

MYLA F. J. ARONSON

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Department of Ecology, Evolution and Natural Resources
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EDUCATION

Ph.D. 2002-2007. Ecology and Evolution, Rutgers University, New Brunswick, NJ
Ph.D. Dissertation: Ecological change by alien plants in an urban landscape.
Advisor: Steven N. Handel, Ph.D.

M.S. 1999-2002. Ecology and Evolution, Rutgers University, New Brunswick, NJ
M.S. Thesis: Floodplain vegetation, soils, and land use of the upper Passaic River basin, New Jersey.
Advisor: Jean Marie Hartman, Ph.D.

B.S. 1994-1998. Natural Resources, Cornell University, Ithaca, NY
Senior Thesis: Ground vegetation as indicators of site quality in northern hardwood forests
Advisor: Timothy J. Fahey, Ph.D.

ACADEMIC POSITIONS

Visiting Research Scholar, 2012-present, Department of Ecology, Evolution and Natural Resources, Rutgers University, New Brunswick, NJ

Adjunct Assistant Professor, 2012-present, Department of Biology, Hofstra University, Hempstead, NY

Assistant Professor, 2009-2012, Department of Biology, Hofstra University, Hempstead, NY

Visiting Assistant Professor, 2006-2009, Department of Biology, Luther College, Decorah, IA

Research Associate, 2007-2008, University of Minnesota, St. Paul, MN
Post-doctoral research examining long-term vegetation change in restored prairie wetlands.
Supervisor: Susan Galatowitsch, Ph.D.

TEACHING EXPERIENCE

Assistant Professor, Hofstra University, Fall 2009 to 2012

Developed lecture and laboratory materials in the courses listed below. Advised undergraduate and Masters student research projects.

- Biology 13: Prokaryotes, Protists, Fungi and Plants
- Biology 14: Evolution, Ecology and Behavior
- Biology 253A: Graduate Seminar in Invasion Ecology

Visiting Assistant Professor, Luther College, Fall 2006 to Spring 2009

Developed lecture and laboratory materials in the courses listed below. Advised undergraduate student research projects and senior papers.

- General Ecology
- Botany
- Principles of Biology 1: Ecology, Evolution and Biodiversity
- Principles of Biology 2: Molecules, Cells and Genes
- Ecological Concepts (non-majors)

Laboratory Instructor and Teaching Assistant, Rutgers University Fall 2002-Spring 2005

- General Biology
- Principles of Botany
- Principles of Biology
- Intermediate Geomatics
- Restoration Ecology

- Beginning Geomatics

Teaching Assistant, Cornell University, Spring 1997

- Environmental Conservation

ADDITIONAL PROFESSIONAL EXPERIENCE

Project Consultant, 2002-2006, Center for Urban Restoration Ecology, Rutgers University, New Brunswick, NJ and the Brooklyn Botanic Garden, Brooklyn, NY. Consulted on a variety of courses and restoration projects in New York, New Jersey and California.

Graduate Fellow, 2005-2006, Department of Ecology, Evolution and Natural Resources, Rutgers University, New Brunswick, NJ and the Morris County Park Commission, New Jersey

Graduate Assistant, 1999-2001, Department of Landscape Architecture, Rutgers University, New Brunswick, NJ and the New Jersey Department of Environmental Protection, Trenton, NJ

Certified Wetland Delineator, 1999. Wetland delineation certification based on the United States Army Corps of Engineers delineation methodology.

Field/Lab Assistant, 1998-2002, Department of Ecology, Evolution and Natural Resources and Department of Landscape Architecture, Rutgers University, New Brunswick, NJ

Field/Lab Assistant, 1994-1998, Department of Natural Resources and Department of Entomology, Cornell University, Ithaca, NY

PUBLICATIONS AND PRESENTATIONS (please note: some listings under my maiden name, M.F. Johnson)

Aronson, M.F.J., and S.N. Handel. 2011. Deer and Invasive species suppress forest herbaceous communities and canopy tree regeneration. *Natural Areas Journal* 31:400-407.

Bennington, J.B. and **M.F.J. Aronson**. (in press). Reconciling Paleontological and neontological data: issues of scale, taxonomy, and taphonomy. In: Louys, J (ed) *Palaeontology in Ecology and Conservation*. Springer.

Aronson, M.F.J., F. La Sorte, C. Nilon *et al.* (submitted to *PNAS*). Life in the concrete jungle: cities as global biodiversity hotspots.

F. La Sorte, **M.F.J. Aronson**, N.G. Williams, *et al.* (in prep for *PNAS*). Europe as the World's global homogenizer of plant species.

Aronson, M.F.J., and S.N. Handel (in prep for *Journal of Forestry*). The challenge of conserving an old-growth suburban forest: stress and vegetation change over 53 years in the Hutcheson Memorial Forest, New Jersey.

Aronson, M.F.J., S.N. Handel, S.E. Clemants, and I.P. LaPuma. (in prep for *Urban Ecosystems*). Urbanization promotes native species loss and the replacement with non-native dominated communities.

***Aronson, M.F.J.**, and S. Galatowitsch. 2008. Long-term vegetation development of restored prairie pothole wetlands. *Wetlands* 28(4): 883-895.

***chosen as one of the top 30 papers "deemed most important in furthering the field of wetland science" in 30 years of the journal *Wetlands*.**

Baiser, B., J.L. Lockwood, D. La Puma, and **M.F.J. Aronson**. 2008. A perfect storm: two ecosystem engineers interact to degrade deciduous forests of New Jersey. *Biological Invasions* 10(6): 785-795.

Aronson, M.F.J., S.N. Handel and S.E. Clemants. 2007. Fruit type, life form, and origin determine the success of woody plant invaders in an urban landscape. *Biological Invasions* 9(4): 465-475.

Aronson, M.F.J., C.A. Hatfield, and J.M. Hartman. 2004. Plant community patterns of low-gradient forested floodplain wetlands in a New Jersey urban landscape. *Journal of the Torrey Botanical Club* 131(3): 232-242.

Hatfield, C.A., P.W. Ryan, **M.F. Johnson** and J.M. Hartman. 2002. Assessing the feasibility of using hydrogeomorphic wetlands assessment in New Jersey – Riverine forest example. Department of Environmental Protection, Trenton, New Jersey.

Presentations:

Aronson, M.F.J. Deer and invasive plant species suppress forest vegetation and avian communities. NYC Natural Areas Restoration Practitioners meeting 2012.

- Aronson, M.F.J.** Drivers, barriers and restoration of biodiversity in urban landscapes. NYC Natural Areas Restoration Practitioners meeting, 2011.
- Aronson, M.F.J.** Drivers, barriers and restoration of biodiversity in a suburban/urban landscape. Long Island Native Plant Symposium, March 11, 2011.
- Aronson, M.F.J.** Using comparative studies to examine intercity versus intracity patterns of native species loss and biotic homogenization of urban floras. *Invited speaker*. Comparative Studies of Cities: Links to Urban Biodiversity and Urban Design Symposium. URBIO 2010: Urban Biodiversity and Design Conference, Nagoya, Japan, May 18-22, 2010.
- Aronson, M.F.J.** Using comparative studies to examine intercity versus intracity patterns of native species loss and biotic homogenization of urban floras. 2010 Hofstra University HCLAS Science Research Symposium. April 9, 2010.
- Aronson, M.F.J.** The biotic-human interface: Addressing biodiversity and conservation in the urban landscape. Symposium Abstract: the Ecological Society of America 93rd Annual Meeting, Milwaukee, WI, August 3-8, 2008.
- R.C. Putnam, **M.F.J. Aronson**, and P.B. Reich. Examining the effects of CO₂, N, and diversity on initial establishment of weedy invaders in a grassland ecosystem. Abstract: the Ecological Society of America 93rd Annual Meeting, Milwaukee, WI, August 3-8, 2008.
- Aronson, M.F.J.**, S.N. Handel, and S.E. Clemants. Urbanization promotes native plant species loss and replacement with non-native plant communities. Abstract: Urban Biodiversity and Design: Implementing the convention on biological diversity in towns and cities, Erfurt, Germany, May 21-24, 2008.
- Aronson, M.F.J.**, S.N. Handel, and S.E. Clemants. Biotic homogenization and the replacement of native species with alien species in an urban landscape. Abstract: the Ecological Society of America 92nd Annual Meeting/Society for Ecological Restoration International 18th International Conference, San Jose, CA, August 5-10, 2007.
- Aronson, M.F.J.** Ecological change by alien plants in the urban landscape. Invited Seminar Speaker: University of Minnesota, Duluth. February 9, 2007.
- Aronson, M.F.J.** Ecological change by alien plants in the urban landscape. Invited Seminar Speaker: Luther College. February 22, 2007.
- Aronson, M.F.J.**, and S.N. Handel. Past, present and future of a suburban old growth forest: vegetation change and exotic species invasions over 50 years. Abstract: the Ecological Society of America 90th annual meeting, Montreal, Canada, August 7-12, 2005.
- Aronson, M.F.J.**, S.N. Handel and S.E. Clemants. Life history correlates of change in plant species distribution in an urban landscape. Abstracts: The Ecological Society of America 89th annual meeting, Portland, Oregon, August 1-6, 2004.
- Momsen, J. and **M.F. Johnson**. Tidal salt marsh restoration in an urban environment. Abstracts: the Society of Wetland Scientists 22nd Annual Meeting, 2001.
- Norris, M.E. and **M.F. Johnson**. Developing a hydrogeomorphic functional assessment (HGM) in an urbanized landscape. Abstracts: Society of Wetland Scientists 21st Annual Meeting, 2000.

AWARDS AND GRANTS

Myla F.J. Aronson, Justin DiAngelo. LICOR LEEF Ecophysiology package. \$49,000, May 2011.

Joan G. Ehrenfeld (deceased), Karen O'Neill (social science lead PI), **Myla F.J. Aronson** (Co-PI), Kirk R. Barrett (Co-PI), Nina H. Fefferman (Co-PI), Rachael L. Shwom (Co-PI). Connectivity Along Urban Rivers: A Keystone Process for Urban Ecosystems. National Science Foundation, Behavior and Cognitive Science, Long Term Ecological Research Program, \$299,886, September 2009-March 2013.

Jennifer Krumins and **Myla F.J. Aronson**. Role of Plant and Soil Community Structure in Riparian Soil Nutrient Retention. Barnegat Bay Partnership. July 2012-June 2013. \$47,915

Myla F.J. Aronson and Jordan Raphael. Ecological and social drivers of plant invasions in natural areas on the suburban/wildland interface at Fire Island National Seashore. National Park Service, \$57,432 (pending).

Myla F. J. Aronson

Myla F.J. Aronson, Madhusudan Katti, Charles Nilon, Paige Warren. Comparative ecology of cities: What makes an urban biota “urban”? Working group, National Center for Ecological Analysis and Synthesis, \$87,000, January 2010-January 2011.

Myla F.J. Aronson. Potential range expansion of non-native aquatic invasive plants and assessing the effects of these species on native habitats in the New York metropolitan area. Hofstra University HCLAS Faculty Research and Development Grant, 2011, \$1,200

Myla F.J. Aronson. Examination of life history traits associated with the success of non-native invasive plant species in the urban environment. Hofstra University HCLAS Faculty Research and Development Grant, 2010, \$1,200

Myla F.J. Aronson, Claire Addis, Allyson Czechowicz. The role of white-tailed deer in epizoochory of invasive plant species and Mechanisms of establishment and life history of *Alliaria petiolata* under enhanced nitrogen conditions. Luther College Academic Administrative Assistantship, 2008, \$1,100

Ryan Goeken, **Myla F.J. Aronson**. Wetland restoration in the agricultural landscape: Factors and perceptions contributing to restoration success. Luther College Student Directed Research Funds, 2008, \$144

Claire Addis, **Myla F.J. Aronson**. Mechanisms of establishment and life history of *Alliaria petiolata* under enhanced nitrogen conditions. Luther College Student Directed Research Funds, 2008, \$400

Allyson Czechowicz, **Myla F.J. Aronson**. The Role of White-Tailed Deer in Epizoochory of Invasive Plant Species Luther College Student Directed Research Funds, 2007, \$400

Myla F.J. Aronson. Consequences of alien plant invasions on forest herbaceous communities and canopy tree regeneration. Hutcheson Memorial Forest Center Summer Research Grant, 2005, \$1,500

Myla F.J. Aronson. Assessing the influences of exotic invasive species competition and deer herbivory on tree canopy seedling dynamics and recruitment New Jersey Forest Foundation Scholarship, 2004, \$3,000

Myla F.J. Aronson. Effects of invasive species on regeneration of forest canopy trees. Hutcheson Memorial Forest Center Summer Research Grant, 2004, \$1,200

Myla F.J. Aronson, Shannon Galbraith, Jonathan Schram. Influence of mycorrhizal infection on the competition between native and exotic species. Hutcheson Memorial Forest Center Summer Research Grant, 2004, \$1200

Myla F.J. Aronson. Assessing the woody regeneration potential of old growth and secondary forests in a suburban region. Hutcheson Memorial Forest Center Summer Research Grant, 2003, \$1,200

PROFESSIONAL MEMBERSHIPS

Ecological Society of America
Society for Conservation Biology
Urban Ecosystems Ecology Section, Ecological Society of America
Torrey Botanical Society

PROFESSIONAL ACTIVITIES

- Reviewer for: *Biological Invasions*, *BioScience*, *Ecography*, *Ecology Letters*, *Environmental Management*, *Natural Areas Journal*, *Restoration Ecology*, *Urban Ecosystems*.
- Involved in the Long Island Invasive Species Management Area (LIISMA).
- Society for Conservation Biology North America Congress for Conservation Biology, Oakland, CA July 15-18, 2012. Symposium Organizer: Managing novel ecosystems: bridging the gap between research and practice.
- The Ecological Society of America 97th Annual Meeting, Portland, OR, August 5-10, 2012. Symposium Organizer: Tales from the concrete jungle: understanding and sustaining the Earth’s urban biodiversity from local to global scales.

Myla F. J. Aronson

- The Ecological Society of America 93rd Annual Meeting, Milwaukee, WI, August 3-8, 2008. Symposium Organizer: Using urban ecological research as a tool for enhancing ecological literacy.
- Northeast Ecology and Evolution Conference: Inaugural meeting at Rutgers University, 2003. Publicity Chairman.

SERVICE

- Community Service
 - Board of Directors: Friends of Hempstead Plains
 - Board of Directors and Academic Advisor: Long Island Native Plant Initiative
 - Fire Island National Seashore Science Advisory Team
- Hofstra University Service
 - Department of Biology: Tri-Beta Faculty Advisor, Fall 2010 to present; Curriculum Committee, Fall 2009 to present; Urban Ecology Major Committee, Fall 2009-present; Cell Biology Faculty Search Committee, 2009-2010
 - Environmental Safety Committee, Fall 2009 to present; Director of Sustainability Studies Faculty Search Committee, Spring 2010 to present
- Community Service
 - Mentored high school students from Locust Valley High School and South Side High School, New York. Summer 2010.
- Rutgers University Service
 - Invited Speaker, Rutgers TA Orientation, Rutgers University, Summer 2005; Ecology and Evolution Graduate Student Seminar. Coordinator 2002-2003; Buell-Small Successional Study 2001-2005. Field sampling volunteer; Rutgers – Princeton Graduate Student Annual Retreat. 2000-2002. Host and organizer; Student Representative, Graduate Program in Ecology and Evolution, Rutgers University, 1999-2000, 2004-2005