

Curriculum vitae

Jeremy W. Lichstein
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Education

2007 Ph.D. Ecology and Evolutionary Biology, Princeton University
2000 M.S. Zoology (Statistics minor), North Carolina State University
1995 B.A. Liberal Arts Honors Program, University of Texas at Austin

Academic appointments

2011- Assistant Professor, University of Florida, Department of Biology
2007-2010 Postdoctoral Research Fellow, Princeton University, Department of Ecology and Evolutionary Biology
2003, 2005 Graduate Teaching Assistant, Princeton University, Department of Ecology and Evolutionary Biology
1997-1998 Graduate Teaching Assistant, North Carolina State University, Department of Zoology

Major awards

2006-2007 Princeton University Honorific Fellowship
2002-2007 Princeton University Centennial Fellowship in Sciences and Engineering
2000-2001 Fulbright Scholarship, Argentina
1998-2000 National Science Foundation Graduate Research Fellowship

Research and teaching interests

Global change biology, climate-vegetation feedbacks, forest ecology and management, population and community ecology, biodiversity, Bayesian and likelihood methods

Publications

Lichstein, J.W., J. Dushoff, K. Ogle, A. Chen, D.W. Purves, J.P. Caspersen, and S.W. Pacala. 2010. Unlocking the forest inventory data: relating individual-tree performance to unmeasured environmental factors. *Ecological Applications* 20(3):684-699.

Malizia, A., H.R. Grau, **J.W. Lichstein**. 2010. Soil phosphorus and disturbances influence liana communities in a subtropical montane forest. *Journal of Vegetation Science* 21:551-560.

Menge, D.N.L., J.L. DeNoyer, **J.W. Lichstein**. 2010. Phylogenetic constraints do not explain the rarity of nitrogen-fixing trees in late-successional temperate forests. *PLoS ONE* 5(8):e12056.

Chisholm, R.A, and **J.W. Lichstein**. 2009. Linking dispersal, immigration and scale in the neutral theory of biodiversity. *Ecology Letters* 12:1385-1393.

Lichstein, J.W., C. Wirth, H.S. Horn, and S.W. Pacala. 2009. Biomass chronosequences of United States forests: implications for carbon storage and forest management. Pages 301-341 in C. Wirth, G. Gleixner, and M. Heimann, eds. *Old-growth forests:*

function, fate and value. *Ecological Studies* vol. 207, Springer-Verlag, Berlin, Heidelberg.

- Wirth, C. and **J.W. Lichstein**. 2009. The imprint of succession on old-growth forest carbon balances: insights from a trait-based model of forest dynamics. Pages 81-113 in C. Wirth, G. Gleixner, and M. Heimann, eds. *Old-growth forests: function, fate and value*. *Ecological Studies*, Springer, Berlin, Heidelberg.
- Purves, D.W., **J.W. Lichstein**, N. Strigul, and S.W. Pacala. 2008. Predicting and understanding forest dynamics using a simple, tractable model. *PNAS* 105(44):17018-17022.
- Wirth C., **J.W. Lichstein**, J. Dushoff, A. Chen, and F.S. Chapin III. 2008. White spruce meets black spruce: dispersal, postfire establishment, and growth in a warming climate. *Ecological Monographs* 78(4):489-505.
- Lichstein, J.W.**, J. Dushoff, S.A. Levin, and S.W. Pacala. 2007. Intraspecific variation and species coexistence. *American Naturalist* 170(6):807-818.
- Purves, D.W., **J.W. Lichstein**, and S.W. Pacala. 2007. Crown plasticity and competition for canopy space: a new spatially implicit model parameterized for 250 North American tree species. *PLoS ONE* 2(9):e870.
- Lichstein, J.W.** 2007. Multiple regression on distance matrices: a multivariate spatial analysis tool. *Plant Ecology* 188(2):117-131.
- Jetz, W., C. Rahbek, and **J.W. Lichstein**. 2005. Local and global approaches to spatial data analysis in ecology. *Global Ecology and Biogeography*, 14(1): 97-98.
- Roy, S.B., P.D. Walsh, and **J.W. Lichstein**. 2005. Can logging in equatorial Africa affect adjacent parks? *Ecology and Society* 10(1):article 6.
- Lichstein, J.W.**, H.R. Grau, and R. Aragón. 2004. Recruitment limitation in secondary forests dominated by an exotic tree. *Journal of Vegetation Science* 15(6):721-728.
- Lichstein, J.W.**, T.R. Simons, and K.E. Franzreb. 2002. Landscape effects on breeding songbird abundance in managed forests. *Ecological Applications* 12(3):836-857.
- Lichstein, J.W.**, T.R. Simons, S.A. Shriener, and K.E. Franzreb. 2002. Spatial autocorrelation and autoregressive models in ecology. *Ecological Monographs* 72(3):445-463.
- Lichstein, J.W.**, M.L. Ballinger, A.R. Blanchette, H.M. Fishman, and G.D. Bittner. 2000. Structural changes at cut ends of earthworm giant axons in the interval between dye barrier formation and neuritic outgrowth. *Journal of Comparative Neurology* 416(2):143-157.

Funding

- USDA Forest Service 09-JV-11242306-051. Sustaining U.S. forests and managing carbon under a changing climate: a decision support system for land managers. S.W. Pacala (PI; Princeton University) and **J.W. Lichstein** (PI). \$107,000. 2009-2010.
- USAID. Enhancing Mexico's competitiveness through technical assistance in carbon management and policy development. R.A. Birdsey (PI; US Forest Service), **J.W. Lichstein** (Co-I). \$87,000. 2009-2010.

Service

Reviewer for journals: *Biodiversity and Conservation*, *Diversity and Distributions*, *Ecography*, *Ecological Applications*, *Ecology*, *Ecology Letters*, *Ecosystems*, *Global*

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Ecology and Biogeography, Journal of Biogeography, Journal of Applied Ecology,
Journal of Vegetation Science, Landscape Ecology, Oikos, PNAS

Reviewer for grant agencies: NSF, NOAA

Reviewer for U.S. National Park Service, Forest Health Monitoring Protocol

Advisory committee for USDA Forest Service National Forests Climate Change
Workshop: A workshop to develop protocols for an assessment of the climate
mitigation capacity of National Forests. Washington DC, 2010.

Workshop participant: USDA Forest Service, Climate Change Response Framework for
Chequamegon-Nicolet National Forest. Madison, WI, 2010.

Instructor: Intensive landscape-scale measurements of forest carbon for reference sites in
the Americas. USDA Forest Service workshop for Latin American researchers, Silas
Little Experimental Forest, New Jersey, September, 2010.

Other awards, activities

- 2010 Led modeling seminar for graduate students and post-docs based on Ben Bolker's book, *Ecological Models and Data in R*
- 2008 Designed and taught one-week field course in Panama for Princeton undergrads (with Dr. Stephanie Bohlman): Ecology and conservation of tropical dry forests
- 2004, 2006 Association of Princeton Graduate Alumni Summer Travel Fellowship
- 2000 Organization for Tropical Studies, Tropical Biology course, Costa Rica
- 2000 Marcia Brady Tucker Travel Award, American Ornithologists' Union
- 1997-1999 Andrews Graduate Fellowship, North Carolina State University
- 1994- Phi Beta Kappa
- 1994 Howard Hughes Fellowship, Summer Undergraduate Research Program in Molecular Biology, University of Texas at Austin
- 1993-1997 Research Technician, University of Texas at Austin, Department of Zoology
- 1992-1995 Plan II Honors Program, University of Texas at Austin, College of Liberal Arts
- 1991-1995 Dean's Scholars Program, University of Texas at Austin, College of Natural Sciences
- 1991-1995 Dedman Scholarship, University of Texas at Austin
- 1991 National Merit Scholar

Presentations at national conferences (only first-authored presentations are listed)

Lichstein, J.W., E. Shevliakova, S. Malyshev, Y. Pan, R.A. Birdsey, and S.W. Pacala. 2008. Temperature sensitivity of forest biomass and productivity: comparing the GFDL-LM3V land model to FIA data. Forest Inventory and Analysis Symposium, Park City, Utah.

Lichstein, J.W., S.W. Pacala, D.W. Purves, J. Dushoff, and K. Ogle. 2006. A resource-based neighborhood competition model of sapling growth. Ecological Society of America, Memphis, Tennessee.

Lichstein, J.W., S.W. Pacala, D.W. Purves, J.P. Caspersen, and K. Ogle. 2004. Parameterizing sapling growth-light models from forest inventory data. Ecological Society of America, Portland, Oregon.

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- Lichstein, J.W. 2000. Autoregressive models of songbird habitat use in managed southern Appalachian forests: landscape effects and spatial autocorrelation. American and British Ornithologists' Unions, St. John's, Newfoundland.
- Lichstein, J.W., T.R. Simons, and K.E. Franzreb. 2000. Comparison of normal, Poisson, and negative binomial regression models for analyzing count data: an example with southern Appalachian songbirds. American and British Ornithologists' Unions, St. John's, Newfoundland.
- Lichstein, J.W., T.R. Simons, and K.E. Franzreb. 1999. A multi-scale assessment of the effects of landscape composition on breeding birds in southern Appalachian forests. Predicting species occurrences: issues of scale and accuracy. Snowbird, Utah.
- Lichstein, J.W., T.R. Simons, and K.E. Franzreb. 1998. Patterns of breeding bird diversity and abundance across land use gradients in the southern Appalachians. North American Ornithological Conference, St. Louis, Missouri.