

## Log of CS publications

### 2024

Thomas, A., F. Seaton, E. Dhiedt, B.J. Cosby, C. Feeney, I. Lebron, L. Maskell, C. Wood, S. Reinsch. B.A. Emmett, D.A. Robinson. 2024. Topsoil porosity prediction across habitats at large scales using environmental variables. *Science of The Total Environment*, 922, p.171158.

### 2023

Lebron, I., Cooper, D.M., Brentegani, M.A., Bentley, L.A., Dos Santos Pereira, G., Keenan, P., Cosby, J.B., Emmet, B. and Robinson, D.A., 2023. Soil carbon determination for long-term monitoring revisited using thermo-gravimetric analysis. *Vadose Zone Journal*, p.e20300.

Levy, Peter ; Bentley, Laura; Emmett, Bridget ; Garbutt, Angus ; Keith, Aidan ; Lebron, Inma ; Robinson, David . (2023). The effects of land use on soil carbon stocks in the UK. *EGUSphere*, egusphere-2023-1681. 26, pp. <https://doi.org/10.5194/egusphere-2023-1681>

Feeney, C.J., Robinson, D.A., Keith, A.M., Vigier, A., Bentley, L., Smith, R.P., Garbutt, A., Maskell, L.C., Norton, L., Wood, C.M. and Cosby, B.J., 2023. Development of soil health benchmarks for managed and semi-natural landscapes. *Science of the Total Environment*, 886, p.163973.

West, B, Jones, DL, Robinson, EL, Marrs, RH, Smart, SM (2023) Model-based assessment of the impact of agri-environment scheme options and short-term climate change on plant biodiversity in temperate grasslands. *Ecol. Sol. Evidence*, DOI: 10.1002/2688-8319.12233

Staley, J T., Wolton, R., & Norton, L R. (2023). Improving and expanding hedgerows—Recommendations for a semi-natural habitat in agricultural landscapes. *Ecological Solutions and Evidence*, 4, e12209. <https://doi.org/10.1002/2688-8319.12209>

### 2022

Seaton, F.M., Robinson, D.A., Monteith, D., Lebron, I., Bürkner, P., Tomlinson, S., Emmett, B.A. and Smart, S.M., 2023. Fifty years of reduction in sulphur deposition drives recovery in soil pH and plant communities. *Journal of Ecology*, 111(2), pp.464-478.

Norton, L.R., Maskell, L.M., Wagner, M., Wood, C.M., Pinder, A.P., Brentegani, M. (2022) Can Pasture fed livestock farming practices improve the ecological condition of grassland in Great Britain? *Ecological Solutions and Evidence Ecological Solutions and Evidence*, 3, <https://doi.org/e12191. 10.1002/2688-8319.12191>

Norton, L. R, Maskell, L. C., McVittie, A., Smith, L., Wagner, M., Waterton, C., Watson, C. 2022. Learning from innovative practitioners: Evidence for the sustainability and resilience of pasture fed livestock systems. *Frontiers in Sustainable Food Systems*, 6, 1012691.

<https://doi.org/10.3389/fsufs.2022.1012691>

Seaton, F.M., Griffiths, R.I., Goodall, T., Lebron, I., Norton, L.R. (2022) Pasture age impacts soil fungal composition while bacteria respond to soil chemistry, Agriculture, Ecosystems & Environment 330, ISSN 0167-8809, <https://doi.org/10.1016/j.agee.2022.107900>.

Robinson, D.A., Thomas, A., Reinsch, S., Lebron, I., Feeney, C.J., Maskell, L.C., Wood, C.M., Seaton, F.M., Emmett, B.A., & Cosby, B.J (2022) Analytical modelling of soil porosity and bulk density across the soil organic matter and land-use continuum. Scientific Reports 12: 7085. | <https://doi.org/10.1038/s41598-022-11099-7>

Feeney, C.J., Cosby, B.J., Robinson, D.A., Thomas, A., Emmett, B.A. & Henrys, P. (2022) Multiple soil map comparison highlights challenges for predicting topsoil organic carbon concentration at national scale. Scientific Reports 12: 1379. <https://doi.org/10.1038/s41598-022-05476-5>

## 2021

Seaton, FM; Barrett, G; Burden, A; Creer, S; Fitos, E; Garbutt, A; Griffiths, RI; Henrys, P; Jones, DL; Keenan, P; Keith, A; Lebron, I; Maskell, L; Pereira, MG; Reinsch, S; Smart, SM; Williams, B; Emmett, BA; and Robinson, DA (2021) Soil health cluster analysis based on national monitoring of soil indicators. Eur. J Soil Sci. 72(6):2414-2429 <https://doi.org/10.1111/ejss.12958>

Simfukwe, Paul; Hill, Paul W.; **Emmett, Bridget A.**; Jones, Davey L. 2021. Identification and predictability of soil quality indicators from conventional soil and vegetation classifications. *PLoS ONE*, 16 (10), e0248665. 22 pp. <https://doi.org/10.1371/journal.pone.0248665>

## 2020

Maskell, L.C., Henrys, P., Pescott, O., Smart, S. 2020. Long-term trends in the distribution, abundance and impact of native ‘injurious’ weeds. <https://doi.org/10.1111/avsc.12518> Applied vegetation Science. 23, 635-647

Keith, A.M.; Dodd, B.A.; Turner, G.; Vane, C.H.; Wood, C.M. (2020). Soil mid-infrared spectroscopy data from arable and grassland in Countryside Survey, Great Britain 2007. NERC Environmental Information Data Centre. <https://doi.org/10.5285/d66ca0a6-403d-4f5a-bef1-8ee177f1e1b3>

Keith, A.M. ; Cave, M.R.; Dodd, B.A.; Smart, S.M.; Turner, G.; Tye, A.M.; Wood, C.M. (2020). Soil aggregate stability data from arable and grassland in Countryside Survey, Great Britain 2007 . NERC Environmental Information Data Centre. <https://doi.org/10.5285/be3793b6-90fb-4e4c-9515-220cc33223b9>

Thomas, A., Cosby, B.J., Henrys, P. and Emmett, B., 2020. Patterns and trends of topsoil carbon in the UK: Complex interactions of land use change, climate and pollution. *Science of the Total Environment*, 729, p.138330.

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Jarvis, S.G., Henrys, P.A., Keith, A.M., Mackay, E., Ward, S.E. and Smart, S.M., 2019. Model-based hypervolumes for complex ecological data. *Ecology*, 100(5), p.e02676.

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Caruso, T., Schaefer, I., Monson, F., Keith, A. M. (2019) Oribatid mites show how climate and latitudinal gradients in organic matter can drive large-scale biodiversity patterns of soil communities. *Journal of Biogeography* 46, 611-620.

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