Ecology & Evolution Graduate Program Newsletter

January - May 2017

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

Please let us know if you have made presentations, published papers, received grants and awards, or traveled to do research. Don't be shy about sending in material for the newsletter! Keep those emails, cards, letters, and social media posts coming! Send your news and accomplishments to peter.morin@rutgers.edu.

Congratulations!

1. Results of the annual competition for **NSF graduate research fellowships** are in. Congratulations go to our students who received fellowships or honorable mentions!

Fellowship Awardee: Abigail Golden

<u>Honorable Mentions:</u> Michael Acquafredda and Sarah Borsetti

- **2. Cara Faillace** received <u>two</u> awards from the Graduate School New Brunswick at the annual awards event held on April 26. Cara received the **Dean's Research Award** and **the Graduate Student Teaching Award!**
- **3.** Jason Grabosky received the SEBS Teaching Excellence Award in recognition of his outstanding teaching efforts at SEBS.

Presentations:

I know that many of you have been giving research presentations at meetings or at other universities. Let us know what you have been up to!

Peter Morin gave a seminar at the E3B Department at Columbia University on March 28th. The title of the seminar was "Message in a bottle: experiments on ecology and evolution with microbes."

Nicholas S. Lorusso. February 27. "Predator-Contingent Exploitation of an Inducible Defense: When is it best to sink or swim?" ASLO Aquatic Sciences Meeting, Honolulu, HI.

Faillace, C. A.; Morin, P. J. March 1. "Strangers In A Strange Land: Evolution Alters The Consequences Of Invasions In Experimental Aquatic Communities". ASLO Aquatic Sciences Meeting, Honolulu, HI.

Publications:

Myla Aronson, Lauren Frazee and their co-authors have a new paper out in Bioscience:

Charles H. Nilon **Myla F. J. Aronson** Sarel S. Cilliers Cynnamon Dobbs **Lauren J. Frazee** Mark A. Goddard Karen M. O'Neill Debra Roberts **Emilie K. Stander** Peter Werner Marten Winter Ken P. Yocom. 2017. Planning for the Future of Urban Biodiversity: A Global Review of City-Scale Initiatives. BioScience (2017) 67 (4): 332-342.

http://academic.oup.com/bioscience/article/doi/10.1093/biosci/bix012/3065740/Planning-forthe-Future-of-Urban-Biodiversity-A?guestAccessKey=5975a661-c6e7-4a8d-991b-27e07200791f

Jason Grabosky and many co-authors have a new paper in the *Annals of Botany*:

Joshua S. Caplan, Bram W. G. Stone, Cara A. Faillace, Jonathan J. Lafond, Joni M. Baumgarten, Thomas J. Mozdzer, John Dighton, Scott J. Meiners, Jason C. Grabosky and Joan G. Ehrenfeld. 2017. Nutrient foraging strategies are associated with productivity and population growth in forest shrubs. Annals of Botany doi:10.1093/aob/mcw271 (available online at https://academic.oup.com/aob)

Cara A. Faillace, **Nicholas S. Lorusso** and **Siobain Duffy** have a new review paper in *Ecology Letters*:

Cara A. Faillace, Nicholas S. Lorusso and Siobain Duffy. 2017 Overlooking the smallest matter: viruses impact biological invasions. Ecology Letters 20:524–538. DOI: 10.1111/ele.12742

Media:

Fish Seek Cooler Waters, Leaving Some Fishermen's Nets Empty

The New York Times, 12/30/2016

However studies have found that two-thirds of marine species in the Northeast United States have shifted or extended their range as a result of ocean warming, migrating northward or outward into deeper and cooler water... "Our management system assumes that the ocean has white lines drawn on it, but fish don't see those lines," said Malin L. Pinsky, an assistant professor in the department of ecology, evolution and natural resources at Rutgers University, who studies how marine species adapt to climate change. "And our management system is not as nimble as the fish."

Events:

Rutgers Day April 29, 2017: After a long day of selling books and merchandise the ECOGSA earned \$2,583.58. This money helps to fund travel, professional workshops, and the yearly camping trip which Rutgers GSA does not help fund.

The annual **Run for the Woods** happened on a rather soggy May 13, 2017 at 9:00 AM. Thanks go to our students for organizing this event.

The annual **Rutgers Princeton Penn Columbia Graduate Student Symposium** was held on May 7, 2017 at Columbia University: For anyone who is unfamiliar with this tradition, RPPC, (which stands for Rutgers-Princeton-Penn-Columbia) is a symposium that brings together grad students from the Ecology and Evolution programs of these universities. The following students from Rutgers gave presentations:

Mike Acquafredda - Diversifying the New Jersey aquaculture sector by developing culture techniques for the Atlantic surfclam (Spisula solidissima)

LaShanda Williams - Tracking how the modern era has shaped microbial diversity

Jeff Brown - How small is too small? The role of protected area size and surrounding land use in conserving unique forest bird assemblages within an urban landscape

Ariel Kruger - Green frogs harbor microbes that inhibit a deadly fungal pathogen

Liz Ballare - Urinary cytokine variation as indicators of immune function in rehabilitated Bornean orangutans (<u>Pongo pygmaeus wurmbii</u>)

Transitions:

Congratulations to **Dr. Michael Gallagher** on the successful defense of his PhD Dissertation on May 11, 2017.

Congratulations to **Michael Acquafredda** on the successful completion of his Qualifying Exam on May 12, 2017

Congratulations to **Jennifer Hoey** on the successful defense of her Preliminary Proposal on May 8, 2017

Congratulations to **Oliver Stringham** on the successful defense of his Preliminary Proposal on April 11, 2017

Congratulations to **Dr. Cara Faillace** on the successful defense of her Ph.D. Dissertation on March 29, 2017

Congratulations to **Rob Crystal-Ornelas** on the successful completion of his Qualifying Exam on March 29, 2017

Congratulations to **Dr. Amanda Sorensen** on the successful defense of her Ph.D. Dissertation on March 28, 2017

Congratulations to **Dr. Margaret Conroy** on the successful defense of her Ph.D. Dissertation on March 27, 2017

Congratulations to **Max Piana** on the successful completion of his Qualifying Exam on March 10, 2017

Congratulations to **Lauren Frazee** on the successful defense of her Preliminary Proposal on January 17, 2017

Congratulations to **Dan Merchant** on the successful defense of his Preliminary Proposal On January 18, 2017

Alumni News:

Molly MacLeod writes that she has a new position as Senior Manager of Science Content at Pfizer. The website that she leads is at https://www.getscience.com/

John Graham writes that he has a new publication: Graham, J.H. and B. Ozener. 2016. Fluctuating asymmetry of human populations: a review. Symmetry 8(12), 154; doi:10.3390/sym8120154

Josh Caplan has been publishing quite a bit! See below.

Caplan JS, Giménez D, Subroy V, Heck RJ, Prior SA, Runion GB, Torbert HA (/in press/). Nitrogen-mediated effects of elevated CO_2 on intra-aggregate soil pore structure. /Global Change Biology./ doi:

10.1111/gcb.13496.http://onlinelibrary.wiley.com/doi/10.1111/gcb.13496/full

Lu M*, Caplan JS*, Bakker JD, Langley JA, Mozdzer TJ, Drake BG, Megonigal JP (2016). Allometry data and equations for coastal marsh plants. /Ecology/ 97:3554.

* /Co-first authors/.<http://onlinelibrary.wiley.com/doi/10.1002/ecy.1600/abstract>

Mozdzer TJ, Caplan JS, Hager RN, Proffitt CE, Meyerson LA (2016). Contrasting trait responses to latitudinal climate variation in two lineages of an invasive grass. /Biological Invasions/ 18:2649-2660.http://link.springer.com/article/10.1007%2Fs10530-016-1218-y

Bouda M, Caplan JS, Saiers JS (2016). Box-counting dimension revisited: presenting an efficient method of minimizing quantization error and an assessment of the self-similarity of structural root systems. /Frontiers in Plant Science/7:149.http://journal.frontiersin.org/article/10.3389/fpls.2016.00149>

Caplan JS, Hager RN, Megonigal PJ, Mozdzer TJ (2015). Global change accelerates carbon fixation by a wetland ecosystem engineer. /Environmental Research Letters/ 10:115006.

Eric Weissberger has a new position as a Marine Habitat Resource Specialist at NOAA

Patricia Ramey-Balci writes that she now has a full time position as an Associate Research Professor at Koc University in Turkey. She is teaching ecology to undergraduates and setting up her new lab.