

Biographical Sketch - George P. Malanson

Education:

1972, B.A., Art History, Williams College, Williamstown, MA
1978, M.S., Geography, University of Utah, Salt Lake City, UT
1983, Ph.D., Geography, University of California, Los Angeles, CA

Postgraduate employment:

1982-84 Dept. of Geography, Oklahoma State University
1984-85 Section d'Etudes des Systemes Ecologiques, Centre Emberger, Centre National de la Recherche Scientifique, Montpellier, France
1985-present Dept. of Geography, University of Iowa
2000-2001 Dept. of Geography, Southwest Texas State University

Awards and honors:

2003 elected Fellow, American Association for the Advancement of Science
2003-present Mary Sue Coleman - F. Wendell Miller Professor, University of Iowa
2004 James J. Parsons Distinguished Career Award, AAG Biogeography Specialty Group

Most relevant peer-reviewed publications:

Zeng, Y, Malanson GP, Butler DR. in review. Geomorphic limitations on self organization in alpine forest-tundra vegetation.
Malanson, GP, Zeng, Y. & Walsh, SJ. 2006a. Landscape frontiers, geography frontiers: lessons to be learned. *Professional Geographer* 58: 383-396.
Malanson, G.P., Zeng, Y. & Walsh, S.J. 2006b. Complexity at advancing ecotones and frontiers. *Environment & Planning A* 38: 619-632.
Zeng, Y. & Malanson, G.P. 2006. Endogenous fractal dynamics at alpine treeline ecotones. *Geographical Analysis* 38: 271-287.
Malanson, G.P. & Zeng, Y. 2004. Uncovering spatial feedbacks at alpine treeline using spatial metrics in evolutionary simulations. In *GeoDynamics*, P.M. Atkinson, G. Foody, S. Darby & F. Wu, eds. CRC Press, Boca Raton, FL, 137-150.
Malanson, G.P. 2001. Complex responses to global change at alpine treeline. *Physical Geography* 22: 333-342.
Malanson, G.P. 1999. Considering complexity. *Annals, Association of American Geographers* 89: 746-753.
Malanson, G.P., Butler, D.R. & Georgakakos, K.P. 1992. Nonequilibrium geomorphic processes and deterministic chaos. *Geomorphology* 5: 311-322.
Malanson, G.P., Butler, D.R. & Walsh, S.J. 1990. Chaos theory in physical geography. *Physical Geography* 11: 293-304.

Other relevant peer-reviewed publications:

Alftine, K.J. & Malanson, G.P. 2004. Directional positive feedback and pattern at an alpine tree line. *Journal of Vegetation Science* 15:3-12.
Malanson, G.P. 2003. Dispersal across continuous and binary representations of landscapes. *Ecological Modelling* 169: 17-24.

- Malanson, G.P. 2002. Effects of spatial representation of habitat in competition-colonization models. *Geographical Analysis* 34: 141-154.
- Malanson, G.P. 2002. Extinction debt trajectories and spatial pattern of habitat destruction. *Annals, Association of American Geographers* 92: 177-188.
- Malanson, G.P. & Cramer, B.E. 1999. Ants in labyrinths: lessons for critical landscapes. *Professional Geographer* 51: 155-170.
- Malanson, G.P. 1997. Effects of feedbacks and seed rain on ecotone patterns. *Landscape Ecology* 12: 27-38.
- Malanson, G.P. & Armstrong, M.P. 1997. Issues in spatial representation: effects of number of cells and between-cell step size on models of environmental processes. *Geographical & Environmental Modelling* 1: 47-64.

Most relevant recent research grants and consultancies:

- 2006-2009 Consultant on NIH R21 grant, Modeling Household Dynamics and Land Use, to R.R. Rindfuss, S.J. Walsh, & B. Entwisle
- 2006-2009 Modeling Dynamism of Human Settlement Frontiers: Synthesizing Discordant Pattern-Process Relations and LCLUC Trajectories in Coupled Natural-Human Systems, NASA, co-I, S.J. Walsh, PI; \$42,000 of \$178,756
- 2004-2007 NSF Biocomplexity, Coupled Human and Natural Systems: Feedbacks Among Patterns and Processes of Land Use and Land Cover Dynamics in the Northern Ecuadorian Amazon, co-PI with S.J. Walsh; \$120,000 of \$320,000
- 2004-07 NSF Biocomplexity, Coupled Human and Natural Systems: Virtual Watershed: Agricultural Landscape Evolution in an Adaptive Management Framework, subcontract with Jerry Schnoor on grant to Chris Lant, PI; \$130,000 of \$450,000
- 2002-05 Consultant on NASA grant, Modeling the Scale Dependent Drivers of LCLU Dynamics in Northeastern Ecuador, to S.J. Walsh & R.E. Bilborrow
- 2001-05 Consultant on NSF-Biocomplexity grant, Simulating Complexity in a Dynamic Landscape: Land-Use and Land-Cover Change in Nang Rong, Thailand, to R.R. Rindfuss, S.J. Walsh, & B. Entwisle
- 2000-03 NSF Geography & Regional Science, Uncovering the Spatial Pattern of Feedback Effects at Alpine Treeline; PI; \$99,946

Relevant service and synergistic activities:

- NIH Roadmap on Population-Environment workshop participant, 2005 Chapel Hill, NC; 2006, Honolulu, HI
- NIH Social Sciences and Population Studies Study Section, ad hoc, 2005, 2006
- National Science Foundation, Biocomplexity: Coupled Human & Natural Systems panel, 2002
- NSF Geography & Regional Science Program review panel, 1998-1999

Other professional service:

- Faculty of 1000 – Biology, Spatial and Landscape Ecology section, 2006-present
- Editor for Biogeography, *Physical Geography*, 2006-present
- Associate Editor: *Arctic, Antarctic, and Alpine Research*, 2005-present
- Current Editorial Boards: *Annals*, *AAG*; *Advances in Water Resources*; *Geography Compass*
- Past Editorial Boards: *Geographical & Environmental Modelling*; *Landscape Ecology*; *Physical Geography*

