

Curriculum Vitae

Dudley B. Bonsal

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**Department of Geography
University of Minnesota – Twin Cities
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EDUCATION:

ongoing PhD, Geography, University of Minnesota
2007 MA, Geography, The Ohio State University
1990 BA, English, Tufts University, Medford, MA

RESEARCH INTERESTS:

Urban and regional systems, land use/land cover analysis, landscape ecology.
Spatial analysis methods, geographic information systems, remote sensing.
Decision-making, environmental systems, conservation.

ACADEMIC AWARDS:

2009 Graduate Research Project Program Grant (w/ Dr. Steven Manson), University of Minnesota
2007 Graduate School Fellowship (2-year), University of Minnesota

PRESENTATIONS:

Bonsal, D. (2007). Examining the Socioeconomic Factors Linked to the Density of Land-Cover Interface: A Methodological Exploration, Trans-Atlantic Land Use Conference, Washington, DC.

Bonsal, D. (2007). Urbanization Influences and Wildland Impacts of Land Transformation Along the Wildland-Urban Interface in Northeast Ohio, *Association of American Geographers Annual Meeting*, San Francisco, California.

PROFESSIONAL EMPLOYMENT:

2008-2009 **Research Assistant:** University of Minnesota – Twin Cities, Human-Environment GIS Laboratory

2005-2007 **Teaching Assistant:** The Ohio State University.

Climatology (Fall 2006, Winter 2007, Spring 2007).
Earth Systems II: Atmospheric Environment (Spring 2006).
World Regional Geography (Autumn 2005, Winter 2006).

2005 **Water Quality Modeling Research Assistant:** New England Interstate Water
Pollution Control Commission.

Provided support to development of ArcView Generalized Watershed Loading Function (AVGWLF) Model for the New England States and New York State; prepared Quality Assurance Project Plan for model; facilitated choice of watersheds for model calibration among members of the Technical Advisory Committee.

1999-2003 **Environmental Scientist:** Charles River Watershed Association.

Prepared GIS technical guidance document for the implementation of Massachusetts Executive Order 418 Open Space and Resource Planning; conducted a land use, open space, natural resource, and water budget analysis, based on the EO418 guidance and using ArcView 3.2, for the town of Littleton, MA; provided technical assistance in EO418 analysis to GIS operators at other watershed associations in Massachusetts; received formal training in Advanced ArcView and Avenue from ESRI;

Mapped stormwater outfall drainage basins using Spatial Analyst and incorporating stormdrain data collected from towns in the Upper Charles River Watershed;

Analyzed, calibrated river cross-section data to fit the Charles River streamline for hydrologic modeling; collected data for and assisted in preparation of groundwater modeling project;

Mapped bathymetry and sediment depth profiles for Charles River impoundments; Created maps, using ArcView 3.2, addressing pollution, conservation, and land use issues, for presentations, research projects, web site, newsletter, the press, municipalities, members; created maps for Run of the Charles Canoe & Kayak Race registration booklet.

PROFESSIONAL MEMBERSHIPS:

2006-2009 Association of American Geographers

SKILLS: ArcGIS 9; ArcView 8.3; ArcView 3.2; FRAGSTATS; VBA; ArcObjects; Avenue; ERDAS Imagine; Garmin GPS 76; MapSource; SPSS; Minitab.