

# Margaret Kosmala

Harvard University  
Department of Organismic and Evolutionary Biology  
Harvard University Herbaria, 22 Divinity Avenue  
Cambridge MA 02138

(cell) 612-598-2129  
kosmala@fas.harvard.edu  
www.margaretkosmala.com

## EDUCATION

Ph.D. (December 2013) University of Minnesota; Ecology, Evolution, and Behavior  
Co-advisors: David Tilman and Craig Packer

B.S. (2000) Brown University; Computer Science (*magna cum laude*)

## PROFESSIONAL EXPERIENCE

2014 - present	Postdoctoral Fellow, Department of Organismic and Evolutionary Biology, Harvard University Mentor: Andrew Richardson
2009 - 2013	Doctoral Candidate, University of Minnesota
2007 - 2009	Doctoral Researcher, University of Minnesota
2007	Junior Research Scientist, University of Minnesota
2006-2007	Research Assistant, University of Minnesota
2005	Organic Vegetable Farm Intern, Foxtail Farm, Osceola, Wisconsin
2003-2004	Communications Intelligence Analysis Engineer, U.S. Department of Defense
2002-2003	Adjunct Faculty, National Cryptologic School
2000-2002	Computer Systems Researcher, U.S. Department of Defense

## MAJOR FELLOWSHIPS (\$261,550 TOTAL)

2012-2013	CIC - Smithsonian Institution Predoctoral Fellowship, National Museum of Natural History, Smithsonian Institution; (\$30,000 one year full fellowship, tuition, \$550 research grant)
2008-2012	NSF Graduate Research Fellowship, National Science Foundation; (\$90,000 three years full fellowship, plus tuition)
2007-2010	Graduate School Fellowship, Graduate School, University of Minnesota; (\$45,000 two school-years fellowship, plus tuition)
1996-2000	UTP Merit College Scholarship, U.S. Department of Defense; (\$96,000 four years full undergraduate tuition)

#### **GRANTS IN SUPPORT OF RESEARCH (\$49,349 TOTAL)**

- 2013 Save Snapshot Serengeti. Crowdfunding, using the Indiegogo platform, in collaboration with Ali Swanson, Craig Packer, and Zooniverse staff. 701 individual donors worldwide, \$36,324.
- 2013 Effects of Warming on a Grassland Insect and Spider Community. James W. Wilkie Fund for Natural History Fellowship, Bell Museum of Natural History, University of Minnesota, \$1,025.
- 2008 Effect of Climate Change on Wildebeest-Human Relations. Consortium on Law and Values in Health, Environment & the Life Sciences, University of Minnesota, \$7,000.
- 2008 Effect of Climate Change on Wildebeest-Human Relations. Office of International Programs, University of Minnesota, \$5,000.

#### **OTHER AWARDS , GRANTS, AND FELLOWSHIPS (\$9,650 TOTAL)**

- 2011, 2013 EEB Travel Awards, College of Biological Science, University of Minnesota; (\$500 each year partial funding for presentation at a conference)
- 2011, 2013 Scholarly Travel Grants, Graduate and Professional Student Assembly, University of Minnesota; (\$150 each year partial funding for presentation at a conference)
- 2009 Carol H. and Wayne A. Pletcher Graduate Fellowship, College of Biological Science, University of Minnesota; (\$2,500 summer fellowship)
- 2008 Denneth & Joan Dvergsten Itasca Summer Scholarship, College of Biological Science, University of Minnesota; (\$2,500 tuition for summer course)
- 2007 Sigerfoos Fellowship, Department of Ecology, Evolution, and Behavior, University of Minnesota; (\$3,350 tuition and travel funds for intensive field course in Costa Rica)
- 2004 Galileo Awards Honorable Mention, U.S. Director of Central Intelligence; commendation for a white paper on future intelligence challenges.
- 2001-2003 Awards for Excellence (three awards), U.S. Department of Defense
- 1998-1999 All-Ivy Academic Honors (two years), The Ivy League

#### **PUBLICATIONS**

- Kosmala, M.**, P. Miller, S. Ferreira, P. Funston, D. Keet, C. Packer. Estimating wildlife disease dynamics in complex systems using approximate Bayesian computation models. *[to be resubmitted soon]*
- Mosser, A., **M. Kosmala**, C. Packer. Landscape heterogeneity and cooperative defense drive the evolution of lion group territoriality. *[submitted]*

- Packer, C., **M. Kosmala**, H.S. Cooley, H. Brink, L. Pintea, D. Garshelis, G. Purchase, M. Strauss, A. Swanson, G. Balme, L. Hunter, K. Nowell (2009). Sport Hunting, Predator Control and Conservation of Large Carnivores. PLoS ONE. 4(6): e5941.
- Charniak E., Y. Altun, R. de Salvo Braz, B. Garrett, **M. Kosmala**, T. Moscovich, L. Pang, C. Pyo, Y. Sun, W. Wy, Z. Yang, S. Zeller, L. Zorn. (2000). Reading comprehension programs in a statistical-language-processing class. In ANLP/NAACL Workshop on Reading Comprehension Tests as Evaluation for Computer-Based Language Understanding Systems.

## PRESENTATIONS

- 2013 Ecological Society of America 98th Annual Meeting, Minneapolis, MN. Effects of experimental warming on a grassland insect and spider community
- 2013 Adler Planetarium, Chicago, IL. From lions to black holes: How citizen scientists are changing the face of research (invited public talk, co-presented with two others)
- 2012 Ecological Society of America 97th Annual Meeting, Portland, OR. Biological control of annual crop pests provided by mixed prairie of varying diversity
- 2011 American Association of Zoo Veterinarians Annual Conference, Kansas City, MO. Disease risk assessment of *Mycobacterium bovis* in African lions
- 2011 Ecological Society of America 96th Annual Meeting, Austin, TX. Modeling host-disease dynamics of bovine tuberculosis in lions in Kruger National Park
- 2011 EcoLunch Seminar, Section of Integrative Biology, University of Texas at Austin. The fate of a TB-infected lion population

## TEACHING EXPERIENCE

- 2002 Introduction to Voice over Internet Protocol, National Cryptologic School, Fort Meade, Maryland

## SERVICE AND OUTREACH

### *Membership in Professional Societies*

Ecological Society of America

### *Journal Reviews*

The American Naturalist

### *Media Coverage*

#### Snapshot Serengeti

2013 February 26. **KSTP 5 Eyewitness News** (ABC affiliate): "U of M Gives Snapshot of the Serengeti" by Chris Egert. <http://kstp.com/news/stories/S2941801.shtml?cat=1>

2013 February 12. **Newsweek**: “At Snapshot Serengeti, Classifying Africa’s Animals” by Rob Verger. <http://www.thedailybeast.com/newsweek/2013/02/11/at-snapshot-serengeti-classifying-africa-s-animals.html>

2012 December 17. **Public Radio International’s The World**, Geo Quiz: “Citizen Science to Help Identify African Animals” by Clark Boyd. <http://www.theworld.org/2012/12/citizen-science-to-help-identify-african-animals/>

2012 December 14. **Minnesota Star Tribune**: “Is that an elephant? Help researchers identify animals of the Serengeti” by Katie Humphrey. <http://www.startribune.com/lifestyle/183537691.html>

2012 December 13. **BBC Nature News**: “Millions of camera-trap images reveal Serengeti life” by Michelle Warwicker. <http://www.bbc.co.uk/nature/20678794>

Plus over 30 other articles and blog posts, including National Geographic’s NewsWatch blog, the Smithsonian News Blog, Scientific American’s Culturing Science blog and Citizen Science blog, coverage in German, Hungarian and Czech, and coverage on sites aimed at K12 education.