

**Stephen W. Pacala**

Department of Ecology and Evolutionary Biology  
Princeton University, Princeton, NJ 08544-1003  
Tel: (609) 258-6885; Fax: (609) 258-6818

**Education**

B.A. 1978 Dartmouth College  
Ph.D. 1982 Stanford University

**Research Interests**

Plant Ecology  
Global Interactions of the Biosphere, Atmosphere and Hydrosphere  
Mathematical Modeling  
Community Ecology

**Employment History**

2000-present	Co-Director, The Carbon Mitigation Initiative, Princeton University
1995-present	Co-Director, NOAA Carbon Modeling Center, Princeton University
1994-present	Associated Faculty, Princeton Environmental Institute, Princeton University
1993-present	Director of Graduate Studies, Department of Ecology and Evolutionary Biology, Princeton University
1992-present	Professor, Department of Ecology and Evolutionary Biology, Princeton University
1987-1992	Associate Professor, Department of Ecology and Evolutionary Biology, The University Connecticut
1982-1987	Assistant Professor, Ecology Section, Biological Sciences Group, The University of Connecticut
1979-1981	Teaching Assistant, Stanford University
1978	Teaching Assistant, Dartmouth College
1975-1978	Research Assistant, Dartmouth College

**Professional Service/Activities**

Associate Editor - The American Naturalist  
Associate Editor - Theoretical Population Biology  
Editorial Board - Ecological Applications  
Editorial Board - Global Change Biology

**Publications**

Kinzig, A.P. S.W. Pacala and G.D. Tilman. 2002. The Functional Consequences of Biodiversity: Experimental Progress and Theoretical Extensions. Princeton University Press, Princeton, NJ.

- Hurtt, G.C., S.W. Pacala, P.R. Moorcroft, J. Caspersen, E. Shevliakova, R.A. Houghton and B. Moore III. 2002. Projecting the Future of the U.S. Carbon Sink. *Proceedings of the National Academy of Sciences*. 99(3):1389-1394.
- Schimel, D.S., J.I. House, K.A. Hibbard, P. Bousquet, P. Ciais, P. Peylin, B.H. Braswell, M.J. Apps, D. Baker, A. Bondeau, J. Canadell, G. Churkina, W. Cramer, A.S. Denning, C.B. Field, P. Friedlingstein, C. Goodale, M. Heimann, R.A. Houghton, J.M. Melillo, B. Moore III, D. Murdiyarno, I. Noble, S.W. Pacala, I.C. Prentice, M.R. Raupach, P.J. Rayner, R.J. Scholes, W.L. Steffen and C. Wirth. 2001. Recent patterns and mechanisms of carbon exchange by terrestrial ecosystems. *Nature* 414:169-172.
- Wilson, H.B., M.J. Keeling and S.W. Pacala. 2001. Deterministic limits to stochastic, spatial models of natural enemies. *American Naturalist* 159:57-80.
- Moorcroft, P.R., G.C. Hurtt and S.W. Pacala. 2001. A Method for Scaling Vegetation Dynamics: the Ecosystem Demography Model (ED). *Ecological Monographs* 71(4):557-586.
- Rees, M., R. Condit, M. Crawley, S.W. Pacala and D. Tilman. 2001. Vegetation Dynamics (9315). *Science* 293(5530):650-655.
- Pacala S.W., Hurt G.C., Moorcroft P.R. and Caspersen J.P. 2001. Carbon storage in the US caused by land use change. Pp. 145-172. In *The Present and Future of Modeling Global Environmental Change*, Terra Scientific Publishing. Toyko, Japan.
- Pacala, S.W., G.C. Hurt, R.A. Houghton, R.A. Birdsey, L. Heath, E.T. Sundquist, R.F. Stallard, D. Baker, P. Peylin, P. Moorcroft, J. Caspersen, E. Shevliakova, M.E. Harmon, S.-M. Fan, J.L. Sarmiento, C. Goodale, C.B. Field, M. Gloor and D. Schimel. 2001. Consistent Land- and Atmosphere-Based U.S. Carbon Sink Estimates. *Science* 292(5525):2316-2320.
- Lewis, M.A. and S. Pacala. 2000. Modeling and analysis of stochastic invasion processes. *Journal of Mathematical Biology* 41:387-429.
- Keeling, M.J., H.B. Wilson and S.W. Pacala. 2000. Re-interpreting Space, Time-lags, and Functional Responses to Ecological Models. *Science* 290:1758-1761.
- Caspersen, J.P., S.W. Pacala, J.C. Jenkins, G.C. Hurt, P.R. Moorcroft and R.A. Birdsey. 2000. Contributions of land-use history to carbon accumulation in US forests. *Science* 290:1148-1151.
- Gloor, M., S.-M. Fan, S.W. Pacala and J.L. Sarmiento. 2000. Optimal sampling of the atmosphere for purpose of inverse modelling - a model study. *Global Biogeochem. Cycles* 14(1):407-428.
- Hurtt, G.C., P.R. Moorcroft, S.W. Pacala and S. Levin. 1998. Terrestrial Models and Global Change: Challenges for the Future. *Global Change Biology* 4(5):581-590.