

# Rebecca A. Senior

British rebecca.a.senior@gmail.com  
rasenior.rbind.io rasenior senior.rebecca

## Professional Appointments

- 2022 – . . . . . ♦ Assistant Professor, Department of Biosciences, Durham University, UK.  
2019 – 2021 ♦ Postdoctoral Researcher, Princeton University, USA. PI: Prof David Wilcove.

## Education

- 2014 – 2018 ♦ Ph.D., University of Sheffield, UK.  
Supervisors: Prof David Edwards and Prof Jane Hill  
*The impacts of forest conversion and degradation on climate resilience in the tropics.*  
Investigating how loss and degradation of tropical forests affects species' exposure to climate change and their ability to respond, particularly by exploiting microclimates or shifts in distribution.
- 2010 – 2013 ♦ B.A. (Hons) Natural Sciences, University of Cambridge, UK.  
First Class Honours

## Research Publications (selected)

My h-index = 14, i10-index = 15, and total citations = 3971 (as per Google Scholar Citations).

- 1 Ma, L., Conradie, S. R., Crawford, C. L., Gardner, A. S., Kearney, M. R., Maclean, I. M. D., ... Wilcove, D. S. (2023). Global patterns of climate change impacts on desert bird communities. *Nature Communications*, 14(1), 211. <https://doi.org/10.1038/s41467-023-35814-8>
- 2 Senior, R. A., Oliveira, B. F., Dale, J., & Scheffers, B. R. (2022). Wildlife trade targets colorful birds and threatens the aesthetic value of nature. *Current Biology*, 32(19), 4299–4305.e4. <https://doi.org/10.1016/j.cub.2022.07.066>
- 3 Lembrechts, J. J., van den Hoogen, J., Aalto, J., Ashcroft, M. B., ..., Senior, R. A., ... Lenoir, J. (2021). Global maps of soil temperature. *Global Change Biology*, n/a(n/a). <https://doi.org/https://doi.org/10.1111/gcb.16060>
- 4 Senior, R. A. (2020). Hot and bothered: The role of behaviour and microclimates in buffering species from rising temperatures. *Journal of Animal Ecology*.
- 5 Jucker, T., Jackson, T., Zellweger, F., Swinfield, T., ..., Senior, R. A., ... Coomes, D. A. (2019). A research agenda for microclimate ecology in human-modified tropical forests. *Frontiers in Forests and Global Change*, 2. <https://doi.org/10.3389/ffgc.2019.00092>
- 6 Senior, R. A., Hill, J. K., & Edwards, D. P. (2019a). Global loss of climate connectivity in tropical forests. *Nature Climate Change*.
- 7 Senior, R. A., Hill, J. K., & Edwards, D. P. (2019b). ThermStats: An R package for quantifying surface thermal heterogeneity in assessments of microclimates. *Methods in Ecology and Evolution*.
- 8 Senior, R. A., Hill, J. K., Benedick, S., & Edwards, D. P. (2018). Tropical forests are thermally buffered despite intensive selective logging [Cover article]. *Global Change Biology*.
- 9 Scheffers, B. R., Edwards, D. P., Macdonald, S. L., Senior, R. A., Andriamahohatra, L. R., Roslan, N., ... Williams, S. E. (2017). Extreme thermal heterogeneity in structurally complex tropical rain forests. *Biotropica*, 49(1), 35–44. <https://doi.org/10.1111/btp.12355>
- 10 Senior, R. A., Hill, J. K., González del Pliego, P., Goode, L. K., & Edwards, D. P. (2017). A pantropical analysis of the impacts of forest degradation and conversion on local temperature. *Ecology and Evolution*.
- 11 Newbold, T., Hudson, L. N., Hill, S. L. L., Contu, S., Lysenko, I., Senior, R. A., ... Purvis, A. (2015). Global effects of land use on local terrestrial biodiversity. *Nature*, 520(7545), 45–50. <https://doi.org/10.1038/nature14324>

## Grants and Awards

- 2022
  - ◇ Durham University Seedcorn Fund (£15,000), rewilding of microclimates
  - ◇ Royal Geographical Society (£2,960), fieldwork & workshops with Oman Botanic Garden
  - ◇ Anglo-Omani Society (£6,000), fieldwork & workshops with Oman Botanic Garden
- 2021
  - ◇ HMEI internship funding (USD \$6,600), to host an intern in summer 2021
- 2018
  - ◇ ACCE Extension for Publication (£3,600), to prepare & submit a high impact manuscript
  - ◇ British Ecological Society travel grant (£500), to attend ATBC Annual Meeting
- 2016
  - ◇ ACCE Placement Support (£1,500), 3-month placement at Rewilding Britain, UK
  - ◇ Departmental travel fund (£800), to attend Conservation Asia 2016
- 2014
  - ◇ NERC Doctoral Training Partnership studentship (£83,936)

## Invited Talks (selected)

- 2023
  - ◇ Alfred Wallace seminar, Universidade de Évora, Portugal.
- 2022
  - ◇ Conservation seminar, University of Sheffield, UK.
  - ◇ Keynote Speaker, Microclimate Ecology & Biogeography Conference 2022, University of Antwerp, Belgium.
  - ◇ CCI seminar, Cambridge Conservation Initiative, Cambridge, UK.
- 2021
  - ◇ Biodiversity & Global Change seminar, Yale University, USA.
  - ◇ Connectivity under climate change in tropical forests, ESA 2020, Salt Lake City, USA.
- 2019
  - ◇ Forest loss and climate change in the tropics, University of Florida, USA.

## Conferences (selected)

- 1 Senior, R. A., & Wilcove, D. S. (2019). *Effectiveness of different conservation strategies for recovering threatened species*. Oral presentation at BES Annual Meeting.
- 2 Senior, R. A., Hill, J. K., & Edwards, D. P. (2018a). *Global loss of climate connectivity in tropical forests*. Oral presentation at ATBC Annual Meeting.
- 3 Senior, R. A., Hill, J. K., & Edwards, D. P. (2018b). *Global loss of climate connectivity in tropical forests*. Oral presentation at SCCS Europe.
- 4 Senior, R. A., Hill, J. K., & Edwards, D. P. (2016). *Are degraded forests climate change ready?* [*Shortlisted for best student talk*]. Oral presentation at Conservation Asia 2016, joint meeting of the Society for Conservation Biology (SCB) Asia section; the Association for Tropical Biology; Conservation (ATBC) Asia-Pacific chapter. National University of Singapore, Singapore.

## Service

- Invited peer review
  - ◇ Reviewer for over 20 journals, including:  
Biological Conservation ◇ Ecography ◇ Environmental Research Letters  
Global Change Biology ◇ Global Ecology and Biogeography  
Global Environmental Change ◇ Journal of Animal Ecology  
Methods in Ecology and Evolution ◇ Nature Ecology & Evolution
- Invited grant review
  - ◇ Royal Geographical Society  
UKRI Future Leaders Fellowship
- Committee membership
  - ◇ NERC Liason Group, Durham University  
Organising and Scientific Steering Committee, Species on the Move 2023
- Professional affiliations
  - ◇ British Ecological Society member (BES)  
British Mycological Society member (BMS)  
Royal Geographical Society fellow (RGS)