

Allen McBride

Postgraduate Research Associate

Oak Ridge National Laboratory, Environmental Sciences Division

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Education and Training

2006 Duke University, Ecology, MA

2004 Swarthmore College, Biology, BA

Research and Professional Experience

2010 to present Postgraduate Research Associate. Environmental Sciences Division, Oak Ridge National Laboratory. Research mentors are Virginia Dale and Keith Kline. Studies of environmental sustainability of bioenergy with respect to land use and development of interdisciplinary indicators.

2004–2006 Graduate Research Assistant. Duke University. Research mentor was Jim Clark. Assisted interdisciplinary study of roles of herbivory, fire, and gap creation in regional forest biodiversity, using experimental manipulations, wireless sensor networks, and simulation modeling.

Summers 2001–2004 and Spring 2004 Undergraduate intern. Environmental Sciences Division, Oak Ridge National Laboratory. Projects:

1. Vegetation and soil survey of long-term research plots, analysis of tree growth data. Mentors: Pat Mulholland and Don Todd, Jr.
2. Analysis of fate of carbon in agricultural lime. Mentor: Tris West
3. Improvement of LINKAGES forest growth model, analysis of biodiversity and ecosystem function. Mentor: Michael Huston

Publications

1. Efroymson, R.A., V.H. Dale, K.L. Kline, A.C. McBride, J.M. Bielicki, R.L. Smith, E.S. Parish, P.E. Schweizer, D.M. Shaw. In review with *Environmental Management*. Environmental indicators of biofuel sustainability: What about context?
2. Kline, K.L., G.A. Oladosu, V.H. Dale, A.C. McBride. 2011. Scientific analysis is essential to assess biofuel policy effects: In response to the paper by Kim and Dale on “Indirect land-use change for biofuels: Testing predictions and improving analytical methodologies”. *Biomass and Bioenergy* 35:4488–4491.
3. McBride, A.C., V.H. Dale, L.M. Baskaran, M.E. Downing, L.M. Eaton, R.A. Efroymson, C.T. Garten, K.L. Kline, H.I. Jager, P.J. Mulholland, E.S. Parish, P.E. Schweizer, and J.M. Storey. 2011. Indicators to support environmental sustainability of bioenergy systems. *Ecological Indicators* 11(5):1277–1289.
4. Ibanez, I., J.S. Clark, M.C. Dietze, K. Feeley, M. Hersh, S. LaDeau, A. McBride, N.E. Welch, and M.S. Wolosin. 2006. Predicting biodiversity change: Outside the climate envelope, beyond the species-area curve. *Ecology* 87:1896–1906.
5. West, T.O. and A.C. McBride. 2005. “The contribution of agricultural lime to carbon dioxide emissions in the United States: dissolution, transport, and net emissions.” *Agriculture, Ecosystems and Environment* 108:145–154.
6. Huston, M.A. and A.C. McBride. “Evaluating the Relative Strengths of Biotic versus

Abiotic Controls on Ecosystem Processes.” In: *Biodiversity and Ecosystem Functioning: Synthesis and Perspectives* (M. Loreau, S. Naeem, and P. Inchausti, editors), Oxford University Press, 2002.

Posters and Presentations

1. Leiby, P.N. and A.C. McBride. “Indicators to Support Sustainability of Bioenergy Systems”. Presented at *Billion Ton Study: What can be Learned about Bioenergy Sustainability?* Workshop, Oak Ridge, September 29, 2011.
2. McBride, A.C, V.H. Dale, L.M. Baskaran, M.E. Downing, L.M. Eaton, R.A. Efrogmson, C.T. Garten, K.L. Kline, H.I. Jager, P.J. Mulholland, E.S. Parish, P.E. Schweizer, and J.M. Storey. “Indicators to Support Environmental Sustainability of Bioenergy Systems”. Presented at Center for BioEnergy Sustainability Forum, Oak Ridge, January 27, 2011 and at the US-China Advanced Biofuels Forum at Idaho National Laboratory, Idaho Falls, September 16, 2011.
3. A. C. McBride and T. O. West. “Estimating Net CO₂ Emissions From Agricultural Lime Applied to Soils in the U.S.” Poster presentation at AGU Fall Meeting, San Francisco, December 2005.
4. A. C. McBride. “How to Overcome Statistical Bias in Diversity-Productivity Experiments.” Swarthmore College, Swarthmore, May 6, 2003.

Professional Service

1. Referee, *Ecological Indicators*
2. Referee, *Environmental Science and Technology*
3. Referee, *Frontiers in Ecology and the Environment*

Teaching Experience

1. GRE prep instructor, Kaplan Test Prep (2009-2010)
2. Private tutor, algebra and calculus (2008-2010)
3. Physics instructor for Swarthmore College Upward Bound Program (2003-2004)
4. Teaching Assistant, Invertebrate Zoology, Swarthmore College Department of Biology (Fall 2003)

Graduate Advisors

M.A. Advisor: Dr. James S. Clark (Duke University)