

# Jennifer Ann Fox

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## Education

- Ph.D. Cornell University, Ecology and Evolutionary Biology, 2005  
Dissertation: Variation in populations of *Daphnia mendotae* over space and time
- M.A. Indiana University, Biology (Ecology, Evolution, and Behavior), 1995  
Thesis: Genetic structure of a mixed population of freshwater snails
- B.A. Carleton College, Biology *cum laude* with Distinction in Department, 1992  
Thesis: Phylogenetics and the evolution of Arthropoda

## Teaching Experience

2005-present Assistant Professor, Drew University

- ❖ Biol 3 – Environmental Biology
- ❖ Biol 9 – Diversity of Life
- ❖ Biol 183 – Tropical Marine Ecology with Fieldwork in Belize
- ❖ Biol 186 – Freshwater Ecology with Lab
- ❖ Biol 196/Neur 197 – Research in Biology/Neurosciences
- ❖ First Year Seminar – Evolution in Everyday Life
- ❖ Biology Laboratory – New Jersey Governor’s School for the Sciences

1998-2005 Teaching Assistant and Instructor, Cornell University

- ❖ BioEE 165 – First-Year Writing Seminar: Evolution in Everyday Life  
Winner of Buttrick-Crippen Fellowship for best First-Year Writing Seminar proposal
- ❖ BioEE 760 – Current Topics in Ecology and Evolution Graduate Seminar
- ❖ BioEE 261 – Ecology and the Environment, Writing in the Major Section
- ❖ BioEE 278 – Evolutionary Biology

1998 Instructor, Carleton College

- ❖ Biology Field Studies and Research
- ❖ Marine Biology
- ❖ Physical and Cultural Environment of New Zealand and Australia

1995-1997 Program Assistant, Kazakh State Academy of Architecture and Construction

- ❖ Environmental Studies M.S. Program
- ❖ NGO EcoInform

1993-1995 Associate Instructor, Indiana University

- ❖ Bio L113 – Introductory Biology Laboratory
- ❖ Bio L100 – Humans and the Biological World

## Publications

- Hairston, N.G., Jr. and J.A. Fox. Egg Banks. In *Encyclopedia of Inland Waters*, G.E Likens, ed. Elsevier. In press.
- Fox, J.A. 2007. Hatching timing of *Daphnia mendotae* diapausing eggs of different ages. *Fundamental and Applied Limnology* 168: 19-26.
- Hairston, N.G., Jr., S.P. Ellner, M.A. Geber, T. Yoshida, J.A. Fox. 2005. Rapid evolution and the convergence of ecological and evolutionary time. *Ecology Letters* 8: 1114-1127.
- Fox, J.A. 2004. New microsatellite primers for *Daphnia galeata mendotae*. *Molecular Ecology Notes* 4:544-546.
- Jokela, J., C.M. Lively, M.F. Dybdahl, J.A. Fox. 2003. Genetic variation in sexual and clonal lineages of a freshwater snail. *Biological Journal of the Linnean Society* 79: 165-181.
- Hairston, N.G., Jr., C.L. Holtmeier, W. Lampert, L.J. Weider, D.M. Post, J.M. Fischer, C.E. Cáceres, J.A. Fox, U. Gaedke. 2001. Natural selection for grazer resistance to toxic cyanobacteria: evolution of phenotypic plasticity? *Evolution* 55: 2203-2214.
- Hairston, N.G., Jr., W. Lampert, C.E. Cáceres, C.L. Holtmeier, L.J. Weider, U. Gaedke, J.M. Fischer, J.A. Fox, D.M. Post. 1999. Evolution of grazer resistance to toxic cyanobacteria demonstrated using long-dormant eggs. *Nature* 401: 446.
- Jokela, J., C.M. Lively, J.A. Fox, M.F. Dybdahl. 1997. Flat reaction norms and 'frozen' phenotypic variation in clonal snails (*Potamopyrgus antipodarum*). *Evolution* 51: 1120-1129.
- Jokela, J., C.M. Lively, M.F. Dybdahl, J.A. Fox. 1997. Evidence for a cost of sex in a freshwater snail (*Potamopyrgus antipodarum*). *Ecology* 78: 452-461.
- Howard, J.J., M.L. Henneman, G.A. Cronin, J.A. Fox, G. Hormiga. 1996. Conditioning of scouts and recruits during foraging by a leaf-cutting ant (*Atta columbica*). *Animal Behaviour* 52: 299-306.
- Fox, J.A., M.F. Dybdahl, J. Jokela, C.M. Lively. 1996. Genetic structure of coexisting sexual and clonal subpopulations in a freshwater snail (*Potamopyrgus antipodarum*). *Evolution* 50: 1541-1548.

## Research Presentations

- Fox, J.A. 2008. Rapid evolvers and cryptic hybrids: Variation over space and time in *Daphnia mendotae*. George Washington University, Washington, DC. (Invited Speaker)
- Fox, J.A. 2007. Rapid evolvers and cryptic hybrids. Merck/AAAS Seminar, Drew University.
- Fox, J.A. 2007. Life history and neutral genetic variation in populations of *Daphnia mendotae* over time. American Society of Limnology and Oceanography, Aquatic Sciences Meeting, Santa Fe, NM.
- Fox, J.A. 2006. Origin and significance of variation in populations of water fleas. Department of Biology and Molecular Biology, Montclair State University. (Invited Speaker)
- Fox, J.A. 2005. Variation in populations of *Daphnia mendotae* over space and time. Seventh Onondaga Lake Scientific Forum, Syracuse, NY. (Invited Speaker)

**Research Presentations (continued)**

- Fox, J.A. 2005. Contributions of *Daphnia* diapausing eggs of different ages to population processes. Ecological Society of America, Annual Meeting, Montreal, QC.
- Fox, J.A. 2005. Rapid evolution and cryptic invasion in populations of *Daphnia* (poster). World Summit on Evolution, Galápagos, Ecuador.
- Fox, J.A. 2005. Variation in populations of *Daphnia galeata mendotae* over space and time. Department of Ecology and Evolutionary Biology Seminar Series, Cornell University.
- Fox, J.A. 2004. First-Year Writing Seminar: Evolution in Everyday Life. Knight Consortium for Writing in the Disciplines, Cornell University. (Invited Speaker)
- Fox, J.A. and N.G. Hairston, Jr. 2003. Temporal patterns of genetic change in recently established *Daphnia* populations. Ecological Society of America, Annual Meeting, Savannah, GA.
- Fox, J.A. 2003. Return of the natives: studying population recovery from industrial pollution (poster). The Power and the Promise of Life Sciences Forum, American Museum of Natural History and Cornell University. (Invited Participant)
- Fox, J.A. 2003. Microsatellite variation over time in a recently founded population of the native *Daphnia mendotae*. Ecology and Evolutionary Biology Symposium, Cornell University.
- Fox, J.A. and N.G. Hairston, Jr. 2002. Time transect of genetic change in a recently founded *Daphnia* population. Society for the Study of Evolution, Annual Meeting, Champaign-Urbana, IL.
- Fox, J.A. and N.G. Hairston, Jr. 2002. Genetic changes over time in a recently founded *Daphnia* population. Sixth International Symposium on Cladocera, Wierzba, Poland.
- Fox, J.A. 2002. History and ecology of Onondaga Lake. Mathematics, Science, Technology Enhancement Project Summer Conference, New York University. (Invited Speaker)
- Fox, J.A. 2002. Population genetic consequences of recolonization of Onondaga Lake by native *Daphnia* species (poster). Fourth Onondaga Lake Scientific Forum, Syracuse, NY.
- Fox, J.A. 1999. Genetic structure of coexisting sexual and clonal subpopulations of a freshwater snail (*Potamopyrgus antipodarum*). Ecology and Evolution Symposium, Cornell University.

**Student Research Supervised***Drew University*

- Emily Schmidt (DSSI 2007, Honors Thesis 2007-08) Auditory predator recognition in NJ forest birds (with Tammy Windfelder)
- Dena Tomassi (DSSI 2006) Local adaptation in the European zooplankton *Daphnia galeata*
- Joseph DiComo (DSSI 2006) Demography of Eastern Painted Turtles in the Zuck Arboretum
- Cory Krediet (Honors Thesis 2005-06) Physical and biological tradeoffs along a depth gradient in the crab *Cancer borealis*

*Cornell University*

- Christopher Daiffler; Geoffrey Gailey; Daniel Orr (Presidential Scholar); Alexandra Wolverton

## Awards, Fellowships, and Grants

### *Drew University*

- 2008    Experiential Learning Mini-Grant (Biol 183) (\$500)  
          CLA Faculty Fall Research Grant (\$900)
- 2007    President's Initiative Fund Distinguished Speaker Series [Sustainable Living :  
          Sustainable Design] (\$10,000)  
          National Science Foundation ADVANCE Workshop, WEBS (Women Evolving  
          Biological Sciences). Selected participant, Seattle, WA, October 2007.  
          CLA Faculty Development Grant (\$425)  
          CLA Conference Travel Grant (\$900)  
          CLA Faculty Summer Research Grant (\$900)
- 2006    Experiential Learning Mini-Grant (Biol 183) (\$500)  
          CLA Faculty Development Grant (\$700)  
          CLA Faculty Summer Research Grant (\$700)
- 2005    CLA Course Development Grant (\$280)

### *Cornell University*

#### Stipend Support

- Buttrick-Crippen Fellowship
- Cornell Graduate Fellowship
- Olin Presidential Fellowship
- Human Accelerated Environmental Change Training Grant Fellowship
- Biogeochemistry and Biocomplexity Initiative Fellowship

#### Research Support

- National Science Foundation Doctoral Dissertation Improvement Grant (\$10,000)
- Teresa Heinz Scholars for Environmental Research (\$13,389)
- Edna Bailey Sussman Fund Environmental Internship (\$4,000)
- Kieckhefer Adirondack Fellowship (\$2,390)
- Numerous small grants for research and conference travel (>\$6,000)

#### Other Recognition

- Outstanding Graduate Teaching Assistant, College of Agriculture and Life Sciences
- Book Award for Best Student Talk, Ecology and Evolutionary Biology

### *Kazakh State Academy of Architecture and Construction (KazGACA)*

- General Electric International Fund (\$25,000 to KazGACA)
- Peace Corps Small Projects Assistance Grant (\$1,100 to NGO EcoInform)

### *Indiana University*

- GAANN Fellowship
- Sears Crowell Scholarship
- Tropical Ecology Field Course, Organization for Tropical Studies
- Several small grants for research (\$2500)

### *Carleton College*

- Richter Research Fellowship
- Dow Chemical Scholarship
- William Carleton Scholar

### Other Teaching Activities and Training

2007	Summer College Program, Drew University
2006	Tropical Marine Ecosystems of Belize, NSF Chautauqua Short Course First-Year Seminar Workshop, Drew University
2005	Marine Course Development Workshop, Gerace Field Station, Bahamas
2004	WRIT 700: Teaching Writing, Knight Writing Program, Cornell University
2001	WRIT 701: Writing Across the Curriculum, Knight Writing Program, Cornell University Expanding Your Horizons, "Water Critters" Hands-On Workshop
2000	MicroWorld Workshop for K-8 School Teachers, Cornell University
1999-2001	Facilitator, Graduate Student Professional Development Workshop, Cornell University
1999	Graduate Student Professional Development Workshop, Cornell University EDUC 620: Internship in Education, Cornell University
1995-1997	Peace Corps Volunteer, Program Development Advisor, Kazakh State Academy of Architecture and Construction, Almaty, Kazakhstan
1995	Model School Practicum, United States Peace Corps, Kapshagai, Kazakhstan
1993	Tropical Ecology Field Course, Organization for Tropical Studies, Costa Rica
1992	Howard Hughes Undergraduate Initiative Biology Teaching Workshop, Indiana University

### Service Activities (Selected)

2007-2008	Academic Standing Committee Science Facility Planning Committee Campus Sustainability Committee Faculty Advisory Committee, Center for Religion, Society, and Culture General Education Working Group (College Seminar) Search Committee, Biology Department (GIS Position) Several campus presentations about climate change, sustainability
2006-2007	Faculty Advisory Committee, Center for Religion, Society, and Culture Advisory Committee, Sustainable Residence Hall Honors Committee Digital Imaging Working Group (ITS) Departmental Representative, Academic Fairs and Admissions Events Met with candidates for Director of Sponsored Programs search
2005-2006	Secretary, Division 1 Search Committee, Biology Instructor Departmental Representative at Academic Fairs and Admissions Events
2001-present	Reviewer for Ecology; Hydrobiologia; Limnology and Oceanography; Marine Ecology - Progress Series; Research in Microbiology

### Membership in Professional Societies

American Society for Limnology and Oceanography; Ecological Society of America; National Center for Science Education; Sigma Xi (full member); Society for the Study of Evolution