Hugh Richards MSci

16 Briar Furlong, Ambrosden, Oxfordshire, UK — hugh.m.richards96@gmail.com — (+44) 07712629173
untanglingthebank.com— linkedin.com/in/hugh-richards-eco
Current professional role: Assistant Ecologist @ Aspect Ecology Ltd.

EDUCATION

University of Bristol, Bristol — Enrolled: September 2016 — Graduated: July 2020
Biology MSci — **First class honours**

Relevant Theoretical Modules: plant science, conservation science, evolutionary ecology, behavioural ecology
Relevant Practical Experience: master's project (79%), statistical analysis and modelling (R), UK-based field ecology projects, scientific communication, literature review

RESEARCH EXPERIENCE

Master's Thesis — October 2019 — June 2020

- Examining *Lemur catta* vocalisation and its relevance to social dominance through a novel social network approach
- Cemented confidence in study design, data collection, analysis, interpretation, and communication
- Elevated experience in and proficiency with R: approx. 5000 lines of code, applying novel analytical methods
- Extensive synthesis of literature and analysis, culminating in an 8000-word thesis "approaching publication quality"

University Experience — September 2016 — June 2020

- **'Understanding Data':** comprehensive training in data collection and manipulation, running custom analyses, and using R packages, covering: fundamental statistical tools (e.g. ANOVAs, linear models, etc.), more complex expansions of these (e.g. mixed effects models), and introductions to Bayesian approaches
- **Bridle Group Summer Internship:** *Pararge aegeria* transcriptome extraction; first experience collaborating in a research group setting
- **'Advanced Practical Skills':** Third year module comprising four mini-projects (one being field ecology: comparing species richness between grasslands), taking hypothesis generation through data collection to analysis, interpretation, reporting, and communication

Self-motivated Projects — Since 2020

- Took a novel analytical approach (network-based diffusion analysis) to master's thesis data with hopes of publishing a new method for behavioural ecology in *Methods in Ecology and Evolution*
- Continued to develop an ever-growing skillset and love for coding, statistical analysis and modelling, most recently by undertaking online training in mixed effects modelling
- Ongoing involvement with conservation projects, including: translocating a Schedule 8 plant *(Cynoglossum germanicum)* and modelling future translocation success; and untangling the effect of weather on *Gentianella campestris* population fluctuation
  — see my website for more detail untanglingthebank.com
- Currently working with a data analyst to create a new machine learning algorithm for high-accuracy identification of *Pipistrellus pipistrellus* and *Pipistrellus pygmaeus* sonograms

ADDITIONAL RELEVANT SKILLS

- **Botany:** taxonomic classification of plants, using anatomical features and field keys, is a primary aspect of my job
- **Habitat Surveys**: habitat classification, through botany, is also central to my work; includes calcareous grassland (for which I have undertaken specific botanical training)
- **Project Management:** be it executing my master's project or coordinating ecological surveys, effective project management has been a theme through my academic and professional exploits
- **Communication:** project success depends on good communication; my experience includes conveying ecological approaches to non-specialist audiences, outlining scientific results, and delegation of necessary actions to enable effective team work

MEMBERSHIP OF PROFESSIONAL BODIES

British Ecological Society — since December 2021
Royal Society of Biology — since April 2021

IN MY SPARE TIME

Habitat management at Shotover Country Park — Long-distance running — Immersion in the natural world — Writing poetry — Good books on sunny sofas — Perfecting my dhal and chapati recipes