

Masters Dissertation Scheme Project form

Company / Organisation Name:	Temple Group
Team / Department:	Digital Delivery
Address:	Clove Building. Maguire Street, London

Provisional title for project:

Habitat Classification and Ecoystem Services

Short description of the problem that would be addressed by the project: The importance of biodiversity is increasingly recognised in the context of climate change and more widely, ecosystem services. Increased data availability has led to predictions and assumptions (such as Living England: From Satellite Imagery to a National Scale Habitat Map - Natural England (blog.gov.uk)). There is an opportunity to validate this data and other datasets, in the context of specific character areas (such as the Cotswolds or South Downs), and the impact of biodiversity potential in relation to areas of higher deprivation in the current census. The opportunity to identify habitat restoration and increased biodiversity potential, in areas of deprivation can only lead to benefits to a sense of place and society.

Short description of the data sources that would be used in the project, and how they would be used

The Living England project, led by Natural England, is a multi-year programme delivering a satellite-derived national habitat layer in support of the Environmental Land Management (ELM) System and the Natural Capital and Ecosystem Assessment (NCEA) Pilot. The project uses a machine learning approach to image classification, developed under the Defra Living Maps project (SD1705 – Kilcoyne et al., 2017). Source Living England Habitat Map (Phase 4) - data.gov.uk

Census 2021 results are the data and supporting commentary on the population and households in England and Wales from Census 2021.

The Office for National Statistics (ONS), released the first results from Census 2021 on Tuesday 28 June 2022. The aim is to release all the main results within two years of the census. Data will be published in phases on the ONS website, and what can be produced will grow richer with each phase. You can find more information about these phases on the Census 2021 release plans(opens in a new tab) page of the ONS website.

Would any work by the student need to be carried out on site at the Company (with the exception of supervisory Meetings)?

The student would not be expected to attend the office for the duration of the study, with the exception of supervisory meetings.

Any issues of data confidentiality and IPR that would need to be resolved

All data usage must conform to the copyright of Natural England terms of use and any ancillary data provided by Temple with be subject to copyright on a case-by-case basis.

Essential skills

Spatial data manipulation, core GIS skills and a background or interest remote sensing or related disciplines

Desirable skills

Data analytics, Database management, Python

Preferred degree programmes (if any)

GIS, remote sensing or related discipline

Preferred selection method

Interview (?)

Support and training offered by the company

Support can include drawing upon advice from members of the Digital Delivery team or other specific software system support through our ESRI support and maintenance
Financial assistance offered by the company.
£500 stipend on successful completion of dissertation
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Any other comments

If there are any questions about the 2023 programme, please contact Richard Arnold at richard.arnold@ucl.ac.uk