

# 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

3B156  
University of Stirling  
Stirling  
FK9 4LA  
United Kingdom

☎ (+44) 01786 467787  
📞 (+44) 07561 408101  
✉ alexander.duthie@stir.ac.uk  
brad.duthie@gmail.com  
🌐 <http://bradduthie.github.io>  
📄 bradduthie

## Publications

22. Duthie, AB. *Sci. Rep. In revision.*
21. Minderman, J, et al. 2019. *Nat. Ecol. Evol.* 3:318.
20. Cusack, JJ, et al. 2019. *Conserv. Lett.* 12:e23450.
19. Duthie, AB, et al. 2018. *Method. Ecol. Evol.* 9:2396-2401.
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 Falcy. 2013. *Ecol. Modell.* 251:260-270.
1. Duthie, AB. 2004. *J. Memetics.* 8 (1).

## Grants and Fellowships

BBSRC-FAPESP-Newton Fund (Co-PI; 2019)	620,956 GBP
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*, *Annals of Human Biology*, *Arthropod-Plant Interactions*, *Behavioral Ecology*, *Behavioral Ecology and Sociobiology*, *Biology Letters* (5), *BMC Evolutionary Biology*, *Ecology and Evolution* (2), *Evolution* (5), *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* (2), *Royal Society Open Science*, and *Symbiosis*

**Grant reviewer:** National Science Foundation (USA), Université Bourgogne – Franche-Comté (UBFC)

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

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

**Representative:** Biological and Environmental Sciences Library (UoS; 2019), Post-doctoral researchers (organiser at UoS; 2017-2019), 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, L<sup>A</sup>T<sub>E</sub>X, and MS Office Suite

## 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> >