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

May 2013

Previous newsletters may be found at: http://www-rci.rutgers.edu/~deenr/news.html

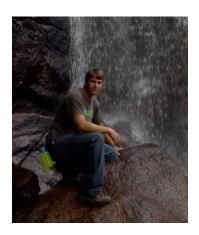
The DEENR Undergraduate Awards for the Graduating Class of 2013 will be presented to the recipients at the SEBS Baccalaureate on May 17th. Congratulations to the following recipients:



Rita Grunberg J. Applegate Award for Outstanding Student in Wildlife Rita will be starting graduate school this fall pursuing her Ph.D. in the Mike Sukhdeo lab in the E&E Grad Program.

Trevor Lepucki E. B. Moore Forestry Award

Trevor will be working with Bartlett Tree Experts this fall where he plans to become a New Jersey Certified Tree Expert and an International Society of Arboriculture Certified Arborist.





Bridget G. Johnson



Ruchi D. Patel

M. Buell Award for Outstanding Student in Ecology shared by Bridget Johnson and Ruchi Patel.

Bridget is considering service projects through AmeriCorps and Peace Corps, which would allow her to merge ecological conservation and social justice efforts.

Ruchi will be going to Paraguay as a member of the Peace Corps and plans to attend graduate school upon her return to the U.S.



Samantha S. Hauser Peter Smouse Award for Outstanding Student in Evolution

Samantha will be attending graduate school in wildlife ecology

Danielle N. Clancy
Roger Locandro Award for Outstanding Student in
Natural Resources

Danielle is working with the American Littoral Society this summer and plans to attend graduate school in the future.



Graduate School - New Brunswick Awards



Jeremy Feinberg was the recipient of a Deans Award for Excellence in Research for his research that led to the discovery of a new species of leopard frog on Staten Island, NY. Reported in the New York Times on March 14, 2012, Jeremy and his coauthors published the findings in an issue of the journal Molecular Phylogenetics and Evolution, currently available online. Read the New York Times article here: Read More

Orion Weldon received an honorable mention for Excellence in Teaching by a Graduate Student. Orion has been a Teaching Assistant for General Biology, Invertebrate Biology, Vertebrate Biology and Winter Field Ecology. In addition to the usual duties of a teaching assistant Orion re-organized the teaching collections for Vertebrate Ecology and other biology/ecology classes on the Cook/Douglass campus and brought them into the 21st century. They are now an invaluable teaching tool for the years to come.



Presentations:

Siobain Duffy gave a talk and four of her students gave posters at the Microbiology at Rutgers University symposium (2/1/2013).

 Siobain's talk was titled "Geminivirus molecular evolution: bias, recombination and selection"

The posters were:

- Y.M. Seah and S. Duffy. Evaluating non-reversibility of substitutions in viral phylogenies.
- Y. Olifer, Y.M. Seah and S. Duffy. Developing start codon mutants for ssDNA virus mutation rate assays.
- A.L. Hicks and S. Duffy. Cell tropism predicts nucleotide substitution rates of mammalian RNA viruses.
- S. Loelius and S. Duffy. The effect of vaccination on Rubella virus diversity.

Eric Ho, a postdoc in Siobain Duffy's lab gave a contributed talk:

• E. Ho, S.I. Gunderson and S. Duffy. A multispecies polyadenylation model. Eleventh Asia Pacific Bioinformatics Conference 2013. Vancouver, CA 1/13

Siobain Duffy gave a contributed talk and two of her students gave posters at the 1st/7th Viral Evolution Workshop (yes that's the name) at Penn State University (3/7-3/10).

Siobain's talk was titled:"The relative contribution of recombination and mutation to begomovirus population diversity"

The posters were:

- Y.M. Seah and S. Duffy."Evaluating non-reversibility of substitutions in viral phylogenies."
- A.L. Hicks and S. Duffy. "Cell tropism predicts nucleotide substitution rates of mammalian RNA viruses."

David Ehrenfeld spoke at the TEDx DeExtinction event held at the National Geographic Society headquarters in Washington, DC on March 15. He published an op-ed article based on his talk: "Resurrected Mammoths and Dodos? Don't Count On It" in the Guardian US, on March 23.

Frank Gallagher, Ph.D. 2008 and an associate with the Urban Forestry lab, participated, as the representative of the science community, in the following presentations:

- "Ways Artist Take on Environmental Issues" Culture Trashes Nature Series, A Project of the Slideshow Gallery, Williamsburg, Brooklyn, New York, New York March 10th.
- "Maintenance Survival and its Relation to Freedom", a conversation with Mierle Laderman Ukeies, Brooklyn Museum, New York, New York, January 13.

Henry John-Alder gave two presentations on Fence Lizards as part of the 2013 Pinelands Short Course organized by Joel Mott of the Pinelands Commission. Approximately 30 participants attended each of the presentations.

Brian Johnson and Andrea Egizi, both Ph.D. candidates in the Dina Fonseca lab, were the winner and first runner up, respectively, of the Best Student Presentation Award at the 79th Annual Meeting of the American Mosquito Control Association in Atlantic City, NJ on Feb 24-28, 2013.

- Brian's first prize, named the Hollandworth Prize, was titled "Drought-induced amplification of local and regional West Nile virus infection rates in New Jersey (USA)."
- Andrea's first runner up talk was titled "Population genetics of Aedes japonicus japonicus on the island of Hawaii"

Lea Johnson, a PhD candidate in the Handel lab, was invited to give a talk at Bates College in the Biology department in March. The talk was titled "Ecological restoration of urban forests: Long-term plant community effects and implications for management."

Natalie Howe, a Ph.D. candidate in the John Dighton lab, presented a poster "Lichen Communities in the NJ Pine Barrens" at the Academy of Natural Sciences of Drexel University's symposium: Biodiversity from Evolutionary Origins to Ecosystem Function.

Julie Lockwood gave an invited seminar in the Environmental Sustainability Seminar Series at Montclair State University, Montclair NJ titled "Contemporary evolution of island birds" in April.

Brooke Maslo gave a presentation entitled, "The Ecological and Economic Benefits of Creating Wildlife Habitat on Residential and Corporate Landscapes" to the Cumberland County Rutgers Cooperative Extension Master Gardeners on January 29th and to the Gloucester County Master Gardeners on January 16th.

Judy Weis gave seminar presentations to the Gowanus Canal Conservancy and to Biology Department at Fairleigh Dickinson University. Judy also gave a talk on her book Walking Sideways to Ocean Blue Divers.

Publications:

Wes Brooks reports the following publication coauthored with Rebecca Jordan and alumnus Stephen Gray among others.

Jordan, RC, JR DeLisi, WR Brooks, SA Gray, A Alvarado & AR Berkowitz. A
collaborative model of science teacher professional development. International
Journal of Modern Education Forum (in press).

Wes Brooks and Rebecca Jordan have the following publication:

 Brooks, WR & RC Jordan. Propagule pressure and native species richness effects drive invasibility in tropical dry forest seedling layers. Perspectives in Plant Ecology, Evolution, and Systematics (in press).

Wes Brooks reports the following:

• Brooks, WR & SC Newbold. 2013. Ecosystem damages in integrated assessment models (IAMs) of climate change. Working Paper #13-02. NCEE Working Paper Series.

Wes Brooks, Julie Lockwood and Rebecca Jordan report the following publication:

 Brooks, WR, JL Lockwood, & RC Jordan. 2013. Tropical paradox: a multi-scale analysis of the invasion paradox within Miami Rock Ridge tropical hardwood hammocks. *Biological Invasions* 15:921-930.

Curtis Burkhalter, a Ph.D. candidate in the Lockwood lab, has the following two publications:

- Burkhalter, C., Moon, D. and Rossi, A. 2013. Diversity and community similarity of arthropods in response to the restoration of former pine plantations. *Southeastern Naturalist.* Vol. 12 Issue 1 pp. 121-136.
- Burkhalter, C. 2013. The potential of restored grasslands for conserving wildlife and fuel production. *Ecological Restoration* Vol. 31 Issue 2 pp. 124-126.

Josh Caplan, a post-doc working with Jason Grabosky, has the following publication:

• Caplan JS, Yeakley JA (in press) Functional morphology underlies performance differences among invasive and native ruderal Rubus species. *Oecologia*

Siobain Duffy has the following publications:

 E.S. Ho, S.I. Gunderson and S. Duffy. 2013. A multispecies polyadenylation site model. BMC Bioinformatics, 14(S2):S9.

- A.T.M. Lima, R.R. Sobrinho, J. Gonzalez-Aguilera, C.S. Rocha, S.J.C. Silca, C.A.D. Xavier, F.N. Silva, S. Duffy and F.M. Zerbini. 2013. Synonymous site variation due to recombination explains higher begomovirus variability in noncultivated hosts. *Journal of General Virology*, 94:418-431.
- D.J. Cardinale, K. DeRosa and S. Duffy. 2013. Diverse factors drive codon usage bias in plant viruses. *Viruses*, 5:162-181.
- Y.M. Seah, A. Sharma, S, Zhang, R.P.P. Almeida and S. Duffy. 2012. A novel *Grapevine leafroll-associated virus 3* variant from California. *Virology Journal*, 9:235.

Andrea Egizi, a Ph.D. candidate in the Fonseca lab, reports the following publication:

• Egizi A, Healy SP, Fonseca DM. 2013. Rapid blood meal scoring in anthropophilic *Aedes albopictus* and application of PCR blocking to avoid pseudogenes. *Infection Genetics and Evolution* 16:122–128.

Frank Gallagher, Ph.D. 2008 and an associate with the Urban Forestry lab, reports the following publication:

Feng F.H., Qian, Y., Wu, Tappero M.R, Gallagher, F.J. Wu, M. Zhang, W., Yu, L., Zhu, Q., Zhang, K., Liu C.J. Lead accumulation and association with Fe on *Typha latifolia* root from an urban brownfield site. *Environmental Science and Pollution Research*. 11/2012; DOI:10.1007/s11356-012-1298-x.

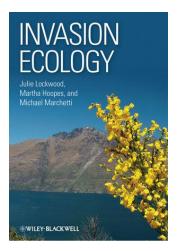
Brian Johnson, a Ph.D. candidate in the Dina Fonseca lab reports three publications:

- Johnson BJ, Sukhdeo MVK. 2013. Drought-induced amplification of local and regional West Nile virus infection rates in New Jersey (USA). *Journal of Medical Entomology* 50(1): 195-204.
- Johnson BJ, Sukhedo MVK. *in press*. Successional mosquito dynamics in surrogate tree hole and ground-container habitats in the northeastern United States: Where does *Aedes albopictus* fit in? *Journal of Vector Ecology*.
- Johnson BJ, Mylecraine K, Shapell L, Tsipoura N, Robson M, Ehrenfeld J, Sukhdeo MVK. 2012. The roles of mosquito and bird communities on the prevalence of West Nile virus in urban wetland and residential habitats. *Urban Ecosystems* 15: 513-531.

Julie Lockwood reports the following publications:

- Blackburn, T.M., T.A.A. Prowse, J.L. Lockwood, and P. Cassey. In Press. Propagule pressure as a driver of establishment success in deliberately introduced exotic species: fact or artefact? *Biological Invasions*.
- Ricciardi A., M.F. Hoopes, M.P. Marchetti and J.L. Lockwood. In Press. Progress towards understanding the ecological impacts of non-native species. *Ecological Monographs*.
- Avery, J.D., D.M. Fonseca, P. Campagne and J.L. Lockwood. In Press. Cryptic introductions and the interpretation of island biodiversity. *Molecular Ecology.*

Julie Lockwood reports the new edition of <u>Invasion Ecology</u> coauthored with Martha Hoopes and Michael Marchetti is now available.



This new edition of *Invasion Ecology* provides a comprehensive and updated introduction to all aspects of biological invasion by non-native species. Highlighting important research findings associated with each stage of invasion, the book provides an overview of the invasion process from transportation patterns and causes of establishment success to ecological impacts, invader management, and post-invasion evolution. The authors have produced new chapters on predicting and preventing invasion, managing and eradicating invasive species, and invasion dynamics in a changing climate.

Brooke Maslo has the following publication:

 Maslo, B. and S. Wehman. 2012. An overview of white-tailed deer status and management in New Jersey. Rutgers Cooperative Extension Fact Sheet: FS1202. Rutgers, The State University of New Jersey, New Brunswick, NJ. http://njaes.rutgers.edu/pubs/fs1202/white-tailed-deer.asp.

George McGhee is lead author on the following publication:

 McGhee, G. R. Jr., Clapham, M. E., Sheehan, P. M., Bottjer, D. J., and Droser, Mary L. 2013. A new ecological-severity ranking of major Phanerozoic biodiversity crises. *Palaeogeography, Palaeoclimatology, Palaeoecology*, http://dx.doi.org/10.1016/j.palaeo.2012.12.019

Lena Struwe has the following publications:

- Molina, J.E., J. Wen, & L. Struwe. 2012. Systematics and biogeography of the non-viny grape relative Leea (Vitales). *Botanical Journal of the Linnean Society*. [published online 20 Nov 2012] DOI: 10.1111/j.1095-8339.2012.01320.x
- Pohlit, A.M., E. V. M. dos Santos, T. C. Mesquita da Silva, S. K. Reis de Morais, S. M. Nunomura, & L. Struwe. 2012. A rare secoiridoid monoterpene and a xanthone from Tachia grandiflora Maguire & Weaver. *Biochemical Systematics* and Ecology 44: 267-269. doi:10.1016/j.bse.2012.05.012

Orion Weldon was first author on a poster presented at the Diadromous Species Restoration Research Conference in Orono, Maine on January 10th - 11th with Olaf Jensen and Andrew Lahr. The title was, "Evaluating the alosine passage performance through a fish ladder on the rehabilitation of a historical fishery".

Rae Winfree reports the following publications:

- Garibaldi, L, I Steffan-Dewenter, R Winfree, and 44 other authors including Winfree lab members I Bartomeus, D Cariveau, R Rader and F Benjamin. 2013.
 Wild pollinators enhance fruit set of crops regardless of honeybee abundance. Science X: x-x (published online ahead of print in March)
- Winfree lab paper has cover of PNAS! Bartomeus, I, J Ascher, J Gibbs, B Danforth, D Wagner, S Hedtke, and R Winfree. 2013. Lack of a general decline among northeastern US bee pollinators over a century of global change. Proceedings of the National Academy of Sciences 110(12): 4656-4660 Cover article
- Kennedy, C., E Lonsdorf, M C Neel, N M Williams, T H Ricketts, R Winfree, and 22 other authors including Winfree lab member D Cariveau. 2013. A global quantitative synthesis of local and landscape effects on native bee pollinators in heterogeneous agricultural systems. *Ecology Letters* X: x-x (published online ahead of print in March)
- Williams, N M and R Winfree. 2013. Local habitat characteristics but not landscape urbanization drive pollinator visitation and native plant pollination in forest remnants. *Biological Conservation* 160: 10-18

Media:

Rae Winfree reports the following media coverage of her Science paper above:

- Featured on NPR Science Friday 8 March 2013
- "Getting the springtime buzz on bees", NPR program "The salt" 1 March 2013
- "Wild bees are good for crops, but crops are bad for bees", Science magazine podcast
- Los Angeles Times Science section, Farmers' lack of bees could be solved by going wild, 28 February

Faculty Achievements and Activities:

Siobain Duffy has been appointed to the Career Development Grants for Postdoctoral Women Committee, American Society for Microbiology

Steven Handel has been appointed to the Science Advisory Committee of the Forest Health Initiative. The FHI (<u>foresthealthinitiative.org</u>) is a consortium of researchers, sponsored by the U.S. Forest Service and other organizations, to fund and coordinate research activities to improve the nation's forest lands.

Steven Handel lectured on urban restoration ecology at the University of Calgary (Alberta, Canada) Dept. of Biological Sciences in March.

Rick Lathrop has been busy since Hurricane Sandy hit New Jersey and New York as evidenced by his following submissions.

NJFloodMapper: A New Tool for Coping with Sea-Level Rise

If sea level rises as scientists predict, will your New Jersey home or parts of your town be underwater?

Rutgers University and the National Oceanic and Atmospheric Administration have unveiled an online mapping tool that offers a disturbing look at which parts of the state are in danger of severe flooding if the ocean and bays continue to rise as expected. That map shows where schools, hospitals, fire and police stations are in the flood zones and illustrates the vulnerabilities posed by future severe storms.

The goal of the project is to help towns and counties prepare for rising sea level.

"While sea level rise is a global phenomenon, adapting to its impacts is a local decision-making challenge that is going to require site-specific remedies," said Richard Lathrop, professor of environmental sciences and director of the Grant F. Walton Center for Remote Sensing and Spatial Analysis. "Hurricane Sandy showed us that local land-use planners and emergency managers need access to detailed, information about what and who may lie in the path of rising sea levels – and the path of high tides and storm surges built on top of those new, higher sea levels."

With NJFloodMapper, anyone can simulate sea level rises of from one foot (the rise many scientists expect in the next 50 years) to six feet. The user can see the advisory based flood elevation information recently released by the Federal Emergency Management Agency that shows what areas are vulnerable to coastal flooding, and 100-year and 500-year-flood information. Maps depicting areas effected by Hurricane Sandy's storm surge are also included. In addition, the tool allows a user to display the location of key buildings like hospitals, firehouses, and schools. Finally, NJFloodMapper will also show which communities are most vulnerable to the effects of sea level and flooding – not just because of their location, but because of the age and relative poverty of their people. Poverty can affect a community's ability to prepare for storms and rebuild afterwards. NJFloodMapper also includes "street views" at selected locations, that demonstrate what sea level rise will look like from 1-6 feet.

Lathrop and his colleagues at the Center for Remote Sensing and Spatial Analysis created NJFloodMapper in collaboration with NOAA's Coastal Services Center. Lisa Auermuller, watershed coordinator for the Rutgers-managed Jacques Cousteau National Estuarine Research Reserve, organized discussions with municipal and county level officials to provide data for NJFloodMapper, as well as sessions in which officials tested the tool. This project was funded by NOAA's Cooperative Institute for Coastal and Estuarine Environmental Technology, Sustainable Jersey, New Jersey SeaGrant, and the New Jersey Department of Environmental Protection.

NJFloodMapper has been more than three years in the making. Auermuller said she and Lathrop involved local and county officials from the beginning. "We didn't assume that 'if we built it, they will come,'" she said. "We listened to what they wanted, and included that in the project, so we knew the finished product would be useful."

The officials were helpful and enthusiastic, she said, but were more focused on flooding – something they dealt with routinely – than sea-level rise. Hurricane Sandy, however, made them much more conscious of what a foot of sea-level rise could do to their communities.

To access the tool go to NJFloodMapper.org

An article about the NJFloodMapper appeared in the Wall Street Journal on March 6, 2013.

Post-Sandy MidAtlantic Coast Ecological Damage Rapid Assessment

As we all experienced firsthand, Superstorm Sandy walloped the MidAtlantic shoreline and interior this past fall. The following week the Rutgers Center for Remote Sensing & Spatial Analysis (CRSSA) was asked by the American Littoral Society to assist in a rapid assessment of impacts to coastal beach, dune, salt marsh and maritime forest habitats. The study was funded by the National Fish and Wildlife Foundation. With the goal of characterizing physical damage from Delaware Bay to Long Island Sound, combining field reporting with mapping from remotely sensed imagery was the only feasible approach. Susan Kennedy and Tim Dillingham of the American Littoral Society (ALS) took the lead in conducting extensive surveys and interviews with natural resource professionals working in the field. With only a month to undertake the mapping assessment, CRSSA Director, Richard Lathrop knew he would have to enlist a lot of help. Given the choice to sign onto the project, the 30 students of *Introduction to Aerial* Photo Interpretation didn't hesitate. Each student was given a 25 mi² zone to assess and classify the severity of the physical impact using pre- and post-storm digital aerial photographic imagery collected by the US Geological Survey, NOAA and other sources. With the assistance of CRSSA staff, Lathrop compiled all the individual student work and quality controlled the results while GIS Coordinator John Bognar developed a series of maps. The resulting report compiled by ALS documents hotspots of damage up and down the coast and will be used to prioritize state and federal habitat restoration efforts in the coming year. The report and maps can be found http://www.crssa.rutgers.edu/projects/coastal/sandy/

Rick Lathrop provided the following press release from 4/19/13 featuring the Center for Remote Sensing and Spatial Analysis (CRSSA). The press release has been edited in this newsletter to contain only the information pertaining to CRSSA.

(New York, NY) EPA presents Environmental Quality Awards annually during Earth Week to individuals, businesses, government agencies, environmental and community-based organizations and members of the media in EPA Region 2, which covers New Jersey, New York, Puerto Rico, the U.S. Virgin Islands and eight federally-recognized Indian Nations. The awards recognize significant contributions to improving the environment and public health in the previous calendar year.

One of the winners...

"American Littoral Society

The American Littoral Society promotes the study and conservation of marine life and habitat. Following Hurricane Sandy, the American Littoral Society coordinated a regional assessment to evaluate the effects of the storm. The resulting study identified regional impacts and changes to specific habitats and provided valuable information to federal, state and local governments."

The Rutgers Back Story ...

The week after Superstorm Sandy hit New Jersey, the Rutgers Center for Remote Sensing & Spatial Analysis (CRSSA) was asked by the American Littoral Society to assist in a rapid assessment of impacts to coastal beach, dune, salt marsh and maritime forest habitats. The study was funded by the National Fish and Wildlife Foundation. With the goal of characterizing physical damage from Delaware Bay to Long Island Sound, combining field reporting with mapping from remotely sensed imagery was the only feasible approach. The American Littoral Society (ALS) took the lead in conducting extensive surveys and interviews with natural resource professionals working in the field. With only a month to undertake the mapping assessment, CRSSA Director, Richard Lathrop knew he would have to enlist a lot of help. Given the choice to sign onto the project, the 30 students of Introduction to Aerial Photo Interpretation didn't hesitate. Each student was given a 25 mi2 zone to assess and classify the severity of the physical impact using pre- and post-storm digital aerial photographic imagery collected by the US Geological Survey, NOAA and other sources. With the assistance of CRSSA staff, Lathrop compiled all the individual student work and quality controlled the results while GIS Coordinator John Bognar developed a series of maps.

The resulting report compiled by ALS documents hotspots of damage up and down the coast and will be used to prioritize state and federal habitat restoration efforts in the coming year.

http://www.crssa.rutgers.edu/projects/coastal/sandy/

GIS Awareness Day

Marci Meixler and the students of Intermediate Environmental Geomatics organized the second annual statewide event in honor of GIS Awareness Day November 14th in the Cook Campus Center. The well-attended event showcased guest speakers and posters from a variety of disciplines including ecology, natural resources, hydrography, geography, urban planning and transportation among others. The event was designed to introduce GIS to undergraduate students and provide an opportunity for students already in the GIS sciences to interact with academic and professional members of the statewide GIS community, see how GIS is used, and learn about potential career opportunities involving GIS.

Lena Struwe has accepted the positions as an Associate Editor for both *PhytoKeys* and the *Botanical Journal of Linnean Society.*

Judy Weis served on EPA Panel for Star Graduate Fellowships.

Rae Winfree received a Board of Trustees Fellowship for Scholarly Excellence.

Student Activities and Achievements:

Nick Lorusso, a Ph.D. candidate in the Morin lab, has been visiting local New Jersey High School Advanced Placement biology classrooms, sharing his experiences in ecology and graduate school. Students have gained exposure to current research and hands-on experiences with science. So far Nick has visited 4 High Schools and 20 classrooms, but he could use some help! If you (or your graduate students) might be interested in giving short talks to young college-bound students with an interest in science, contact Nick for information! (nick.lorusso@rutgers.edu)

Molly MacLeod, a Ph.D. candidate working with Rae Winfree, was accepted to the Santa Fe Science Writing conference. Molly received a travel grant of \$500 from the Office of the Promotion of Women in Science to help defray the cost of attendance.

Grants and Scholarships:

Brian Johnson, a Ph.D candidate working with Dina Fonseca, received the Jobbins Scholarship of \$2000 from the Northeastern Mosquito Control Association in December.

Jeremy Feinberg, a Ph.D candidate in the Burger lab, received a grant of \$5000 from the Hudson River Foundation to study the effects of hurricane Sandy on regional/coastal leopard frog populations.

Jenny Paterno, a Master's student working with David Bushek, received the Louis Fontenelli Scholarship of \$2500 from the New Jersey Water Environment Scholarship Award for 2013

Laura Shappell, Ph.D. candidate working with Lena Struwe, received a New Jersey Water Resources Research Institute Graduate Research Grant of \$5,000.

Laura's grant was titled "Implications of historical and modern land use: urban wetland vegetation as indicators of temporal and spatial environmental heterogeneity and disturbance."

Amanda Sorensen, a Ph.D. student in the Rebecca Jordan Lab, received the Margaret Denton Wagner Fellowship of \$1,095 from the Associate Alumnae of Douglass College

Transitions:

Congratulations on the successful defense of their Master's degrees go to:

- Lauren Spitz Poster, advisor Lena Struwe, on March 20, 2013. Lauren is continuing on for her Ph.D in the E&E Graduate Program.
- Michele Talmadge, advisor JeanMarie Hartman, on April 11, 2013. Michele has
 accepted a position at the Mt. Cuba Center in Hockessin, DE, a horticultural
 institution dedicated to the preservation of the Piedmont Region of northern
 Delaware. As the Natural Land Steward Michele will be involved in wildlife and
 vegetation surveys, invasive species management, natural lands research, GIS
 work, and the management of seasonal employees.

Congratulations on the successful defense of their Ph.D. Dissertations goes to:

- Linda Rohleder on March 6th. Linda is working for the NY/NJ Trail Conference as supervisor of the Invasives Strike Force. Linda's advisor was Claus Holzapfel.
- Elena Tartaglia, advisor Steven Handel, on March 28th.
- Lea Johnson, advisor Steven Handel, on May 1st. Lea Johnson will be a Visiting Professor of Plant Ecology at Bates College this fall.

Congratulations on the successful completion of their Qualifying Exam goes to

- Tina Harrison, advisor Rae Winfree, on December 7th.
- Nick Lorusso, advisor Peter Morin, on April 23rd

Congratulations on the successful defense of their Preliminary Proposal goes to:

- Andrea Egizi, advisor Dina Fonseca, on February 13th.
- Laura Shappell, advisor Lena Struwe, on February 19th.
- Curtis Burkhalter, advisor Julie Lockwood, on May 9th.

Post-doc Josh Caplan has accepted the Bucher-Jackson Postdoctoral Fellowship at Bryn Mawr in the Biology Department. He will be starting in June and will be teaching Urban Ecosystems and doing research at the Smithsonian Global Change Wetland.

The E&E Family Continues to Grow:

Brooke Maslo and Renee Falivene welcomed daughter Arden Ella Maslo on April 5th. Arden weighed in at 8 lbs 2 oz with a length of 20 1/2". Brooke reports that everyone is doing well and getting "some" sleep each night.

Nora Madison Baiser was born on January 3, 2013 and weighed in at 6 lbs. 1 oz. 20 inches. Her father Ben (Ph.D. 2009, advisor Julie Lockwood) reports Nora is a huge Mets, Islanders, Giants, and Knicks fan and was miraculously born with a grateful dead tattoo!

Alumni:

James MacDonald (Ph.D. 2008, advisor Judy Weis) has a publication from his dissertation:

 MacDonald and Weis 2013 Journal of Experimental Marine Biology and Ecology . 441:90-98.

http://www.sciencedirect.com/science/article/pii/S0022098113000312

Chris Martine (MS '01, advisor John Kuser) is finishing up his first year as David Burpee Professor at Bucknell University. He has just released the third full episode of his "Plants are Cool, Too" YouTube series, this one on the malodorous flowers of skunk cabbage. Chris also has a paper coming out in the next issue of the Journal of the Torrey Botanical Society entitled, "Establishment of regional herbarium leads to more than 200 new flora atlas records for New York state," with an undergraduate student coauthor. Video link: http://www.youtube.com/watch?v=iX7n24ZeqAw

David Mellor (Ph.D. 2011, advisor Rebecca Jordan) has accepted a position with the <u>Virginia Master Naturalist Program</u> at Virginia Tech. David will be designing online classes and doing citizen-science education with the Master Naturalist Program. David, Cami and Lilly will be moving to Charlottesville this month where the program office is located.

Ellen Pehek, (Ph.D. 1995, advisor Peter Morin) has the following publication on the conservation genetics of the northern dusky salamander in PeerJ https://peerj.com/articles/64/

