

COAUTHORSHIP DECLARATION

All chapters in this dissertation have been extracted from co-authored work.

Chapter 1 and **Chapter 2** have been published as a pre-print in *bioRxiv*. For **Chapter 1** (p. 866772; DOI: [10.1101/866772](https://doi.org/10.1101/866772)) the candidate analysed all data (100%), wrote the manuscript's first draft (100%), and contributed to data collection (20%) and data cleaning (80%). For **Chapter 2** (p. 865279; DOI: [10.1101/865279](https://doi.org/10.1101/865279)) the candidate analysed all data (100%) and wrote the manuscript's first draft (100%).

Chapter 3 has been published in *Journal of Ecology* (107.4, pp. 1365–2745 DOI: [10.1111/1365-2745.13147](https://doi.org/10.1111/1365-2745.13147)). The candidate analysed all data (100%), wrote the the manuscript's first draft (100%), and contributed to the development of the theoretical framework (80%).

Finally, **Appendix A** has been published in *Ecology* (98.10, pp. 2640–2652; DOI: [10.1002/ecy.1955](https://doi.org/10.1002/ecy.1955)). The candidate contributed to data analysis (60%), manuscript writing (40%), and data visualisation (70%).

On behalf of all co-authors, the undersigned certifies that: the above statement correctly reflects the nature and extent of the PhD candidate's contribution to this co-authored work; and in cases where the candidate was the lead author of the co-authored work he wrote the text.

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