David Jay Harris
UC Davis Population Biology PhD Candidate
Curriculum Vitae
(updated Jan 17, 2013)

Environmental Science and Policy
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Email:
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Previous Education:
2008 A. B. (Biology). Washington University in St. Louis

Awards:
E. C. Pielou Award for best student oral presentation in statistical Ecology at the Ecological Society of America meeting (2012)

National Science Foundation Graduate Research Fellowship (Awarded 2009)

Michigan State University summer fellowship for Enhancing Linkages between Mathematics and Ecology (Awarded 2005)

Research interests
I'm currently working on statistical techniques for modeling the factors governing species distributions and species interactions. My research involves finding better methods for taking advantage of information that most other methods ignore, particularly information that can be shared among species. These models should be of interest to ecologists across a range of subdisciplines, from basic ecologists interested in understanding environmental filtering, to applied ecologists interested in making predictions about the future ranges of species in novel environments.

Teaching experience (college level)
Unofficial teaching assistant for the graduate course ANT 298, "Statistical Rethinking" (UC Davis, 2012)

Undergraduate Statistics Workshop (UC Davis, 2010)

Teaching Assistant for BioSci 2B, introduction to ecology and evolution (UC Davis, 2009, 2013)

Teaching experience (other)
Volunteer assistant biology teacher at Winters High School (Winters, CA, 2010)

Senior after-school science club leader at Delmar Harvard Elementary School (St. Louis, MO, 2007-2008)

Assistant coach for the Okemos High School debate team (Okemos, MI, 2004-2006)

Oral presentations:

Harris, D. J. Interpretable, accurate predictions of species distributions and community composition: Making the most of prior information. Ecological Society of America Meeting, August 9, 2012. ***(E.C. Pielou award winning presentation)***

Harris, D. J., M. C. O. Ferrari, and A. Sih. Behavior in a changing world: Uniting models and data. Ecological Society of America Meeting, August 2, 2010.

Harris, D. J. and K. G. Smith. When will invasive species homogenize or differentiate communities? An occupancy-based null model of the effects of species invasions. Ecological Society of America Meeting, August 7, 2008.

Publications:

Pruitt JN, S. E. Riechert, and **D. J. Harris** 2011. Reproductive consequences of male body mass and aggressiveness depend on females' behavioral types. *Behavioral Ecology and Sociobiology*, 65: 1957-1966.

Harris, D. J., K. G. Smith, and P. J. Hanly. 2011. Occupancy Is Nine-Tenths of the Law: Occupancy Rates Determine the Homogenizing and Differentiating Effects of Exotic Species. *The American Naturalist*, 177:535-543

Lankau, R., P. S. Jørgensen, **D. J. Harris**, and A. Sih. 2011. Incorporating evolutionary principles into environmental management and policy. *Evolutionary Applications*, 4: 315–325

Sih, A., M. C. O. Ferrari, and **D. J. Harris** 2011. Evolution and behavioural responses to human-induced rapid environmental change. *Evolutionary Applications*, 4: 367–387

Software:

`blender` is an R package for estimating biotic homogenization and differentitaion, as described in Harris et al. (2011). The package is available from the Comprehensive R Archive Network at http://cran.r-project.org/web/packages/blender/index.html.