

KARA A. MOORE

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EDUCATION

- 2007 Ph.D., Ecology, University of California, Davis, CA. GPA: 4.00/4.00
2002 M.S., Forest Ecology, University of Michigan, Ann Arbor, MI. GPA:
7.92/8.00
1998 B.S. Biology, University of Michigan, Ann Arbor, MI: written evaluations

RESEARCH AND PROFESSIONAL EXPERIENCE

- 2010-2014 **Principal Investigator**, Population viability and restoration potential for rare plants near solar installations, BMP Ecosciences.
2010-2012 **Principal Investigator**, Mapping habitat distributions of desert rare plants from optimized data, UC Davis, California Native Plant Society, and UC Jepson and University Herbaria.
2007-Present **Post-doctoral Researcher**, Plant local adaptation and population biology, Dept. of Evolution and Ecology, UC Davis, advisor and Co-PI Dr. Maureen Stanton
2006-Present **Senior Scientist**, Endangered and threatened plant reproductive biology and pollinator dependence. BMP Ecosciences and Ash Meadows National Wildlife Refuge, Ash Meadows, Nevada.
2007- 2008 **Post-doctoral Researcher**, Serpentine endemic plants' biogeography and potential responses to climate change, Dept. of Environmental Science and Policy, UC Davis, advisors Drs. Susan Harrison and Mark Schwartz
2002-2007 **Dissertation Research: Using models and field experiments to define niche versus dispersal limitation in California grassland annuals**, Dept. of Environmental Science and Policy, UC Davis, advisor Dr. Susan Harrison
2005-2007 **Graduate Research Assistant**, Klamath-Siskiyou plant diversity and climate change, Dept. of Environmental Science and Policy, UC Davis, advisors Drs. Susan Harrison and Ellen Damschen (NCEAS)
2002-2007 **Graduate Research Assistant**, California serpentine regional plant diversity, Dept. Environmental Science and Policy, UC Davis, advisors Drs. Susan Harrison and Hugh Safford (USGS-USFS)
2006 **Graduate Research Assistant**, Botanical surveys of LTER grassland plant diversity, UC McLaughlin Natural Reserve, advisor Dr. Susan Harrison
2006 **Graduate Research Assistant**, Valley elderberry longhorn beetle habitat assessment, American river corridor, Dept. of Environmental Science and Policy, UC Davis, advisor Dr. Marcel Holyoak
2000-2002 **Master's Thesis Research: The occurrence and vegetative reproduction of red maple among landscape ecosystem types, northern Lower Michigan**, University of Michigan Biological Station, School of Natural Resources and the Environment, UM Ann Arbor, advisor Dr. Burton V. Barnes

1996-1998 **Undergraduate Research Fellow**, Honors Thesis: An exploration of the competitive interactions of three clonal sedges in a Michigan fen Dept. of Biology, UM Ann Arbor, advisor Dr. Deborah Goldberg

TEACHING AND RELATED EXPERIENCE

Winter-Spring 2008 **Post-doctoral Research Mentor**, *Experimental Ecology and Evolution in the Field*, Dept. of Evolution and Ecology, UC Davis.
Fall 2006 **Teaching Assistant**, *Principles of Ecology*, Dept. of Environmental Science and Policy, UC Davis
Summer 2005 **Teaching Assistant**, *Grass Identification*, Dept. of Plant Biology, Dept. of Plant Biology, UC Davis
Fall 2004 **Teaching Assistant**, *Wetland Ecology*, Dept. of Environmental Science and Policy, UC Davis
Spring 2002 **Lecturer**, *Spring Ecosystems and Plants*, School of Natural Resources and the Environment, UM Ann Arbor
Winter 2002 **Graduate Student Instructor**, *Applied Population Ecology*, School of Natural Resources and the Environment and Dept. of Biology, UM Ann Arbor
Spring 2001 **Course Assistant**, *Spring Ecosystems and Plants*, School of Natural Resources and the Environment, UM Ann Arbor
Fall 2000, 2001 **Graduate Student Instructor**, *Woody Plants*, School of Natural Resources and the Environment, UM Ann Arbor

COMPETITIVE RESEARCH GRANTS AND AWARDS

2010-2014 **California Energy Commission, Public Interest Energy Research Program Grant**, Reducing the Environmental Impact of Solar Energy: *Population viability and restoration potential for rare plants near solar installations* (with Bruce Pavlik). Funding pending final approval of commissioners, September 2010, \$753,100
2010-2012 **California Energy Commission, Public Interest Energy Research Program Grant**, Reducing the Environmental Impact of Solar Energy: *Mapping habitat distributions of desert rare plants from optimized data* (with Patrick McIntyre and Greg Suba), \$580,907
2009-2012 **NSF Population and Community Ecology Program Collaborative Research Grant**: *Consequences of habitat heterogeneity and seed dormancy for adaptation at the margins of a native plant population* (with Maureen Stanton and Richard Gomulkiewicz), \$309,280
2002-2007 **Block Grant Fellowships, Graduate Group in Ecology**, UC Davis, \$32,000
2005-2007 **National Science Foundation Doctoral Dissertation Improvement Grant**, \$12,000
2004 **Davis Botanical Society Research Grant**, UC Davis, \$750
2004 **Mildred E. Mathias Graduate Student Research Grant**, University of California Natural Reserve System, \$2000
2003 **Jastro Shields Research Award**, Graduate Group in Ecology, UC Davis, \$2000

- 2003 **Consortium for Research at the McLaughlin Natural Reserve Graduate Research Award**, UC Davis, \$2000
- 1996 **Undergraduate Research Fellowship**, Dept. Biology, UM Ann Arbor, \$2000

PEER-REVIEWED PUBLICATIONS

- Moore, K. A.** and S.C. Elmendorf. *In press*. Species interactions along stress gradients. *In Serpentine: A model for Evolution and Ecology*, S.P. Harrison and N. Rajakaruna, Eds. University of California Press, Berkeley.
- Pavlik, B.M., **Moore, K.A.** and A.E. Stanton. *In press*. Quantifying herbivore impacts on rare plants at Ash Meadows. *Proceedings of a conference of the California Native Plant Society*. California Native Plant Society. Sacramento, CA.
- Moore, K. A.**, S. P. Harrison, and S.C. Elmendorf. *In review*. Can spatial isolation help predict dispersal limited sites for native species restoration? *Ecological Applications*.
- Harrison, S. P., H. Cornell, and **K. A. Moore**. 2010. What controls spatial niches? Testing theory with tarweeds. *Ecology* 91:2141-2150.
- Moore, K. A.** 2009. Fluctuating patch boundaries of a charismatic annual forb result from niche, not dispersal, limitation. *Ecology* 90(2): 378-387.
- Elmendorf, S.C. and **K. A. Moore**. 2009. Community composition data outperforms environmental data in predicting species' fecundity and abundance. *Conservation Biology* 22(6):1523-1532.
- Elmendorf, S. C., and **K. A. Moore**. 2007. Plant competition varies with community composition in an edaphically complex landscape. *Ecology* 88:2640-2650.
- Melbourne, B.A., H.V. Cornell, K. F. Davies, C. J. Dugaw, S.C. Elmendorf, A.L. Freestone, R. Hall, S.P. Harrison, A. Hastings, M. Holland, M.A. Holyoak, J. Lambrinos, **K.A. Moore**, C.M. Taylor and H. Yokomizo. 2007. Invasion in a heterogeneous world: resistance, coexistence or hostile takeover? *Ecology Letters* 10:77-94.
- Moore, K. A.** and S. C. Elmendorf. 2006. Propagule vs. niche limitation: untangling the mechanisms behind plant species' distributions. *Ecology Letters* 9:797-804.
- Hastings, A., K. Cuddington, K. F. Davies, C. J. Dugaw, S. Elmendorf, A. Freestone, S. Harrison, M. Holland, J. Lambrinos, U. Malvadkar, B. A. Melbourne, **K. Moore**, C. Taylor, and D. Thomson. 2005. The spatial spread of invasions: new developments in theory and evidence. *Ecology Letters* 8(1):91-101.

PRESENTATIONS

- Moore, K.A.**, M.L. Stanton, and Richard Gomulkiewicz. June 2010. Consequences of habitat heterogeneity and seed dormancy for adaptation at the margins of a native plant population. Presentation, *Evolution*, Portland, OR.
- Moore, K.A.** and B.M. Pavlik. February 2010. Using phenology and effects of pollen source on fitness to evaluate the sensitivity of rare plant reproduction to disturbance. *Ash Meadows National Wildlife Refuge Symposium*, Pahrump, NV.
- Moore, K.A.**, S. P. Harrison, and S.C. Elmendorf. January 2009. Can spatial isolation help predict dispersal-limited sites for native species restoration? Presentation, *California Native Plant Society Mtg.*, Sacramento CA.

- Moore, K.A.** and B.M. Pavlik. February 2009. Limitations on endemic plant seed availability at Ash Meadows. *Ash Meadows National Wildlife Refuge Symposium*, Pahrump, NV.
- Moore, K.A.** and B.M. Pavlik. February 2008. Rare plant breeding biology at Ash Meadows. *Ash Meadows National Wildlife Refuge Symposium*, Las Vegas, NV.
- Moore, K.A.** August 2007. Shifting spatial occurrence of the native annual *Lupinus nanus* results from coupling between interannual variation and deterministic niche constraints. Presentation, *Ecological Society of America Annual Mtg.*, San Jose, CA.
- Moore, K.A.** and S. P. Harrison. 2007. Dispersal limitation and site suitability vary with distance from existing patches of two charismatic native annuals. Presentation, *California Native Grassland Association and Annual Mtg.*, Santa Barbara, CA
- Moore, K.A.** and S. C. Elmendorf. August 2006. The plant's eye view of competitive gradients. Presentation, *Ecological Society of America Annual Mtg.*, Nashville, TN.

SERVICE

Reviewer: Ecology, Ecology Letters, American Naturalist, Journal of Ecology, Ecological Applications, Oecologia, Plant Ecology, PLOSOne, Acta Oecologica, American Midland Naturalist

SYNERGISTIC ACTIVITIES

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| 2009-present | Founding Collaborator, Kids into Discovering Science , McLaughlin Natural Reserve outreach program, University of California, Davis and Lake County Unified School District. |
| 2006 | Grant Review Panel Assistant , California Bay-Delta Area Ecosystem Restoration Program, Land Use and Natural Resources, University of California, Davis Extension |
| 2000-2002 | Ecologist , Walpole Island Heritage Center, Prairie Inventory, Walpole Island First Nation, Canada |
| 1999 | Workshop Assistant , First Annual Meeting on Agricultural Sustainability, National Pollution Prevention Center, UM Ann Arbor |
| 1999-2001 | Restoration/Burn Crew and Bird Survey Volunteer , Natural Areas Preservation Division, City Parks and Recreation, Ann Arbor, Michigan |
| 1998-2000 | Program Leader , Leslie Science Center, Ann Arbor, Michigan |
| 1998-2000 | Founding Member , Environmental Learning Fund, Ann Arbor, Michigan |

PROFESSIONAL MEMBERSHIPS

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| 2010-present | Society for the Study of Evolution |
| 2010-present | American Society of Naturalists |
| 2007-present | California Native Plant Society |
| 2002-present | Ecological Society of America |
| 2007-2009 | California Native Grassland Association |
| 2006-2008 | Association for Women in Science, Davis Chapter |