

## JAMES R. MILLER

Assistant Professor  
Department of Landscape Architecture and  
Department of Natural Resource Ecology and Management  
146 College of Design  
Iowa State University  
Ames, Iowa 50011-3094  
Phone: 515-294-6764  
Fax: 515-294-2348  
[jrmiller@iastate.edu](mailto:jrmiller@iastate.edu)  
[www.public.iastate.edu/~jrmiller/](http://www.public.iastate.edu/~jrmiller/)

---

### ACADEMIC TRAINING

- 1999 Ph.D. in Ecology; Colorado State University, Graduate Degree Program in Ecology/Department of Biology.
- 1994 Masters of Science; Colorado State University, Department of Fishery and Wildlife Biology.
- 1991 Bachelors of Science; Colorado State University, Department of Fishery and Wildlife Biology. *Summa Cum Laude*.

### PROFESSIONAL EXPERIENCE

- 2002-present Assistant Professor, Department of Landscape Architecture and Department of Natural Resource Ecology and Management, Iowa State University.
- 1999-2002 Postdoctoral Fellow, Department of Zoology, University of Wisconsin-Madison.
- 1997-1998 Fulbright Postgraduate Fellow, CSIRO Division of Wildlife and Ecology, Helena Valley, Western Australia.

### HONORS AND AWARDS

**International Travel Grant 2004** from Iowa State University for travel to Christchurch, New Zealand.

**Michael Guyer Postdoctoral Fellowship 1999** of the Department of Zoology, University of Wisconsin – Madison.

**Fulbright Post-Graduate Award 1997** for Ph.D. studies with the CSIRO Division of Wildlife and Ecology, Western Australia.

**Paul A. Stewart Award 1997** of the Wilson Ornithological Society for graduate

research.

**Mewaldt-King Award 1997** of the Cooper Ornithological Society for graduate research.

**Alexander Wilson Prize 1997** for best student presentation at the Annual Meeting of the Wilson Ornithological Society.

**Wilson Ornithological Society Travel Award 1997** for attending the annual meeting, Manhattan, Kansas.

**American Planning Association Best Publication Award 1996** for Elliot, D., C. Duerksen, N. T. Hobbs, and J. R. Miller. *Managing Landscapes for Wildlife and People: A Habitat Protection Handbook*. Clarion Associates, Denver.

**Research Fellowship 1995-96** of the Graduate Degree Program in Ecology, Colorado State University.

**Colorado Fellowship 1992** for B.S. studies at the Department of Fishery and Wildlife Biology, Colorado State University.

**Phi Kappa Phi Honor Society 1991** for B.S. studies at the Department of Fishery and Wildlife Biology, Colorado State University.

**Philip A. Connolly Scholarship 1990** for B.S. studies at the Department of Fishery and Wildlife Biology, Colorado State University.

**President's Scholarship 1989-90** for B.S. studies at the Department of Fishery and Wildlife Biology, Colorado State University.

**Dean's List 1989-91** for B.S. studies at the Department of Fishery and Wildlife Biology, Colorado State University.

## **PROFESSIONAL SOCIETIES**

Ecological Society of America  
U.S. Chapter of the International Association of Landscape Ecology  
Society for Conservation Biology  
American Institute of Biological Sciences  
American Ornithologists' Union  
Cooper Ornithological Society

## PEER REVIEW

Associate Editor: Restoration Ecology  
Reviewer: Biological Conservation  
Biological Invasions  
Bioscience  
Condor  
Conservation Biology  
Conservation Ecology  
Ecological Applications  
Ecology  
Ecoscience  
Ecosystems  
Journal of the Torrey Botanical Society  
Landscape Ecology  
Landscape and Urban Planning  
Wildlife Society Bulletin  
Wilson Bulletin

## EXTRAMURAL FUNDING

- Miller, J. R. Landscape Ecological Assessment of Compensatory Wetland Mitigation. Iowa Department of Transportation \$85,202. 2005-2007.
- Shulte, L. A., and **J. R. Miller**. Invasibility and restoration of oak ecosystems in the Midwest Driftless Area. U.S. Forest Service \$107,644. 2004-2006.
- Leslie, T, J. Alread, T. L. Clapp, A. Kyber, **J. Miller**, J. Muench, L. Paxson, C. Rogers, and M. Torres-Antonini. Design Science and Design for Society. Iowa State University Miller Grant (course development) \$24,960. 2004-2005.
- Miller, J. R. The contribution of nature reserves to the conservation of biodiversity in a rapidly urbanizing region. Iowa State University Research Grant \$16,000. 2004-2005.
- Miller, J. R., S. A. Snyder, and R. G. Haight. Prioritizing metropolitan open space protection in a changing landscape. U.S. Forest Service \$43,157. 2004-2005.
- Debinski, D. M., **J. R. Miller**, and R. Koford. Effects of prairie restoration using fire and grazing regimes on the butterfly community of Iowa's Loess Hills. Iowa State Wildlife Grant \$98,542. 2004-2006.
- Miller, J. R. Avian response to prairie restoration in the Loess Hills of Western Iowa. Iowa State Wildlife Grant \$69,026. 2003-2005.
- Miller, J. R., and J. A. Wiens. Effects of changing land use on wildlife diversity.

Colorado Division of Wildlife \$66,651 (approved annually). 1995-1997.

Miller, J. R., J. A. Wiens, and N. T. Hobbs. Avian diversity and predator assemblages in lowland riparian areas across a gradient of urbanization. City of Boulder Open Space Department \$18,379 (approved annually). 1995-1997.

## **PUBLICATIONS**

### **Refereed Journal Articles**

Miller, J. R., M. D. Dixon, and M. G. Turner. 2004. Response of avian communities in large-river floodplains to environmental variation at multiple scales. **Ecological Applications** 14:1394-1410.

Turner, M. G., S. E. Gergel, M. D. Dixon, and **J. R. Miller**. 2004. Distribution and abundance of trees in floodplain forests of the Wisconsin River: environmental influences at different scales. **Journal of Vegetation Science** 15:729-738.

Miller, J. R., M. M. Wagner, and R. Nelson. 2004. Ecology and education in landscape architecture. **Landscape Review** 9:167-170.

Miller, J. R., M. G. Turner, E. H. Stanley, E. A. H. Smithwick, and L. C. Dent. 2004. Spatial extrapolation: the science of predicting ecological patterns and processes. **Bioscience** 54:310-320.

Bestelmeyer, B. T., **J. R. Miller**, and J. A. Wiens. 2003. Applying species diversity theory to land management. **Ecological Applications** 13:1750-1761.

Miller, J. R., J. A. Wiens, N. T. Hobbs, and D. M. Theobald. 2003. The effect of human settlement on bird communities in lowland riparian areas near Colorado's Front Range. **Ecological Applications** 13:1041-1059.

Gergel, S. E., M. G. Turner, **J. R. Miller**, J. M. Melack, and E. H. Stanley. 2002. Landscape indicators of human impacts on riverine systems. **Aquatic Science** 64:118-128.

Miller, J. R., and R. J. Hobbs. 2002. Conservation where people live and work. **Conservation Biology** 16:330-337.

Miller, J. R., and P. Cale. 2000. Behavioral mechanisms and habitat use by birds in a fragmented agricultural landscape. **Ecological Applications** 10:1732-1748.

Miller, J. R., and N. T. Hobbs. 2000. Effects of recreational trails on nest predation rates and predator assemblages. **Landscape and Urban Planning** 50:227-236.

Theobald, D. M., **J. R. Miller**, and N. T. Hobbs. 1997. Estimating the cumulative

effects of development on wildlife habitat. **Landscape and Urban Planning** 39:25-36.

Miller, J. R., L. A. Joyce, R. L. Knight, and R. M. King. 1996. Landscape patterns and road density in the Southern Rocky Mountains. **Landscape Ecology** 11:115-127.

Miller, J. R., T. T. Schulz, N. T. Hobbs, K. R. Wilson, D. L. Schrupp, and W. L. Baker. 1995. Flood regimes and landscape structure: changes in a riparian zone following shifts in stream dynamics. **Biological Conservation** 72:371-379.

Miller, J. R., and N. T. Hobbs. 1994. Effect of forage hydration on lag time during *in vitro* digestion of meadowgrass hay. **Grass and Forage Science** 49:107-110.

### Refereed Monographs and Books

Duerksen, C. J., D. L. Elliott, N. T. Hobbs, E. Johnson, and J. R. Miller. 1997. **Habitat Protection Planning: Where the Wild Things Are**. American Planning Association Planning Advisory Service Report 470/471, Chicago. 82 pp.

Elliot, D., C. Duerksen, N. T. Hobbs, and J. R. Miller. 1996. **Managing Landscapes for Wildlife and People: A Habitat Protection Handbook**. Clarion Associates, Denver, Colorado.

### Refereed Book Chapters

Miller, J. R., J. M. Fraterrigo, N. T. Hobbs, D. M. Theobald, and J. A. Wiens. 2001. Urbanization, avian communities, and landscape ecology. Pages 117-137 in J. M. Marzluff, R. Bowman, R. McGowan, and R. Donnelly, editors. **Avian Ecology and Conservation in an Urbanizing World**. Kluwer, New York.

Miller, J. R., J. A. Wiens, and N. T. Hobbs. 2000. How does urbanization affect bird communities in riparian habitats? An approach and preliminary assessment. Pages 427-440 in J. Craig, N. Mitchell, and D. Saunders, editors. **Nature Conservation in Production Environments: Managing the Matrix**. Surrey Beatty and Sons, Chipping Norton, New South Wales.

### Unrefereed

Miller, J. R. 1998. Wildlife, people, and conservation: perspectives from Western Australia. **Wildlife Society Bulletin** 26:1002-1003.

Miller, J. R. 1996. Urbanization and bird communities in riparian areas. **Urban Wildlife Newsletter**. No. 25. Colorado Division of Wildlife, Denver.

Miller, J. R. 1995. The Valley of the Crane. Pp. 211-219. In John A. Murray, editor. **American Nature Writing 1995**. Sierra Club Books.

## Submitted

Miller, J. R. Conservation subdivisions: what's being conserved? *Conservation Biology*.

Miller, J. R. Restoration, reconciliation, and reconnecting with nature. *Biological Conservation*.

## In Prep

Miller, J. R. The extinction of experience. *Trends in Ecology and Evolution*.

Miller, J. R., and S. Apfelbaum. Conservation subdivisions in theory and practice. *Landscape and Urban Planning*.

## INVITED SEMINARS AND LECTURES

Miller, J. R. Conservation subdivisions: What's being conserved? **Iowa Chapter of the American Society of Landscape Architects Fall Conference, Reiman Gardens, Ames, IA, September 2004.**

Miller, J. R. Biotic homogenization and the scale of human experience. **Society for Conservation Biology Annual Meeting, Columbia University, New York City, July 2004.**

Miller, J. R. Restoration, reconciliation, and reconnecting to nature nearby. **School of Environmental Science, Murdoch University, Perth, Australia, July 2004.**

Miller, J. R., M. D. Dixon, and M. G. Turner. Response of avian communities in large-river floodplains to environmental variation at multiple scales. **Department of Natural Resource Ecology and Management Seminar Series, Iowa State University, Ames, Iowa, November 2002.**

Miller, J. R., M. G. Turner, E. H. Stanley, M. D. Dixon, and S. E. Gergel. Ecological indicators for large-river floodplains. **U.S. Environmental Protection Agency EMAP Symposium, Kansas City, Missouri, May 2002.**

Miller, J. R. Effects of land use on forest birds of the Wisconsin River floodplain. **U.S.G.S. Upper Midwest Environmental Sciences Center, La Crosse, Wisconsin, October 2001.**

- Miller, J. R. Habitat fragmentation and forest bird communities of the Wisconsin River floodplain: does the paradigm fit? **University of Wisconsin – Madison, Zoology Department Colloquium**, September 2001.
- Miller, J. R. The effect of human settlement on bird communities in riparian woodlands. **University of Georgia, Warnell School of Forest Resources**, May 2001.
- Miller, J. R. Human settlement and bird communities in riparian woodlands. **Iowa State University, Department of Landscape Architecture**, May 2001.
- Miller, J. R. The effect of human settlement on riparian birds. **University of New Orleans, Biology Department**, February 2001.
- Miller, J. R. Landscape ecology. **Wildlife Conservation Society - Landscape Species Workshop, White Oak, Florida**, May 2000.
- Miller, J. R. Avian response to habitat fragmentation in Western Australia. **National Audubon Society, Fort Collins, Colorado**, November 1998.
- Miller, J. R. Riparian bird communities along the Front Range of Colorado, U.S.A.: The effect of urbanization. **CSIRO Division of Wildlife and Ecology**, Gungahlin (A.C.T.), and regional laboratories at Perth (Western Australia) and Alice Springs (Northern Territory), **Australia**, April 1998.
- Miller, J. R. Bird communities in riparian areas and urbanization along Colorado's Front Range. **University of Colorado, Boulder**, October 1995.
- Miller, J. R. Effects of human population density on bird communities in riparian zones. **Colorado Division of Wildlife**, State-Wide Habitat Biologists Coordination Meeting, **Grand Junction**, January 1995.

## CONFERENCE PRESENTATIONS

- Miller, J. R., M. M. Wagner, and R. Nelson. Ecology and education in landscape architecture. **Council for Educators in Landscape Architecture Annual Meeting**, June 2004, Christchurch, New Zealand (Oral Presentation).
- Walker, T., and **J. R. Miller**. Response of grassland songbirds to prairie restoration in the Loess Hills, Iowa. **Cooper Ornithological Society 74th Annual Meeting**, May 2004, La Crosse, Wisconsin (Oral Presentation).
- Miller, J. R., M. D. Dixon, and M. G. Turner. Response of birds to forest fragmentation in large-river floodplains. **U.S. Regional Association of the International Association for Landscape Ecology 17<sup>th</sup> Annual Symposium**, April 2002, Lincoln, Nebraska (Oral Presentation).

- Miller, J. R., M. D. Dixon, and M. G. Turner. Effects of land use on forest bird communities of large-river floodplains. **63<sup>rd</sup> Midwest Fish and Wildlife Conference**, Dec. 2001, Des Moines, Iowa (Oral Presentation).
- Miller, J. R., M. D. Dixon, and M. G. Turner. Land-use change and bird communities in large-river floodplains. **Annual Meeting of the Ecological Society of America**, Aug. 2001, Madison, Wisconsin (Oral Presentation).
- Miller, J. R., J. A. Wiens, and N. T. Hobbs. Human settlement and avian communities in lowland riparian areas. **Annual Meeting of the Ecological Society of America**, Aug. 2000, Snowbird, Utah (Oral Presentation).
- Miller, J. R., M. D. Dixon, S. E. Gergel, and M. G. Turner. The effect of changes in land use on bird communities in large-river floodplain forests. **U.S. Regional Association of the International Association for Landscape Ecology 15<sup>th</sup> Annual Symposium**, April 2000, Fort Lauderdale, Florida (Oral Presentation).
- Miller, J. R., and P. Cale. Avian foraging and habitat use in a highly fragmented landscape. **Fifth World Congress of the International Association of Landscape Ecology**, Aug. 1999, Snowmass, Colorado (Oral Presentation).
- Miller, J. R., N. T. Hobbs, J. M. Fraterrigo, J. A. Wiens, and D. M. Theobald. Urbanization, avian communities, and landscape ecology. **Annual Meeting of the Cooper Ornithological Society**, March 1999, Portland, Oregon (Oral Presentation).
- Miller, J. R. Avian nest predation and urbanization: a dent in the dogma. **Annual Meeting of the Ecological Society of America**, Aug. 1998, Baltimore, Maryland (Oral Presentation).
- Miller, J. R., J. A. Wiens, and N. T. Hobbs. How does urbanization affect bird communities in riparian habitats? An approach and preliminary assessment. **Nature Conservation in Production Environments: Managing the Matrix**, Dec. 1997, Taupo, New Zealand (Oral Presentation).
- Miller, J. R. Nest predation in riparian areas along the Colorado Front Range: the effect of urbanization. **Annual Meeting of the Wilson Ornithological Society**, April 1997, Manhattan, Kansas (Oral Presentation).
- Miller, J. R., D. M. Theobald, and N. T. Hobbs. Characterizing urban gradients. **U.S. Regional Association of the International Association for Landscape Ecology 12<sup>th</sup> Annual Symposium**, March 1997, Durham, North Carolina (Poster Presentation).

- Miller, J. R. Avian diversity and nest predation rates across a gradient of urbanization. **U.S. Regional Association of the International Association for Landscape Ecology 11<sup>th</sup> Annual Symposium**, March 1996, Galveston, Texas (Oral Presentation).
- Miller, J. R., T. Schulz, N. T. Hobbs, K. Wilson, D. Schrupp, and W. Baker. Mission impossible in a riparian landscape of the western Great Plains: Conservation of pattern in the absence of process. **Annual Symposium on Ecological Research at Colorado State University**, Feb. 1996, Fort Collins (Oral Presentation).
- Miller, J. R. Avian communities in lowland riparian areas and land use in the surrounding matrix. **Annual Meeting of the Guild of Rocky Mountain Population Biologists**, Sept. 1995, Nederland, Colorado (Oral Presentation).
- Miller, J. R., T. T. Schulz, N. T. Hobbs, K. R. Wilson, D. L. Schrupp, and W.L. Baker. Flood regimes and landscape structure: changes in a riparian zone following shifts in stream dynamics. **Annual Meeting of the Society for Conservation Biology**, June 1995, Fort Collins (Oral Presentation).
- Miller, J. R. Riparian avifaunas and the influence of urbanization. **The Annual Department of Biology Student Symposium**, April 1995, Colorado State University, Fort Collins (Oral Presentation).
- Miller, J. R., Joyce, L. A., and R. L. Knight. Road density and landscape structure on the Arapaho-Roosevelt National Forest. **Annual Symposium on Ecological Research at Colorado State University**, Nov. 1994, Fort Collins (Oral Presentation).
- Miller, J. R., L. A. Joyce, and R. L. Knight. Landscape patterns and road density in the southern Rocky Mountains. **U.S. Regional Association of the International Association for Landscape Ecology 9<sup>th</sup> Annual Symposium**, March 1994, Tucson, Arizona (Oral Presentation).
- Miller, J. R., D. L. Urban, R. L. Knight, M. L. Carter, and A. J. Hansen. Landscape change and the southern Rocky Mountain avifauna. **Annual Meeting of the Society for Conservation Biology**, June 1993, Tempe, Arizona (Oral Presentation).
- Miller, J.R., L. A. Joyce, and R. L. Knight. A comparison of forest stand shapes in the southern Rockies. **U.S. Regional Association of the International Association for Landscape Ecology 7<sup>th</sup> Annual Symposium**, April 1992, Corvallis, Oregon (Poster Presentation).

## **LEADERSHIP AT SCIENTIFIC MEETINGS**

Conservation of Biodiversity in Large River Systems of the Midwest. Paper session in Ribbons of Life in the Heartland: Riparian Ecosystems in Transition (Symposium). 64<sup>th</sup> Annual Midwest Fish and Wildlife Conference, Kansas City, MO, Dec. 2003.

The Conservation of Biological Diversity and Ecological Research at Colorado State University - an Inter-Departmental Symposium., Nov. 1994.

Second Annual Symposium on Ecological Research at Colorado State University, Feb. 1996.

*Updated 12-16-04*