources through the generous gift of \$1.5 million from three charitable organizations founded by John Seward Johnson and a matching gift from an anonymous donor. The holder of the Johnson Family Chair will study the ecological interface of salt- and freshwater-based ecosystems and will use the Raritan River drainage basin and the Rutgers Ecological Preserve for teaching and research. For the news release see: http://news.rutgers.edu/medrel/news-releases/2013/march-2013/rutgers-creates-chai-20130321

Presentations:

Ashley DeNegre, a PhD candidate in the Fefferman lab, gave a contributed talk entitled,"Antibiotic Resistance among the AIDS-immunocompromised: A Model of How AIDS Influences Microbial Evolution," at the annual meeting of the Society for Mathematical Biology held at Arizona State University on June 10th.

Siobain Duffy gave the departmental seminar in the Department of Microbiology and Plant Pathology at Iowa State University on 4/2/13. The seminar was titled "The molecular evolution of begomoviruses: ssDNA viruses that act like RNA viruses."

Bonnie McCay (Human Ecology) was the keynote speaker for the 14th Biennial Conference of the International Association for the Study of the Commons, Kita Fuji, Japan, June 4, 2013. Her topic was "Tragedies, Comedies, and Other Dramas of the Commons."

On May 5, Lena Struwe gave an invited talk at the US Botanic Garden on the Mall in Washington, DC, titled: 'The good, the bad, and the ugly facts about medicinal plants'

On April 24, Lena Struwe gave an invited talk titled "Host niche conservatism or specialization? Evolutionary host patterns in *Ophiognomonia* (Diaporthales: Ascomycota) and the relationship of species diversification to ecological vicariance and plant host niches' at SUNY Stony Brook University.

Robert Trivers (Anthropology) has spent four months at the Institute for Advanced Studies in Berlin. He reports the writing and submission of two papers while there and he has given the following presentations:

- "Deceit and self-deception", Leipnitz Institute, Berlin, Germany, April 22, 2013.
- "Betrug und Selbst-Betrug", Hamburg Literary Festival, Hamburg, Germany, April 20, 2013.
- "The logic of self-deception", University of Copenhagen, Copenhagen, Denmark, April 3, 2013.
- "The logic of self-deception in human life", Max Planck Institute for Human Development, Dahlem, Berlin, Germany, January 22, 2013.

Judy Weis, (Rutgers-Newark) has given the following presentations:

- As a speaker at on-line conference on Behavior and Invasive Species titled "The role of behavior on the success of invasive crustaceans"
- As an invited speaker at Hudson-Delaware chapter of SETAC titled "Singing the blues in Hackensack: behavioral and ecological effects on blue crabs and bluefish living in a contaminated environment"
- Lecture on salt marshes at SUNY-Southampton.

Publications:

Dan Cariveau and members of the Winfree lab have the following publication:

Daniel P. Cariveau, Neal M. Williams, Faye E. Benjamin, Rachael Winfree.
Response diversity to land use occurs but does not consistently stabilise ecosystem services provided by native pollinators. *Ecology Letters*. Available as early view online.

Brooke Maslo reports the following publication:

 Maslo, B. and K. Leu. 2013. The facts about bats in New Jersey. Rutgers Cooperative Extension Fact Sheet: FS1207. New Brunswick, NJ.

Orin (Robbie) Robinson, Nina Fefferman and Julie Lockwood report the following publication. Robbie is a PhD candidate in Julie Lockwood's lab.

 Robinson, O.J., N.H. Fefferman, and J.L. Lockwood. In Press. How to effectively manage invasive predators to protect their native prey. *Biological Conservation*.

Robert Trivers (Anthropology) has had the following papers published:

- Trivers, R., Hopp, R. and Manning, J.T. in press. A longitudinal study of digit ratio (2D:4D) and its relationships with adult running speed in Jamaicans. *Human Biology*
- Manning, J.T., Kilduff, L.P. and Trivers, R. 2012. Digit ratio (2D:4D) in Klinefelter's Syndrome. Andrology, doi: 10.1111/j.2047-2927.2012.00013.x
- Lynch, R. and Trivers, R. 2012. Self-deception inhibits laughter and humor appreciation. *Journal of Personality and Individual Differences* 53: 491-495.

The German language version of Robert Trivers book on <u>Deceit and Self-Deception</u> has been published:

• Trivers, R. 2013. <u>Betrug und Selbst-betrug</u>. Berlin: Ullstein.

Andrew "Pete" Vayda, professor emeritus in Human Ecology, reports the following publication that discusses, *inter alia*, the need for sequencing of the ecological and social science components of interdisciplinary projects.

 Vayda, A.P. 2013. "Causal Explanation for Environmental Anthropologists." In: <u>Environmental Anthropology: Future Directions</u>, H. Kopnina and E.S. Ouimet, eds., London, Routledge, pp. 207-224.

Media:

Fox News New York interviewed Rae Winfree and Faye Benjamin regarding wild vs. domesticated bee pollinators as reported in *Science* http://video.foxnews.com/v/2402218038001/

The piece was sent to affiliates across the country.

Faculty Achievements and Activities:

Lena Struwe has been elected as a member of the University Senate, as a representative of the Graduate School - New Brunswick, to serve a 3 year term.

Together with Beth Tracy in the Women in Science Office at Rutgers, Lena Struwe organized a workshop for graduate students in team building and DiSC working styles on May 7. The workshop was sponsored by Dean Rick Ludescher.

Siobain Duffy and Lena Struwe organized a poster exhibit called Evolution in Action on May 3 on campus, where 70 student-designed posters were exhibited by the DEENR class Fundamentals of Evolution.

Rutgers Day/Ag Field Day

The weather could not have been nicer for Rutgers Day (always Ag Field Day to us here on Cook Campus). It brought out the crowds!

Lena Struwe organized an information event called WEEDS OF DESIRE, with Jennifer

Blake-Mahmud on Rutgers Day 2013. Drinks made from weedy species were served (elderflower lemonade and rose hip soup), stickers handed out (I DRINK WEEDS, WEEDS ARE ALSO MADE FROM STARDUST, WEEDS ARE SUPEREVOLUTIONARY, etc.), potted weeds were demonstrated, and 450 free copies of a small newly designed field guide to weedy plants of NJ were handed out. This photo, taken by Jennifer Blake-Mahmud, shows Rutgers undergrad Stacey Brody talking about edible weeds with a visitor.





The EcoGSA once again held their used book sale. The number of books donated was greater than ever. The proceeds from the sale help to defray costs of the Eminent Ecologist speaker, the Friday Student Seminar series and the professional development workshops that the EcoGSA hold throughout the year. The picture was taken before the sale was actually open for business.

Lena Struwe led two guided tours for the public on weird and crazy plants in the floriculture greenhouses.

Grants:

Siobain Duffy: has received a grant for a proposal titeld "Disease Diagnostics for Sustainable Cassava Production in Africa", funded by the Bill and Melinda Gates Foundation and the UK Dept of International Development. Rutgers is a subawardee, \$131,900 of a total \$9,481,294.

Student Awards, Achievements, and Activities:

Laura Shappell, a PhD candidate in Lena Struwe's lab, was the Rutgers University Nominee for the Philanthropic Educational Organization Scholar Award.

Amanda Wenczel, a PhD candidate in Dave Bushek's lab, has been selected for the Class of 2014 Eagleton Fellowship Program offered through the Eagleton Institute of Politics here at Rutgers. The Eagleton Martin Fellowship provides full tuition and a stipend of \$6,000 for the upcoming year. Eagleton fellows take a course in applied policy to enhance their understanding of government, public affairs and the practice of politics in the fall semester before being placed in an office in the New Jersey legislature, the Governor's Office, an executive agency, or other government-related office for at least 15 hours a week in the spring semester.

Transitions:

Congratulations to Ryan Burrows on the successful defense of his Master's degree on May 28th. Ryan is advised by Rebecca Jordan. Ryan is now spending all his time on the company he co-founded in 2008 with Michael Corragio: EcoWalls http://greenecowalls.com/

Congratulations to Natalie Lemanski in the Nina Fefferman lab on the successful completion of her Qualifying Exam on May 30th.

Congratulations to the following of the successful defense of their Preliminary Proposal:

- Brad Greening, advisor Nina Fefferman, on May 14th
- Kevin Aagaard, advisor Julie Lockwood, on May 15th

The E&E family continues to grow by leaps and bounds:

Kristen Ross (PhD 2008, advisor Steven Handel) and Bill Landesman (PhD 2009, advisor John Dighton) welcomed daughter Mollie Rose Landesman to the world on April 11at 6:40pm, two weeks early and weighing only 5 lbs! Mollie is growing rapidly and everyone is doing great although Kristen and Bill do report the usual sleep deprivation.

Lauren Spitz Poster, PhD student in the Steven Handel lab, gave birth to daughter Baila Chaya on Monday, May 27 at 11:47pm, weighing in at 7 lbs. 2 oz., and 19 3/4" long. The entire family is happy, healthy, and doing well.

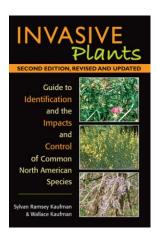
Alumni:

Nacho Bartomeus, a former post-doc in the Winfree lab, has received the Ramon Y Cajal Fellowship. The fellowship provides 5 years funding for early career researchers. Nacho describes it as "the best fellowship in Spain."

Mary Cadenasso (PhD 1998, advisor Steward T.A. Pickett) was named a Chancellor's Fellow for the next five years at University of California, Davis for outstanding work in her early career.

The departmental website at Davis has this write up: http://www.plantsciences.ucdavis.edu/plantsciences/features/recent_news/fall2012/cadenasso.htm

Frank Gallagher (PhD 2008, advisor Jason Garbosky) received the EPA's Environmental Quality Award, the highest recognition presented to the public by the agency. For more information on Frank, his career and the award visit: http://sebsnjaesnews.rutgers.edu/2013/05/environmental-planning-instructor-frank-gallagher-recognized-with-epa-environmental-quality-award/



Sylvan Kaufman, (PhD 1999, co-advisors Peter Smouse and JeanMarie Hartman) reports "the second edition of my and my dad Wallace Kaufman's book, <u>Invasive Plants: Guide to Identification and the Impacts and Control of Common North American Species</u>, published by Stackpole Books, came out in March. It includes 23 new species and updated information and references."

Romina Rader, a former post-doc in the Winfree lab, reports the following publication

 Rader, R., Reilly, J., Bartomeus, I. and Winfree, R (in press). Native bees buffer the negative impact of climate warming on crop pollination by honey bees. Global Change Biology

(http://onlinelibrary.wiley.com/doi/10.1111/gcb.12264/abstract)

