

A. Bradley Duthie

I am an evolutionary ecologist and ecological modeller with broad interests in developing theory across the biological and environmental sciences. My research primarily uses mathematical and individual-based models to understand complex interactions in populations, communities, and social-ecological systems. I am especially interested in applying these modelling approaches to questions concerning the evolution and maintenance of biodiversity, and the management of populations under conservation conflict.

Professional Appointments

Leverhulme Trust Early Career Fellow, Nov. 2017 – Oct. 2020
Biological and Environmental Sciences, University of Stirling

ERC Postdoctoral Research Assistant, Nov. 2016 – Oct. 2017
Biological and Environmental Sciences, University of Stirling

ERC Postdoctoral Research Fellow, Jun. 2013 – Oct. 2016
School of Biological Sciences, University of Aberdeen

Education

Ph.D. Ecology and Evolutionary Biology, Spring 2013
Graduate Minor: Statistics
Certificate: Graduate Student Teaching Certificate
Iowa State University

B.S. Biology (Magna cum laude), Spring 2007
Specialisation: Ecology, Evolution, Environment
Southern Illinois University Edwardsville

B.S. Philosophy (Magna cum laude), Spring 2007
Minor: Chemistry
Southern Illinois University Edwardsville

A. Bradley Duthie
Ph.D., FHEA
Evolutionary Ecologist
Ecological Modeller
Biostatistician

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Publications

21. Duthie, AB. *PLoS Comput. Biol.* In review.
20. Duthie, AB, et al. *Method. Ecol. Evol.* In press.
19. Cusack, JJ, et al. *Conserv. Lett.* In press.
18. Paine, CET., et al. 2018. *Funct. Ecol.* 32 (7):1681-1692.
17. Redpath, SM, et al. 2018. *Trends Ecol. Evol.* 33 (6):415-426.
16. Duthie, AB, et al. 2018. *J. Evol. Biol.* 31:31-45.
15. Duthie, AB, et al. 2016. *Proc. R. Soc. B.* 282:20161845.
14. Duthie, AB, et al. 2016. *Am. Nat.* 188 (6):651-667.
13. Duthie, AB, et al. 2016. *Oikos.* 125 (11):1597-1606.
12. Duthie, AB, et al. 2016. *Evolution.* 70 (9):1927-1943.
11. Frater, PN & AB Duthie. 2016. *Ideas Ecol. Evol.* 9:15-18.
10. Reid, JM, et al. 2016. *Evolution.* 70 (7):1512-1529.
9. Reid, JM, et al. 2015. *Evolution.* 69 (11):2846-2861.
8. Duthie, AB, et al. 2015. *Am. Nat.* 186 (1):151-158.

7. Reid, JM, et al. 2015. *J. Anim. Ecol.* 84 (4):1029-1040.
6. Duthie, AB & JM Reid. 2015. *PLoS One.* 10 (4):e0125140.
5. Duthie, AC & AB Duthie. 2015. *Polymath.* 5 (1):1-22.
4. Reid, JM, et al. 2015. *Evolution.* 69 (1):59-74.
3. Duthie, AB, et al. 2014. *Am. Nat.* 183 (6):826-841.
2. Duthie, AB & MR Falcu. 2013. *Ecol. Modell.* 251:260-270.
1. Duthie, AB. 2004. *J. Memetics.* 8 (1).

Grants and Fellowships

Scottish Natural Heritage Tender (Co-PI; 2018)	9,947 GBP
Leverhulme Trust Early Career Fellowship (2017)	88,650 GBP
NSF Postdoctoral Research Fellowship in Biology (2013; award declined)	138,000 USD
NSF Doctoral Dissertation Improvement Grant (2010)	13,411 USD
Biotechnology Graduate Fellowship (ISU; 2007)	20,000 USD

Leadership

Manuscript reviewer: *Acta Oecologica*, *American Naturalist*, *Arthropod-Plant Interactions*, *Behavioral Ecology and Sociobiology*, *Biology Letters* (5), *BMC Evolutionary Biology*, *Ecology and Evolution*, *Evolution* (3), the *Journal of Animal Ecology*, the *Journal of Applied Ecology* (2), the *Journal of Theoretical Biology* (3), *Landscape Ecology*, *Molecular Ecology* (2), *Oikos*, *PLoS One*, *Proceedings of the Royal Society B*, *Royal Society Open Science*, and *Symbiosis*

Grant reviewer: National Science Foundation (USA)

Conference organiser: Midwest Ecology and Evolution Conference at Iowa State University (2010)

Workshop organiser: European Congress of Conservation Biology in Jyväskylä, Finland (2018)

Representative: Post-doctoral researchers (organiser at UoS; 2017-2018), Graduate and Professional Student Senate (Senator at ISU; 2011-2013), and Graduate Research in Evolutionary Biology and Ecology (Vice President at ISU; 2009-2010)

Computer Skills

Experience in statistical analysis, mathematical & individual-based modelling, genetic algorithms, and computer programming in C, R, and MATLAB

Use of Linux, git, and high performance computing clusters

Knowledge of HTML, Markdown, \LaTeX , and MS Office Suite

Course design and instruction in Blackboard

Software Developed

All listed software is publicly available on the Comprehensive R Archive Network (CRAN) and on GitHub.

2. **GMSE** *v0.3.1.9*. 2017. Generalised Management Strategy Evaluation Simulator. *Written in R and C*.
R package link: < <http://CRAN.R-project.org/package=GMSE> >
Website link: < <https://confoobio.github.io/gmse/> >
1. **gamesGA** *v1.1.3.2*. 2017. Genetic Algorithm for Sequential Symmetric Games. *Written in R and C*.
R package link: < <http://CRAN.R-project.org/package=gamesGA> >

Selected Awards

Iowa State University Teaching Excellence Award (top 10% of TAs; 2010)

Donal G. Myer Outstanding Student Award (SIUE; awarded to one science student; 2007)

Ober Honours Award in Philosophy (SIUE; awarded to one philosophy student; 2007)

Phi Kappa Phi (Collegiate Honour Society; 2006)

Chancellor's Scholarship (SIUE; full tuition for undergraduate education; 2003-2007)