Sebastian **Dunnett, PhD**

IPBES Nexus Fellow | Interdisciplinary Spatial Ecologist

+44 (0)7749003592 | sebdunnett@gmail.com | sebdunnett.com | 0000-0002-4238-2508

Summary

London-based interdisciplinary ecologist with published quantitative spatial research on global environmental change and proven experience working at the science-policy interface. One of ~150 experts globally contributing to the upcoming IPBES Nexus Assessment: summarising the interlinkages between biodiversity, water, food and health.

Publications

1. **Dunnett, S.**, Holland, R. A., Taylor, G., & Eigenbrod, F. (2022). Reply to Niebuhr et al.: Infrastructure impacts must always be assessed locally. *Proceedings of the National Academy of Sciences*, *119*(48), e2214469119. https://doi.org/10.1073/pnas.2214469119
2. **Dunnett, S.**, Holland, R. A., Taylor, G., & Eigenbrod, F. (2022). Reply to Pérez-García et al.: Perfect is the enemy of good. *Proceedings of the National Academy of Sciences*, *119*(33), e2206500119. https://doi.org/10.1073/pnas.2206500119
3. **Dunnett, S.**, Holland, R. A., Taylor, G., & Eigenbrod, F. (2022). Predicted wind and solar energy expansion has minimal overlap with multiple conservation priorities across global regions. *Proceedings of the National Academy of Sciences*, *119*(6). https://doi.org/10.1073/pnas.2104764119
4. Delafield, G., Donnison, C., Roddis, P., Arvanitopoulos, T., Sfyridis, A., **Dunnett, S.**, Ball, T., & Logan, K. G. (2021). Conceptual framework for balancing society and nature in net-zero energy transitions. *Environmental Science & Policy*, *125*, 189–201. https://doi.org/10.1016/j.envsci.2021.08.021
5. Eigenbrod, F., Beckmann, M., **Dunnett, S.**, Graham, L., Holland, R. A., Meyfroidt, P., Seppelt, R., Song, X.-P., Spake, R., Václavík, T., & Verburg, P. H. (2020). Identifying Agricultural Frontiers for Modeling Global Cropland Expansion. *One Earth*, *3*(4), 504–514. https://doi.org/10.1016/j.oneear.2020.09.006
6. **Dunnett, S.**, Sorichetta, A., Taylor, G., & Eigenbrod, F. (2020). Harmonised global datasets of wind and solar farm locations and power. *Scientific Data*, *7*(130). https://doi.org/10.1038/s41597-020-0469-8
7. Bull, J. W., Brauneder, K., Darbi, M., Van Teeffelen, A. J. A., Quétier, F., Brooks, S. E., **Dunnett, S.**, & Strange, N. (2018). Data transparency regarding the implementation of European "no net loss" biodiversity policies. *Biological Conservation*, *218*. https://doi.org/10.1016/j.biocon.2017.12.002

Academic Service

Ad hoc peer review

- *Nature Scientific Data*
- *Earth System Science Data*
- *Data*

Education

University of Southampton — *Southampton, UK*

PhD: Potential spatial trade-offs between renewable energy expansion and biodiversity conservation — *2016-2020*

Imperial College London — *London, UK*

Environmental Technology MSc Distinction — *2011-2012*

University of Cambridge — *Cambridge, UK*

BA Natural Sciences 2.1 — *2008-2011*

Awards

2022 Doctoral College Research Award (School runner-up), University of Southampton
2017 Emerging Leader, Caux Dialogue on Environment and Security
2016 NERC PhD studentship

Teaching Experience

Imperial College London — *London, UK*

Guest Lecturer, Environmental Technology MSc — *2022—*

- Annual guest lecture on *Managing People and Nature in an Urban Borough*, given as part of the Urban Sustainable Environments option.

University of Southampton — *Southampton, UK*

Postgraduate Teaching Assistant — *2016-2020*

- *GEOG1010 - Geographical, Quantitative and Field Skills*: leading undergraduate computer practical sessions using statistical software (Stata), marking and moderating discussion boards.
- *ENVS6034 - Advanced Quantitative Methods*: assisting master's computer practical sessions using statistical software (R).
- *GEOG6109 - Programming for GIS and Spatial Analyses*: assisting master's computer practical sessions using statistical software (Python).

Employment

UN Environment Programme - World Conservation Monitoring Centre — *Cambridge, UK*

Senior Programme Officer, Nature Economy — *2022-*

- Providing technical leadership across a team of 40 staff, as well as developing a work programme supporting extractive and renewable energy companies measure and manage biodiversity impacts while delivering a green energy transition to meet ambitious climate targets.

Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services — *Bonn, Germany*

Fellow, Nexus Assessment — *2022-*

- Working with over 150 other nominated experts globally to strengthen the science-policy interface for biodiversity by synthesising the latest research and presenting options to deliver biodiversity conservation within the environmental nexus of water, food, health and climate.

London Borough of Hammersmith and Fulham — *London, UK*

Ecology Lead - Climate Emergency — *2020-2022*

- Led the ecology theme in a new cross-cutting Climate & Ecology strategy, coordinating with service lines to embed across the organisation. Worked to strengthen the business case for private investment in green infrastructure projects through commercial partnerships.
- Ensured local government action contributes to international policy frameworks: became a signatory to the Edinburgh Declaration and now an active participant in CitiesWithNature, a partnership of ICLEI, The Nature Conservancy and IUCN. Responsible for one direct report.

UN Environment Programme - World Conservation Monitoring Centre — *Cambridge, UK*

Programme Officer, Business and Biodiversity — *2014-2016*

- Managed the production of a feasibility report for multilateral finance institutions (MFIs) on marine "no net loss" of biodiversity. Provided policy support researching environmental oil and gas legislation in East Africa and seconded to BP in London to provide technical support.

2014— CBRE, Energy and Sustainability Analyst

2012-2014 Researcher, Best Foot Forward (now Anthesis Group)

Memberships

2017— Member of the Royal Society of Biology

2017— British Ecological Society

2015-2020 Society for Conservation Biology

Conferences

Presentations

2021	*Predicting future energy and biodiversity trade-offs globally*, EGU General Assembly	*Online*
2019	*Renewable energy and non-renewable biodiversity*, UKERC Annual Assembly	*London, UK*
2018	*Infinite energy on finite land*, BES Macroecology	*St Andrews, UK*

Posters

2018	*Infinite energy on finite land: land cover and use impacts of renewable energy, biodiversity protection, and agricultural production*, SCCS	*Cambridge, UK*

References

Available on request