

DR. ARPAT OZGUL

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RESEARCH INTERESTS

Population ecology, bio-demography, evolutionary demography, metapopulation dynamics, life-history evolution, wildlife disease dynamics, quantitative techniques for estimation of population parameters, population modeling, spatially-explicit population viability analysis

EDUCATION

- 2006 PhD in Wildlife Ecology & Conservation, University of Florida, Gainesville, Florida
Thesis: *Metapopulation dynamics of yellow-bellied marmots*
Advisor: Dr. Madan K. Oli
- 2001 MSc in Environmental Sciences, Bosphorus University, Istanbul, Turkey
Thesis: *Population distribution of cave-dwelling bat species and conservation status of underground roosts in Northwestern Turkey*
Advisor: Dr. Andrzej Furman
- 1999 BA in Management, Bosphorus University, Istanbul, Turkey
Thesis: *Comparative analysis of the management of nongovernmental environmental organizations*

EMPLOYMENT

- 2011 - recent Postdoctoral Research Associate
Department of Zoology, Cambridge University
Demography of social behaviour
- 2008 - 2011 Postdoctoral Research Associate
Division of Biology, Imperial College London
Individual differences and the dynamics of animal populations
- 2006 - 2008 Postdoctoral Research Associate
Department of Wildlife Ecology & Conservation, University of Florida
Wildlife disease dynamics
- 2001 - 2006 Graduate Research Assistant
Department of Wildlife Ecology & Conservation, University of Florida
Analysis of animal population dynamics; metapopulation dynamics of the yellow-bellied marmot; small mammal population fluctuations
- 1999 - 2001 Graduate Research Assistant
Institute of Environmental Sciences, Bosphorus University
Community ecology of cave-dwelling bats

GRANTS AND AWARDS

- 2010 NERC Postdoctoral Grant, University of Cambridge
- 2008 NERC Postdoctoral Grant, Imperial College London
- 2007 Courtesy Assistant Professor, Department of Wildlife Ecology and Conservation, University of Florida
- 2006 Graduate Student of the Year Award, Sigma Xi, University of Florida Chapter
- 2006 Departmental nomination for the Best Dissertation Award, University of Florida
- 2004 Rocky Mountain Biological Labs - Lee R. G. Snyder Memorial Fund, Gothic, CO
- 2004 Sigma Xi Grant-in-Aid of Research
- 2003 Best Student Presentation Award, The Wildlife Society, Florida Chapter
- 2002 William and Else Jennings Award, University of Florida
- 2001 Rufford Conservation Grant, Whitley Awards Foundation, UK
- 1999 Threatened Species Category Award, BP Conservation Programme - BirdLife, BP Amoco, Flora & Fauna International, UK

PUBLICATIONS

- 23. Armitage KB, Van Vuren DH, **Ozgul A**, Oli MK (in press) Causes of prenatal dispersal in yellow-bellied marmots. *Ecology*
- 22. Struve J, Lorenzen K, Blanchard J, Börger L, Bunnefeld N, Edwards C, Hortal J, MacCall A, Matthiopoulos JF, Moorter BV, **Ozgul A**, Royer F, Singh N, Yesson C, Bernard R (in press). Lost in space? Searching for directions in the spatial modelling of individuals, populations and species ranges. *Biology Letters*
- 21. **Ozgul A**, Oli MK, Child DZ, Armitage KB, Blumstein DT, Olson LE, Tuljapurkar S, Coulson T (2010) Phenotypic mechanisms underlying a demographic response to climate change. *Nature* 466: 482:485
- 20. Ezard T, Bullock J, Dalglish H, Millon A, Pelletier F, **Ozgul A**, Koons D (2010) Matrix models for a changeable world: the importance of transient dynamics in population management. *Journal of Applied Ecology* 47: 515-523
- 19. Wendland L, Wooding J, White CL, Demcovitz D, Littell R, Berish JD, **Ozgul A**, Oli MK, Klein PA, Christman MC, Brown MB (2010) Social behavior drives the dynamics of respiratory disease in threatened tortoises. *Ecology* 91: 1257-1262
- 18. **Ozgul A**, Tuljapurkar S, Benton TG, Pemberton JM, Clutton-Brock TH, Coulson T (2009) The dynamics of phenotypic change and the shrinking sheep of St. Kilda. *Science* 325: 464-467
- 17. **Ozgul A**, Oli MK, Bolker BM, Perez-Heydrich C (2009) Upper respiratory tract disease, force of infection, and effects on survival of gopher tortoises. *Ecological Application* 19: 786-798
- 16. **Ozgul A**, Armitage KB, Blumstein DT, Van Vuren DH, Oli MK (2009) Influence of local demographic processes on the metapopulation dynamics of the yellow-bellied marmot. *American Naturalist* 173: 517-530

15. Borrego N, **Ozgul A**, Armitage KB, Blumstein DT, Oli MK (2008) Spatiotemporal variation in survival of male yellow-bellied marmots. *Journal of Mammalogy* 89: 365–373
14. **Ozgul A**, Oli MK, Olson LE, Blumstein DT, Armitage KB (2007) Spatiotemporal variation in the reproductive rates of the yellow-bellied marmot. *Oecologia* 154: 95-106
13. Getz LL, **Ozgul A**, Oli MK, Hofmann JE, McGuire B (2007) Dynamics of vole populations: Influence of interspecific competition. *Acta Zoologica Sinica* 53: 800-811
12. **Ozgul A**, Armitage KB, Blumstein DT, Oli MK (2006) Spatiotemporal variation in survival rates: Implications for population dynamics of yellow-bellied marmots. *Ecology*, 87: 1027-1037
11. **Ozgul A**, Armitage KB, Oli MK, Blumstein DT, Van Vuren DH (2006) Effects of patch quality and network structure on patch occupancy dynamics of a yellow-bellied marmot metapopulation. *Journal of Animal Ecology* 75: 191-202
10. Dodd CK, **Ozgul A**, Oli MK (2006) Influence of disturbance events on survival and dispersal rates of Florida box turtles. *Ecological Applications* 16: 1936–1944
9. Blumstein DT, **Ozgul A**, Yovovich V, Van Vuren DH, Armitage KB (2006) Effect of predation risk on the presence and persistence of yellow-bellied marmot (*Marmota flaviventris*) colonies. *Journal of Zoology* 270: 132-138
8. Getz LL, **Ozgul A**, Oli MK, Hofmann JE, McGuire B (2006) Dynamics of vole populations: an experimental evaluation of the influence of food resources. *Acta Zoologica Sinica* 26: 114-122
7. Getz LL, Oli MK, Hofmann JE, McGuire B, **Ozgul A** (2005) Factors influencing movement distances of two species of sympatric voles. *Journal of Mammalogy* 86: 647-654
6. **Ozgul A**, Getz LL, Oli MK (2004) Demography of fluctuating populations: temporal and phase-related changes in vital rates of *Microtus ochrogaster*. *Journal of Animal Ecology* 73: 201-215
5. Blumstein DT, Runyan A, Seymour M, Nicodemus A, **Ozgul A**, Ransler F, Im S, Stark T, Zugmeyer C, Daniel JC (2004) Locomotor ability and wariness in yellow-bellied marmots. *Ethology* 110: 615-634
4. Furman A & **Ozgul A** (2004) The distribution of cave-dwelling bats and conservation status of underground habitats in Northwestern Turkey. *Biological Conservation* 120: 243-248
3. Karatas A & **Ozgul A** (2003) On the occurrence of *Myotis emarginatus* (Geoffroy, 1806) in Turkey (Chiroptera: Vespertilionidae). *Zoology in the Middle East* 28: 17-24
2. Furman A & **Ozgul A** (2002) Distribution of cave-dwelling bats and conservation status of underground habitats in the Istanbul area. *Ecological Research* 17: 69-77
1. **Ozgul A**, Bilgin R, Furman A (2000) Cave-dwelling bats of Çatalca-Kocaeli Region, Northwestern Turkey. *Proceedings of the 8th European Bat Research Symposium* (ed. BW Woloszyn) 17: 191-198

In review / preparation

- Dietz MS, Murdock CC, Romero LM, **Ozgul A**, Foufopoulos J (in review) Distance to an unpaved road is associated with reproductive success and physiological stress response in a migratory land bird.

- Foufopoulos J & **Ozgul A** (in preparation) Effect of disease on nest and individual survival of white-crowned sparrows (*Zonotrichia leucophrys*) in Colorado.
- Kubasiewicz, L, **Ozgul A**, Coulson T (in preparation) Dynamics of phenotypic change in Soay sheep: Individual and environmental effects.
- Donnelly S, Fontaneto D, **Ozgul A** (in preparation) Life history adaptations to environmental stress: Prediction and response from two rotifer species.

TEACHING EXPERIENCE

Instructor

Quantitative Wildlife Ecology (WIS4601C) - University of Florida (Springs 2004, 2006)

Demography & Management - Imperial College London (November 2009)

Guest lecturer

Wildlife Population Modeling (WIS6466) - University of Florida (Spring 2006)

Wildlife Population Ecology (WIS4501) - University of Florida (Spring 2004, 2005, 2007)

Advanced Topics in Population Ecology (WIS6455) - University of Florida (Spring 2004, 2005)

Quantitative Wildlife Ecology (WIS4601C) - University of Florida (Spring 2005, 2007)

Teaching assistant

Generalized Linear Modeling in R – Imperial College London (February 2009)

Analysis and Management of Animal Populations - University of Florida (Springs 2004 & 2006)

Wildlife Issues (WIS2040) - University of Florida (Fall 2005)

Quantitative Data Analysis - Bosphorus University (Fall 2001)

Environmental Dimension - Bosphorus University (Fall 2000)

Models & Concepts in Ecology - Bosphorus University (Spring 2000)

Thesis supervision

Hannah Froy, MSc Thesis, Imperial College London (2010)

Laura Kubasiewicz, MSc Thesis, Imperial College London (2009)

Shane Donnelly, MSc Thesis, Imperial College London (2009)

Natalia Borrego, Undergraduate intern, University of Florida (2005)

PROFESSIONAL REVIEW

Reviewed manuscripts for the following peer reviewed journals:

American Naturalist; Biological Conservation; Biology Letters; Chelonian Conservation and Biology; Ecology; Ecoscience; Journal of Animal Ecology; Journal

of Mammalogy, Journal of Wildlife Management; Oecologia; Oikos; Journal of Applied Ecology

COMPUTER SKILLS

Proficient in computer programming (MATLAB, R), ecological (MARK, PRESENCE, DISTANCE, RMARK, MSURGE), statistical (R, S-plus, SAS, SPSS), spatial analysis (ARCVIEW/ARCGIS), and database management (MS ACCESS) software packages

PRESENTATIONS

A spatially-structured matrix population model: Vec-permutation matrix approach

2010 Imperial College London, Spatial Ecology Workshop

Bio-demographic methods in population ecology and evolutionary biology

2009 Istanbul Technical University, Ecology & Evolution Symposium

2009 Istanbul Technical University, Dept. of Molecular Biology & Genetics

The dynamics of phenotypic change and the shrinking sheep of St. Kilda

2009 University of Aberdeen, Inst. of Biological and Environmental Sciences

2009 University of Florida, Dept. of Wildlife Ecology and Conservation

2009 University of Lyon, Ecology and Evolution Dept.

2009 Imperial College London, Center for Population Biology

2008 Bosphorus University, Environmental Sciences Dept.

2008 University of Cambridge, Zoology Dept.

Influence of local demography on asymptotic and transient dynamics of a yellow-bellied marmot metapopulation

2008 Populations Under Pressure Symposium, Imperial College London (Poster)

2007 Ecological Society of America Meeting, San Jose, California

2005 Ph.D. Exit Seminar, University of Florida

Effects of upper respiratory tract disease in gopher tortoise populations in Florida - populations in transition

2006 Ecology of Infectious Diseases - NSF Meeting, Atlanta, Georgia (Poster)

Spatiotemporal variation in vital rates: Implications for population dynamics of yellow-bellied marmots

2006 Florida Wildlife Society Meeting, Cocoa Beach, Florida (by Borrego N)

2005 Ecological Society of America Meeting, Montreal, Canada

2005 Wildlife Graduate Student Seminar, University of Florida

Patch occupancy dynamics of a yellow-bellied marmot metapopulation

2004 Florida Wildlife Society Meeting, Mount Dora, Florida

2004 Rocky Mountain Biological Laboratory, Gothic, Colorado

Demography of fluctuating vole populations

2003 Ecological Society of America Meeting, Savannah, Georgia

2003 Florida Wildlife Society Meeting, Vero Beech, Florida

2003 Rocky Mountain Biological Laboratory, Gothic, Colorado
2003 Wildlife Graduate Student Seminar, University of Florida

Population distribution of cave-dwelling bat species and conservation status of underground roosts in Northwestern Turkey

2001 MSc Exit Seminar, Bosphorus University, Istanbul
1999 BP Conservation Programme, London, UK
1999 European Bat Research Symposium, Krakow, Poland (Poster)
1999 'Research and Development in Turkey' Symposium, Istanbul, Turkey (Poster)

WORKSHOPS

2010 Spatial Ecology Workshop, Imperial College London
2009 Ecology & Evolution Workshop, Istanbul Technical University
2009 Planning for an Academic Career, Imperial College London
2008 Ecology & Evolution Seminar Series (**Organizer**), Imperial College London
2008 Linking Ecological and Evolutionary Dynamics II, Imperial College London
2008 Populations Under Pressure, Imperial College London
2008 Linking Ecological and Evolutionary Dynamics I, Imperial College London
2007 IFAS Grant Writing Workshop, University of Florida
2007 Analysis and Management of Animal Populations (**Demonstrator**), University of Florida
2006 Teaching Excellence Workshop, University of Florida
2006 Model Selection and Inference in Ecology, University of Central Florida
1999 Wildlife Management Workshop - The Society for Protection of Nature, Adana, TR
1999 Biological Surveys Workshops, Expedition Advisory Centre, London, UK

PUBLISHED PHOTOGRAPHY

Wildlife photography work (<http://arpat.net/randfx>) published in several scientific journals (Ecology, Ecological Applications, Science, Nature, TREE, Functional Ecology cover, Cell, Evolutionary Biology cover) and over 300 international newspapers and magazines (inc. BBC, CNN, New York Times, Time, Guardian, The Scientist, Encyclopædia Britannica, Illustreret Videnskab).

POPULAR ARTICLES

Ozgul A (1998) Peynirlikonu Sinkhole Expedition: A speleological expedition into the deepest cave in Turkey and the 12th deepest cave in the world (-1377m). Atlas Magazine 41: 57-71 (in Turkish)

MAIN COLLABORATORS

Armitage KB	Coulson T	Owen JR
Benton TG	Dodd CK	Owens IPF
Bilgin IR	Fontaneto D	Pelletier F
Blumstein DT	Foufopoulos J	Pemberton JM
Bolker BM	Furman A	Sekercioglu CH
Childs DZ	Getz LL	Tuljapurkar S
Clutton-Brock TH	Oli MK	Van Vuren DH

REFERENCES

Prof. Tim Coulson

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Prof. Daniel T. Blumstein

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