

David Allan Bennett

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Professional Preparation

Ph.D., Geography, University of Iowa, Iowa City, IA 1994.
Master of Regional Planning, University of Michigan, Ann Arbor, MI 1982.
B.A., Environmental Studies, University of Northern Iowa, Cedar Falls, IA 1980.

Appointments

Associate Professor, Department of Geography, University of Iowa, Iowa City, IA, 2003-present.
Assistant Professor, Department of Geography, University of Iowa, Iowa City, IA, 2000-2003.
Assistant Professor, Department of Geography, University of Kansas, Lawrence, KS, 1998-2000.
Assistant Professor, Department of Geography, Southern Illinois University, Carbondale, IL, 1993-1998.

Selected Publications

Xiao, N., Bennett, D.A., Armstrong, M.A., forthcoming, Interactive evolutionary approached to multiobjective spatial decision making: a synthetic review. *Computers, Environment, and Urban Systems*.
Brown, D.G., Aspinall, R., Bennett, D.A., 2006, Landscape Models and Explanation in Landscape Ecology—A Space for Generative Landscape Science? *The Professional Geographer*, 58(4):369–382.
Bennett, D.A., and Tang, W., 2006, Modeling Yellowstone's northern range elk herd as adaptive, spatially aware, and mobile agents. *International Journal of Geographical Information Science*, 20(9):1039-1066.
Armstrong, M.P. and Bennett, D.A. 2005. A manifesto for mobile geographic education. *The Professional Geographer*. 57(4):506-515.
Lant, C.L. Kraft, S.E., J. Beaulieu, D. Bennett, T. Loftus, and J. Nicklow, 2005. Using Ecological-Economic Modeling to Evaluate Policies Affecting Agricultural Watersheds. *Ecological Economics* 55(4): 467-484.
Bennett, D.A., Xiao, N., Armstrong, M.P. 2004. Exploring the geographic consequences of public policies using evolutionary algorithms. *Annals of the Association of American Geographers*. 94(4):827-847.
Armstrong, M.P. , Xiao, N., Bennett, D.A. 2003. Using Genetic Algorithms to Create Class Intervals for Choropleth Maps. *Annals of the Association of American Geographers*. 93(3):595-623.
Sengupta, R.R. and Bennett D.A. 2003. Agent-based modeling environment for spatial decision support. *International Journal of Geographic Information Science*. 17(2): 157-180.
Xiao, N., Bennett, D.A., Armstrong, M.P. 2002. Using evolutionary algorithms to generate alternatives for multiobjective site-search problems, *Environment and Planning A*. 34 (4): 639-656.

- Xiao, N., Bennett, D.A., Middleton, B., Fessel, K. 2002. SISM: a multi scale model for cypress swamp regeneration. *Geographical and Environmental Modelling*. 6(1):99-116.
- Lant, C., Loftus, T., Kraft, S., and Bennett, D.A. 2001, Land-use dynamics in a southern Illinois (USA) watershed. *Environmental Management*, 28(3): 325-340.
- Bennett, D.A. and Vitale, A. 2001. Evaluating non-point pollution policy using a tightly coupled spatial decision support system. *Environmental Management*, 27(6):825-836.
- Sengupta, R., Bennett, D.A., Beaulieu, J., and Kraft, S.E. 2000. Evaluating the impact of policy -induced land use management practices on non-point source pollution using a spatial decision support system. *Water International*, 25(3),437-445.
- Bennett, D.A., Wade, G.A., and Armstrong M.P. 1999. Exploring the solution space of semi-structured geographical problems using genetic algorithms. *Transactions in GIS*. 3(1):51-71.
- Bennett, D.A. 1997. Managing geographical models as repositories of scientific knowledge. *Geographical and Environmental Modelling*. 1 (2): 115-133.
- Bennett, D.A. 1997. A framework for the integration of geographical information systems and modelbase management. *International Journal of Geographical Information Science* 11(4): 337-357.

Selected Grants

- NSF Human Social Dynamics. 2006-2009. Principal investigatory for "Collaborative Research: AOC Social Complexity and the Management of the Commons." with Paul Robbins, David McGinnis, Catherine Kline (Full grant \$675,000, UI \$198,355).
- NSF Biocomplexity in the Environment: Dynamics of Coupled Natural and Human Systems, 2002-2006. Principal investigator for "Complexity across boundaries - coupled human and natural systems in the Yellowstone Northern Elk Winter Range." \$94,230. This is a subgrant through Idaho State University, PI Dave McGinnis, with Duncan Pattern, Jason Shogren, and Bill Travis (full grant \$638,000).
- National Cancer Institute, 2002-2005. Investigator for "A GIS-based workbench to interpret cancer maps." PI. Gerard Rushton, with Barry Green. \$1,494,201.
- USDA, 2002-2004. Co-principal investigator for "Water quality protection in agroecosystems: integrating science, technology, and policy." \$384,000. with R. Rajagopal (PI) and David Osterberg.
- NSF Biocomplexity in the Environment: Dynamics of Coupled Natural and Human Systems, incubator grant. 2001-2002. Co-principal investigator for "Modeling biocomplexity and socio-economic decision-making under uncertainty." \$46,183. with David McGinnis (PI).
- NSF/EPA/USDA Water and Watersheds. 1999-2002. Principal investigator for "Understanding the social context for ecological restoration in multiple-ownership watersheds: the case of the Cache River, Illinois". \$91,000. This is a sub-grant through SIUC- Steve Kraft (PI), Chris Lant (PI), with Jeff Beaulieu, Jane Adams, Leslie Duram (full grant \$718,000).
- The Nature Conservancy. 1994. Principal investigator for "Ecosystem Function and Restoration in the Cache River Bioreserve." 1995-1998. \$559,553. Chris Lant, Dave Sharpe, Jeffery Beaulieu, Ronald Brandon, Brooks Burr, Kathy Flanigan, Steven Kraft,