

JASON D. FRIDLEY

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EDUCATION

- 2002 Ph.D. in Biology, University of North Carolina at Chapel Hill
1997 BA in Biology, Bennington College, VT

GRANTS AND COMPETITIVELY FUNDED PROPOSALS

- 2004-2007 NSF International Research Fellowship: Connecting genes to ecosystems: how does genetic diversity maintain species diversity in a species-rich pastureland? (with J.P. Grime, FRS, University of Sheffield, UK) \$103,760
2003-2006 National Parks Foundation Ecological Research Fellowship: What controls the floristic diversity of a National Park? Species turnover as a common currency for quantifying diversity patterns within the Great Smoky Mountains and among 23 National Parks. (with Peter White, UNC) \$150,000
2002-2003 NC Biotechnology Center: Characterization of plant communities surrounding North Carolina agricultural ecosystems. (with Robert Peet, UNC) \$85,000
2000-2001 NSF Doctoral Dissertation Improvement Grant: Relationships among species diversity, site fertility, resource heterogeneity, and ecosystem productivity in plant communities. \$9,345
2000 Sigma Xi GIAR. \$717
2000 Smith Research Grant, UNC Graduate School. \$500
1998 Sigma Xi GIAR. \$700

FELLOWSHIPS AND HONORS

- 2003 John L. Harper Prize for Best Paper by a Young Author, British Ecological Society
2001 Highly Commended, Keymer Prize for Best Student Talk, British Ecological Society Winter Meeting
2001-2002 Henry H. Dearman Dissertation Fellowship, UNC Graduate School
2001-2002 Royster Society of Fellows, UNC Graduate School
1998-2001 NSF Graduate Research Fellowship
1997-1998 Mrs. W.C. Coker Fellowship, UNC Biology
1995-1997 Brockway Faculty Scholarship, Bennington College, VT

PUBLICATIONS

Fridley, J.D., Peet, R.K., van der Maarel, E., and Willems, J.H. Integration of local and regional species-area relationships from space-time species accumulation. *The American Naturalist*, in press.

- Fridley, J.D., Qian, H., White, P.S., and Palmer, M.W.** 2006. Plant species invasions along the latitudinal gradient in the United States: comment. *Ecology*, in press.
- Bruno, J.F., **Fridley, J.D.**, Bromberg, K.D., and Bertness, M.D. 2005. Insights into biotic interactions from studies of species invasions. In: Sax, D.F., Gaines, S.D., and Stachowicz, J.J., eds. *Exotic species, bane to conservation and boon to understanding: ecology, evolution, and biogeography*. Sinauer, Sunderland, MA.
- Fridley, J.D.**, Peet, R.K., White, P.S., and Wentworth, T.R. 2005. Connecting fine- and broad-scale species-area relationships of southeastern U.S. flora. *Ecology* 86: 1172-1177.
- Fridley, J.D.**, Brown, R.L., and Bruno, J.F. 2004. Null models of exotic invasion and scale-dependent patterns of native and exotic species richness. *Ecology* 85: 3215-3222.
- Peet, R.K., **Fridley, J.D.**, and Gramling, J.M. 2003. Variation in species richness and species pool size across a pH gradient in forests of the Southern Blue Ridge Mountains. *Folia Geobotanica* 38: 391-401.
- Fridley, J.D.** 2003. Diversity effects on productivity in different light and nutrient environments: an experiment with communities of annual plants. *Journal of Ecology* 91: 396-406. [Winner of 2003 John L. Harper Prize]
- Brown, R.L. and **Fridley, J.D.** 2003. Control of plant species diversity and community invasibility by species immigration: seed richness versus seed density. *Oikos* 102: 15-24.
- Fridley, J.D.** 2002. Resource availability dominates and alters the relationship between species diversity and ecosystem productivity in experimental plant communities. *Oecologia* 132: 271-277.
- Fridley, J.D.** 2001. The influence of species diversity on ecosystem productivity: how, where, and why? *Oikos* 93: 514-526.
- Huston, M.A., Aarssen, L.W., Austin, M.P., Cade, B.S., **Fridley, J.D.**, Garnier, E., Grime, J.P., Hodgson, J., Lauenroth, W.K., Thompson, K., Vandermeer, J.H., and Wardle, D.A. 2000. No consistent effect of plant diversity on productivity (Technical Comment). *Science* 289: 1255a.
- Fridley, J.D.** 1998. The flora and fauna of Duke Paul's Missouri. In: Hans von Sachsen-Altenburg and Robert L. Dyer, *Duke Paul of Wuerttemberg on the Missouri Frontier: 1823, 1830 and 1851*. Pekitanoui, Boonville, MO.

PUBLISHED ABSTRACTS

- Fridley, J.D.**, Bruno, J.F., and Brown, R.L. 2005. Scale-dependent invasion patterns and null models of community assembly. Ecological Society of America Annual Meeting, Montreal.
- Fridley, J.D.** 2005. Park biodiversity surveys: does vegetation science suggest where to look? George Wright Society Biennial Conference, Philadelphia, PA.
- Fridley, J.D.** and Peet, R.K. 2004. Accumulation of local biodiversity in space-time. British Ecological Society Annual Meeting, Lancaster, UK.
- Fridley, J.D.** and Peet, R.K. 2004. Accumulation of local biodiversity in space-time: solving Preston's riddle. Ecological Society of America Annual Meeting, Portland, OR.
- Fridley, J.D.**, Gramling, J.M., Jobe, R.T., Kaplan, J.A., McKnight, M., Senft, A., Vandermast, D.B., and Peet, R.K. 2003. Fine-scale species-area relationships of the vascular flora of the Southeast. Ecological Society of America Annual Meeting, Savannah, GA.
- Brown, R.L., **Fridley, J.D.**, and Bruno, J.F. 2003. Null models and observed patterns of native and exotic diversity: does native richness repel invasion? Ecological Society of America Annual Meeting, Savannah, GA.

- Gramling, J.M., Peet, R.K., **Fridley**, J.D., and Wentworth, T.R. 2003. Species richness and species pool size variation across pH gradients in southern Blue Ridge forests. Ecological Society of America Annual Meeting, Savannah, GA.
- Vandermast, D.B., **Fridley**, J.D., Kuppinger, D., and Peet, R.K. 2003. Assessment of habitat specialization of southeastern trees using large-extent co-occurrence data. Ecological Society of America Annual Meeting, Savannah, GA.
- Wentworth, T.R., White, P.S., Wheeler, B.E., Taverna, K., Kuppinger, D., Jacobs, L.A., **Fridley**, J.D., and Peet, R.K. 2003. Nested versus non-nested characterization of vegetation composition and species richness at multiple spatial scales. Ecological Society of America Annual Meeting, Savannah, GA.
- Fridley**, J.D. 2002. Diversity effects on productivity in different environments: an experiment with communities of annual plants. Ecological Society of America Annual Meeting, Tucson, AZ.
- Fridley**, J.D. 2001. Resource availability influences the relationship between plant diversity and ecosystem productivity. British Ecological Society Winter Meeting, Warwick, UK.
- Brown, R.L. and **Fridley**, J.D. 2001. The effect of seed density and seed richness on species diversity and invasibility. Ecological Society of America Annual Meeting, Madison, WI.
- Fridley**, J.D. 2001. Relative effects of resource availability and species diversity on ecosystem productivity. Ecological Society of America Annual Meeting, Madison, WI.
- Woods, K.D., **Fridley**, J.D., and Smith, J. 1996. Demographic patterns and disturbance history in old-growth forests from tree-ring analysis. Ecological Society of America Annual Meeting, Providence, RI.

DISSERTATION

- Fridley, J.D. 2002. The influence of species diversity on ecosystem productivity in different environments: experimental plant communities and theory. Ph.D. Dissertation. University of North Carolina, Chapel Hill, NC.

INVITED PRESENTATIONS

- Duke University, Graduate Program in Ecology, December 2005
- University of Nebraska-Lincoln, School of Biological Sciences, February 2005
- Syracuse University, Department of Biology, February 2005
- University of Tennessee, Department of Ecology and Evolutionary Biology, February 2005
- University of Zurich, Switzerland, Institute of Environmental Sciences, November 2004
- University of Jena/Max Planck Institute for Biogeochemistry, Germany, May 2004
- University of Maryland Center for Environmental Science, April 2004
- North Carolina State University, Department of Botany, March 2004
- Cornell University, Department of Ecology and Evolutionary Biology, February 2004
- The Academy of Natural Sciences, Philadelphia, PA, April 2003
- Oklahoma State University, Department of Botany, March 2003
- Centre for Population Biology, Silwood, Berkshire, UK, June 2002
- University of Sheffield, UK, Department of Animal and Plant Sciences, December 2001
- Bennington College, Bennington, VT, October 2000

TEACHING

- 2002 Understanding Biodiversity (undergraduate), Bennington College
- 2002 Population, Food, and Farms (undergraduate), Bennington College
- 2002 Advanced Readings Seminar in Ecology, Bennington College
- 1997, 1999 Teaching Assistant, Plant Ecology (graduate/adv. undergraduate), UNC
- 1998 Teaching Assistant, Animal Behavior (undergraduate), UNC

ADVISING AND GRADUATE COMMITTEE

- 2004 - Mary O'Connor (graduate committee), UNC
- 2004 Daniel McGlinn (undergraduate honors thesis), UNC

PROFESSIONAL ACTIVITIES

- 1999 - Manuscripts reviewed for *The American Naturalist*, *Annals of Botany*, *Biological Invasions*, *Botanical Bulletin of Academia Sinica*, *Canadian Journal of Forest Research*, *Conservation Biology*, *Diversity and Distributions*, *Ecography*, *Ecology*, *Ecological Monographs*, *Ecology Letters*, *Functional Ecology*, *International Journal of Plant Sciences*, *Journal of Ecology*, *Journal of Vegetation Science*, *Oecologia*, *Oikos*, and *Plant Ecology*
- 2005 Reviewer (ad hoc), Swiss Federal Institute of Technology Research Commission
- 2005 Invited Participant, "The Next Generation of Biodiversity and Ecosystem Functioning Research" DIVERSITAS Workshop, Kota Kinabalu, Borneo, Malaysia
- 2005 Invited Participant, "The Invasion Paradox: Reconciling Biodiversity and Invasion Patterns Across Spatial Scales" Symposium, Ecological Society of America Annual Meeting, Montreal
- 2005 Symposium Organizer, "Parks for Science: Examples from the National Parks Ecological Research Program", George Wright Society Biennial Conference, Philadelphia, PA
- 2005 Reviewer (ad hoc), German Research Foundation (DFG)
- 2004 Reviewer (ad hoc), USDA National Research Initiative Competitive Grants Program
- 2004 Invited Participant, 2004 Progress in Experimental Biodiversity Research Workshop, Jena, Germany
- 2003 Invited Participant, 2003 Biotic Mechanisms of Ecosystem Regulation in the Global Environment (BioMERGE) Adaptive Synthesis Workshop, St. Louis, MO
- 2002 Co-instructor, 2002 Biocomplexity and Ecoinformatics Graduate Course, National Center for Ecological Analysis and Synthesis, Santa Barbara, CA

PROFESSIONAL EXPERIENCE

- 2006 - Assistant Professor, Department of Biology, Syracuse University
- 2004 - Visiting Scholar, University of Sheffield, UK
- 2003 - 2005 Postdoctoral Scholar, Department of Biology, UNC
- 2002 Visiting Faculty, Bennington College, VT

1997-1999 Teaching Assistant, Department of Biology, UNC
1994-1998 Research Assistant, Hans von Sachsen-Altenburg (historian)
1995-1997 Research Assistant, Kerry D. Woods, Bennington College
1996 Science Instructor, Long Trail School (secondary), Dorset, VT

PROFESSIONAL AFFILIATIONS

American Association for the Advancement of Science

British Ecological Society

Ecological Society of America

George Wright Society

Sigma Xi Scientific Research Society