

## *Curriculum Vitae*

### **Thomas Mueller**

Junior Professor for Movement Ecology and Biodiversity Conservation

Department of Biological Sciences, Goethe-University Frankfurt  
& Biodiversity and Climate Research Centre (BiK-F)  
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### **CURRENT POSITIONS**

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**Robert Bosch Junior Professor** *since Dec. 2013*  
**for Movement Ecology and Biodiversity Conservation**  
Department of Biological Sciences, Goethe University Frankfurt  
& Biodiversity and Climate Research Centre Frankfurt (BiK-F, Frankfurt, Germany)

**Research Associate, Smithsonian Conservation Biology Institute** *since Mar. 2011*  
National Zoological Park (Front Royal, VA, USA)

### **PAST POSITIONS**

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**Research Assistant Scientist, Dept. of Biology, University of Maryland** *2012-2013*  
• PI on NSF grant “Informatics Tools for Population-level Movement Dynamics”

**PostDoc, Biodiversity and Climate Research Centre Frankfurt (BiK-F)** *2011 - 2012*  
• Group: Katrin Böhning-Gaese, topic: movement and seed dispersal of hornbills

**PostDoc, Dept. of Biology, University of Maryland** *2009 - 2011*  
• Group: William F. Fagan, topic: comparative analyses of movement patterns in ungulates

### **EDUCATION**

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**PhD, Behavior, Ecology, Evolution and Systematics Program, University of Maryland, USA** *2008*

- *Research focus and lab:* theoretical and spatial ecology, *advisor:* William F. Fagan
- *Thesis:* Resource predictability and individual movement strategies in ungulates: Does temporal uncertainty lead to nomadism in Mongolian gazelles?
- *Graduate Coursework:* Concepts in Evolution, Behavioral Ecology, Theoretical Ecology, Biometrics 1 & 2, Computer Science 1 & 2, Quantitative Spatial Analysis, Computational Statistics

**Diplom in Biology, Philipps-University Marburg, Germany** *2001*

- *Thesis:* Effects of scale-sensitive landscape complementation and intraspecific interaction on breeding performance of common ravens (*Corvus corax*) in Bialowieza Forest, Poland, *advisor:* Hans-Wilhelm Bohle
- *Focus Areas:* Ecology, Conservation Biology, Geography, and Philosophy

## 5 REPRESENTATIVE PUBLICATIONS

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- Mueller T.**, R. B. O'Hara, S. J. Converse, R.P. Urbanek, W. F. Fagan. 2013. Leadership and Spatial Learning of Migratory Performance. *Science*, 341, 999-1002.  
featured among others in:  
BBC: <http://www.bbc.co.uk/news/science-environment-23892244>  
NPR: <http://www.npr.org/2013/08/30/216533688/wise-old-whooping-cranes-keep-captive-bred-fledglings-on-track>  
National Geographic: <http://news.nationalgeographic.com/news/2013/08/130830-whooping-crane-migration-genetic-conservation-learn-bird-animal/>  
Deutschlandfunk: [http://www.deutschlandfunk.de/erfahrung-zaehlt.676.de.html?dram:article\\_id=259774](http://www.deutschlandfunk.de/erfahrung-zaehlt.676.de.html?dram:article_id=259774)
- Fagan W.F., M.A. Lewis, M. Auger-Methe, T. Avgar, S. Benhamou, G. Breed, L. LaDage, U. E. Schlägel, W. Tang, Y. Papastamatiou, J. Forester, and **T. Mueller**. 2013. Spatial Memory and Animal Movement. *Ecology Letters*, 16, 1316–1329.
- Mueller T.**, K. A. Olson, G. Dressler, P. Leimgruber, T. K. Fuller, C. Nicolson, A. J. Novaro, M. J. Bolgeri, D. Wattles, S. DeStefano, and W. F. Fagan. 2011. How landscape dynamics link individual- to population-level movement patterns: a multispecies comparison of ungulate relocation data. *Global Ecology and Biogeography*, 20, 683–694.  
featured in Science Daily: <http://www.sciencedaily.com/releases/2011/05/110511142138.htm>
- Mueller T.**, W.F. Fagan, and V. Grimm. 2011. Integrating individual search and navigation behaviors in mechanistic movement models. *Theoretical Ecology*, 4, 341-355.
- Mueller T.** and W.F. Fagan. 2008. Search and navigation in dynamic environments - from individual behaviors to population distributions. *Oikos*, 117, 654–664.

## 5 SELECTED AWARDS & GRANTS

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- Robert Bosch Junior Professorship 2013 (€1,000,000): 2013-1019  
*Sustainable Development and Long-Distance Animal Movements:  
Mongolia's Eastern Steppe at the Crossroads*  
<https://www.bosch-stiftung.de/content/language2/html/46500.asp>
- PI on NSF grant DBI 1062411 (\$829,000): 2011-2014  
*Informatics Tools for Population-level Movement Dynamics*  
<http://www.nsf.gov/awardsearch/showAward.do?AwardNumber=1062411>
- Smithsonian Pre-Doctoral Fellowship (\$25,000) 2007-2008
- NSF Doctoral Dissertation Improvement Grant (\$11,800) 2006-2008
- University of Maryland, Darwin Scholarship (\$20,000) 2003