

## **DANIEL G. BROWN**

School of Natural Resources & Environment, University of Michigan, Ann Arbor, MI

### **Education**

Ph.D., Geography, University of North Carolina at Chapel Hill, 1992

M.A., Geography, University of North Carolina at Chapel Hill, 1989

B.A., *summa cum laude*, Geoenvironmental Studies, Shippensburg University, PA, 1987

### **Professional Experience**

Professor and Associate Dean for Research, School of Natural Resources & Env. (SNRE), U. Michigan, 2006-present

Associate Professor, School of Natural Resources & Env. (SNRE), U. Michigan, 1999-2006

Assistant to Associate Professor, Department of Geography, Michigan State Univ., 1992 to 1999

### **Selected Professional Activities**

Exec. Committee, Sch. Of Nat. Resources & Env., Univ. of Michigan, 2001-2005

Editorial Board Member: *Journal of Land Use Science*, 2005-present.

Subject Editor and Editorial Board Member: *Landscape Ecology*, 1998-2005

Science Team Member: NASA Land Cover and Land Use Change Program, 1997-present.

Chair, Land Use Steering Group, Land Use Interagency Working Group, US Global Change Research Program, 2005-present.

### **Related Publications**

2006. Brown, D.G., Aspinall, R., and Bennett, D.A. Landscape models and explanation in landscape ecology - A space for generative landscape science? *Professional Geographer*, 58(4): 369-382.

2006. Brown, D.G. and Robinson, D.T. Effects of heterogeneity in residential preferences on an agent-based model of urban sprawl. *Ecology and Society*, 11(1): 46.

2005. Brown, D.G., Riolo, R.L., Robinson, D., North, M., and Rand, W. Spatial process and data models: Toward integration of agent-based models and GIS. *J Geogr Sys*, 7(1): 1-23.

2005. Brown, D.G., Page, S.E., Riolo, R.L., Zellner, M., and Rand, W. Path dependence and the validation of agent-based spatial models of land-use. *Int J of GIS*, 19(2): 153-174.

2004. Brown, D.G., Page, S.E., Riolo, R.L., and Rand, W. Agent based and analytical modeling to evaluate the effectiveness of greenbelts. *Env. Modelling & Software*, 19(12): 1097-1109

2004. Brown, D.G. and Duh, J.-D. Spatial simulation for translating between land use and land cover. *International Journal of GIS*, 18(1): 35-60.

2002. Brown, D.G., Goovaerts, P., Burnicki, A., Li, M.Y. Stochastic simulation of land-cover change using geostatistics and generalized additive models. *Photogrammetric Engineering and Remote Sensing*, 68(10):1051-1061.

2000. Brown, D.G., Pijanowski, B.C., and Duh, J.-D. Modeling the relationships between land-use and land-cover on private lands in the Upper Midwest, USA. *Journal of Environmental Management*, 59: 247-263.

1994. Brown, D.G. Predicting vegetation types at treeline using topography and biophysical disturbance variables. *Journal of Vegetation Science*, 5(4-5): 641-656.

### **Synergistic Activities**

2006. Brown, D.G. and Xie, Y. Guest Editorial, Special Issue: Spatial Agent-based Modeling. *International Journal of Geographical Information Science*, 20(9): 941-943.
2005. Hansen, A.J., and Brown, D.G. Guest Editorial, Special Section: Land-Use Change in Rural America: Rates, Drivers, and Consequences. *Ecological Applications*, 15(6): 1849–1850.
2004. Brown, D.G., Walker, R., Manson, S., Seto, K. Modeling land-use and land-cover change. In G. Gutman, B.L. Turner, Eds. *Land Change Science: Observing, Monitoring and Understanding Trajectories of Change on the Earth's Surface*. Dordrecht: Kluwer, 395-409.
2002. Brown, D.G. Forest Cover Increase and Carbon Sequestration. *Our Changing Planet: The Fiscal Year 2003 US Global Change Research Program and Climate Change Research Initiative*. A Report to Congress by the Climate Change Science Program and the Subcommittee on Global Change Research, Washington, DC, pp. 76-78.
2000. Brown, D.G., K.V. Walker, M.B. Davis, S. Sugita, and J.D. Lindeberg. Land Ecology. In: P. Sousounis, and J. Bisanz (eds.). *Preparing for a Changing Climate: The Potential Consequences of Climate Variability and Change*. Report for the U.S. Global Change Research Program. Summary of the Great Lakes Region Assessment. University of Michigan, Ann Arbor, MI, pp. 55-64.

**Graduate Advisees:** *Post-Doc:* Li An (San Diego State University), Elisabeth Addink (U. Utrecht); *PhD:* Geoffrey Duh (Portland St. U.), Moira Zellner (University of Illinois-Chicago), Amy Burnicki (current), Tingting Zhao (current), Jason Taylor (current), Derek Robinson (current), Qing Tian (current); *Masters:* Michele Tobias (UC Davis), Vikalpa Jetly (i-Cubed), Lara Peterson (USDA Forest Service), Sean Savage (Altarum), Elizabeth Severtsen (U. Washington), Khemerith So (USFWS), Amy Gilboy (GeoMarine, Inc.), Christine Geddes (U. Michigan), Abby Fateman (Contra Costa Co. CA), Scott Drzyzga (Shippensburg U.), Mark Bowersox (ITT), Kenneth Duda (USGS), James Reisen (NRCS), Jessica Dolanski (MSU), Cathy Delain (City of Manitowoc, WI), David Vaughan (U. of S. Carolina).

**Total Graduate Students Supervised: 21**

**Total Post-Docs Supervised: 2**

**Graduate Advisors:** Stephen J. Walsh, University of North Carolina (MA and PhD)

### **Collaborators**

University of Michigan: Arun Agrawal, J. David Allan, Kathleen Bergen, Bill Currie, Ana Diez-Roux, Craig Dobson, Johannes Foufopolous, Myron Gutmann, George Kaplan, Bobbi Low, Robert Marans, Joan I. Nassauer, Scott Page, Rick Riolo, Mark Wilson

Others: Richard Aspinall (MacCaulay Institute), David Bennett (U Iowa), David Butler (Texas St U), David Cairns (Texas A&M U), Dan Fagre (USGS), Pierre Goovaerts (BioMedware), Eric Gustafson (USDA FS), Kevin Gutzwiller (Baylor U), Andrew Hansen (Montana St. U.), Geoffrey Jacquez (BioMedware), George Malanson (U Iowa), Bryan Pijanowski (Purdue), David Theobald (Colo St U), David Wear (USDA FS)