

Steven M. Manson

Academic Appointments

- 2006 - Present McKnight Land-Grant Professor, University of Minnesota
2002 - Present Assistant Professor, Department of Geography, University of Minnesota

Education

- 2002 Ph.D. (Geography) Graduate School of Geography, Clark University
1995 B.A. Honours (Geography). Department of Geography, University of Victoria, Canada

Selected Awards

- 2006 New Investigator in Earth-Sun System Science, National Aeronautics and Space Administration
2006 McKnight Land-Grant Professor, University of Minnesota
2005 Young Scholar Award, University Consortium for Geographic Information Science
2004 Faculty Summer Research Fellow, College of Liberal Arts, University of Minnesota
1999 NASA Earth System Science Fellow, National Aeronautics and Space Administration
1996 Full Graduate Scholarship, Clark University
2000 Best Paper, University Consortium for Geographic Information Science Student Paper Competition

Selected Publications Related to Workshop

Manson, S. M. (2007). Does scale exist? An epistemological scale continuum for complex human-environment systems. *Geoforum* (Accepted, in press).

Manson, S. M. (2007). Challenges in evaluating models of geographic complexity. *Environment and Planning B* (Accepted, in press).

Manson, S. M. (2006). Bounded rationality in agent-based models: experiments with evolutionary programs. *International Journal of Geographic Information Science* 20(9): 991-1012.

Manson, S. M. (2006). Land use in the Southern Yucatan Peninsular Region of Mexico: scenarios of population and institutional change. *Computers, Environment, and Urban Systems* 30(3): 230-253.

Manson, S. M. and D. O'Sullivan (2006). Complexity theory in the study of space and place. *Environment and Planning A* 38(4): 677-692.

Manson, S. M., J. Geoghegan and B. L. Turner II (2006). State of the art in describing future changes in ecosystem services: forecasting changes in land use and land cover. In *Millennium Ecosystem Assessment: Ecosystems and Well-Being (Volume 2: Scenarios)*. H. Mooney and A. Cropper (eds). Geneva, Switzerland: Island Press, pp. 74-76.

Manson, S.M. (2005). Agent-based modeling and genetic programming for modeling land change in the Southern Yucatan Peninsular Region of Mexico. *Agriculture, Ecosystems and Environment* 111(1): 47-62.

Brown, D. G., R. Walker, S. M. Manson and K. Seto (2004). Modeling land use and land cover change In *Land Change Science: Observing, Monitoring, and Understanding Trajectories of Change on the Earth's Surface*. G. Gutman, A. Janetos, C. Justice, E. Moran, J. Mustard, R. Rindfuss, D. Skole and B. L. Turner II. (eds). Dordrecht, Netherlands: Kluwer Academic Publishers, pp. 395-409.

Manson, S. M. (2004). The SYPR integrative assessment model: complexity in development. In *Integrated Land-Change Science and Tropical Deforestation in the Southern Yucatán: Final Frontiers*. B. L. Turner, D. Foster and J. Geoghegan (eds). Oxford, United Kingdom: Clarendon Press of Oxford University Press, pp. 271-291.

Parker, D. C., S. M. Manson, M. Janssen, M. J. Hoffmann and P. J. Deadman (2003). Multi-agent systems for the simulation of land use and land cover change: a review. *Annals of the Association of American Geographers* 93(2): 314-337.

Manson, S. M. (2003). Validation and verification of multi-agent models for ecosystem management. In *Complexity and Ecosystem Management: The Theory and Practice of Multi-Agent Approaches*. M. Janssen (ed). Northampton, Massachusetts: Edward Elgar Publishers, pp. 63-74.

Parker, D. C., T. Berger and S. M. Manson (2002) *Meeting the Challenge of Complexity: Proceedings of the Special Workshop on Agent-Based Models of Land-Use/Land-Cover Change*. Santa Barbara, California: Center for Spatially Integrated Social Science (CSISS).

Manson, S. M. (2001). Simplifying complexity: a review of complexity theory. *Geoforum* 32(3): 405-414.

Selected Grants Related to Workshop

2006 National Aeronautics and Space Administration, New Investigator Program in Earth-Sun System Science (08/01/2006-07/31/2009). *North American Land Change: Integrated Research and Education on Decision Making in Coupled Human-Environment Systems (NNX06AE85G)*. PI: S. M. Manson (\$343,383).

Grant-In-Aid Of Research, Artistry and Scholarship, Office of the Dean of the Graduate School, University of Minnesota (01/01/2006-06/15/2007). *Does Sprawl Beget Sprawl? Urbanization in the Twin Cities of Minnesota, 1990-2005* PI: S. M. Manson (\$23,924).

2005 Intercollegiate Research Network, University of Minnesota (06/15/2005-06/15/2006). *Testing a Novel Mechanism for Sustainable Development of Agriculture*. PI: N. Jordan, S. M. Manson, K. Nelson (\$10,000).

2004 National Cancer Institute, National Institutes of Health (09/01/2004-08/01/2006). *Population, Land Use and Health in Frontier Regions (HD051645)*. PI: R. Rindfuss, S. Walsh, B. Entwisle. Senior personnel/workshop participant (\$219,000).

National Science Foundation (09/01/2004-08/31/2006). *BE/CNH: The Vulnerability and Adaptive Capacity of Coupled Human-Environment Systems in the Southern Yucatan Peninsular Region (BCS-0410016)*. PI: B. L. Turner II and J. R. Eastman. Senior personnel (\$149,684).

Faculty Interactive Research Program, Center for Urban and Regional Affairs, University of Minnesota (06/15/2004-01/01/2006). *Assessing and Forecasting Land Use and Land Cover Change in the Twin Cities Metropolitan Area*. PI: M. Bauer and S. M. Manson (\$40,673).

Selected Professional Service

Departmental: Co-Director of Masters of Geographic Information Science Graduate Program

University: Member of Provost's committee on the Interdisciplinary Undergraduate Minor in Geographic Information Science, Member of CLA Budget Advisory Committee

National: Member of Scientific Freedom and Responsibility Standing Committee and Board Member of Spatial Analysis and Modeling Specialty Group Association of American Geographers

Editorships: Guest co-editor of Environment and Planning A, Environment and Planning B.

Journal reviewing: Annals of the Association of American Geographers; Computers; Ecological Economics; Environment and Urban Systems; Environmental Management; Environment and Planning; Geoforum; Geoinformatica; International Journal of Geographic Information Science; Journal of Management Studies; Land Ecology; Photogrammetric Engineering and Remote Sensing; Progress in Human Geography; Remote Sensing of the Environment; Transactions of the Institute of British Geographers

Proposal reviewing: NASA; NSF; California Energy Commission's Global Climate Change Grant Program; Canadian Social Sciences and Humanities Research Council of Canada