KYNAN DELANEY

Biologist & Data Scientist

I am an ecologist and statistics advisor at the University of Edinburgh.

My research interests have been focused on how ageing manifests in demography, phenotypic traits, and across shifts in environment. Through my work, I have gained quantitative skills in diverse forms of analysis, from time series and survival analyses, to computer-vision and GIS methods. My work involved primary data collection, as well as the analysis of existing datasets, all involving messy, real-world biological data.

EDUCATION

2024 2019 University of Edinburgh

PhD Ecology & Evolution

Q Edinburgh, UK

Thesis: Plasticity of ageing in burying beetles

2018 2017

Exeter University

MSc Evolutionary & Behavioural Ecology

Exeter, UK

Thesis: Ageing in female mate choice in Drosophila simulans

2016 2012 **Trinity College Dublin**

BA Mod(Hons) Zoology

Oublin, Ireland



PROFESSIONAL EXPERIENCE

Present Nov, 2024

Ashworth Demonstrator - general statistics support

University of Edinburgh

♀ Edinburgh, UK

- Provide support for statistics and R coding for 4th year thesis projects in Zoology, Ecology, Evolutionary Biology, Immunology, and Plant Sciences.
- · Lead tutorials on foundational concepts of statistics interpretation of data, study design, analyses, and inference.
- Prepare and deliver existing teaching materials lectures on introductory statistics.
- · Create new teaching materials through RMarkdown tutorials on statistical analyses, bridging understanding of simple t-tests and ANOVAs to (generalised) linear models and mixed models.

CONTACT INFO

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Skynandelaney.github.io

in kynan-delaney

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For more information, please contact me via email.

SKILLS

Languages

R, Python, and SQL

Data processing and visualisation

Tidyverse tools, flexdashboard, and RMarkdown Shiny for R/Python PyQt and Dash Postgres and SQLite

Analysis

Power analyses GLMMs, GAMMs, Survival Analyses, and Time-series analyses Mark-recapture Population Modelling Bayesian & Frequentist methods Computer Vision methods

Technical Skills

Academic Writing and Presentation Field Data-Collection Familiar with Debian-based Linux distributions 3D Design, Scanning, and Printing Soldering, Electronics, and Data-Logger Configuration.

2024

Advisor Post/Undergraduate Projects

University of Edinburgh

♀ Edinburgh, UK

2022

- MSc Thesis: Using machine learning to automate the identification of specific individuals belonging to a local burying beetle population.
- Honours Thesis: The Effect of Ageing on the Colour of Burying Beetles, Nicrophorus vespilloides.
- **Honours Thesis**: Estimating genetic constraints on the evolution of carapace patterns in a burying beetle, *Nicrophorus vespilloides*.
- **Honours Thesis**: The Effect of Age and Experience on Flight Ability and Lifespan in the Burying Beetle, *Nicrophorus vespilloides*.

2021

Postgraduate Course Demonstrator

University of Edinburgh

♀ Edinburgh, UK

2020

- Provided in-person support to MSc students on an introductory statistics course (PGBI11003) for MSc/Diploma in Bioinformatics.
- Led remote-learning sessions concerning theory and practical applications of statistical methods.

2019

Technical Support Specialist

Voxpro

Oublin, Ireland

- Provided technical support over phone and email for addressing hardware and software issues with smart-home security installations.
- Involved direct communication with customers, engineers, and identification of emerging trends for team training.



PUBLICATIONS

2025

High-volume, computer-aided recognition of small invertebrates with discrete patterning

Under review

Delaney, K. L., Delaney, E., Moorad, J.

2025

Persistent maternal age effects on male offspring fitness traits in a wild mammal population

Under review

Ravindran, S., **Delaney, K. L.,**, Bal, X., Pilkington, J. G., Pemberton, J. M., Moorad, J. A., Froy, H., Nussey, D. H.

2019

Flexible polyandry in female flies is an adaptive response to infertile males

Behavioral Ecology, 30(6), 1715-1724.

Sutter, A., Travers, L. M., Oku, K., **Delaney, K. L.**, Store, S. J., Price, T. A., & Wedell, N.



COMMUNICATIONS

2024

Ageing across environments - how burying beetles age in the laboratory and the wild

Talk for the Scottish Ecological Ageing Research Group

♥ Edinburgh, UK

Plasticity of ageing in burying beetles 2023

Talk for the Darwin Trust Symposium

Q Edinburgh, UK

Ageing in wild- and lab-living beetles 2023

Talk for the European Meeting for PhD Students in Evolutionary Biology

Millport, UK

Maternal presence influences vital rates in a burying beetle 2020 species with facultative parental care

Poster for Evolutionary Demography 7 K. Delaney & J. Moorad

GRANTS AND FUNDING

Moray Endowment Fund

Project: Plasticity of ageing in burying beetles £1949.30

REFERENCES

Dr. Jacob Moorad

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Dr. Nick Colegrave

• N.Colegrave@ed.ac.uk

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2020