

ONE Planet Undergraduate Research Experience Placement (REP) Scheme

Placement title: An investigation of historical land-use and current management of UK allotments

One Planet Research Theme: Climate & Climate Change | Earth System Processes | Anthropocene | Environmental Informatics

Supervisor: Dr Kate Randall
School/Department: Department of Applied Sciences
University: Northumbria University

Placement Description: The NAS represents 11 allotment regions across the UK, offering ready-made tools to study the future role of allotments within urban environments. At present, there is no central database and visual representation of historic land-use of NAS allotments. Without this information, educated site selection, potential allotment areas for urban biodiversity initiatives and the extensive allotment networks cannot be readily identified for research and policy purposes. This placement will collate, categorise, and map past and present management of UK allotment soils and neighbouring areas, providing opportunities to engage with stakeholders and outreach experience. As an additional opportunity, the student can assist in an allotment pilot soil sampling campaign. The data and map work are highly valuable to the UK NAS as an information tool for policy holders, NAS members are the general public. In addition, this work is vital to us at Northumbria, laying the foundations for future research with the NAS, and strengthen their scientific connections. Allotments have always been an attractive commodity to their users, driven by food security issues and urban horticulture, in addition to social, health and recreational benefits. Understanding the significance of historic land-use and current management on allotment soil health and productivity is vital to protect and promote their benefits. **Aim:** Collate and produce an in-depth dataset to visualise historic land-use and current management of UK allotments. **Objectives:** To meet this aim, the following three objectives must be met **(1)** Access and collate historic land-use of UK allotments and neighbouring land **(2)** Create a historic land-use map for UK allotments and neighbouring land **(3)** Collate results of a pre-distributed survey to broadly categorise current allotment management.

Timescale:

Tasks	Placement week					
	1	2	3	4	5	6
Meeting with supervisory team	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow
Identify land-use record holders	Orange					
Access & collate NAS land-use records	Blue	Blue	Blue			
Contact, access & collate non-NAS land-use record holders	Grey	Grey	Grey	Grey		
Allotment pilot soil sampling			Red			
Development of visual land-use mapping tool	Green	Green	Green	Green	Green	Green
Outreach event for NAS for National Allotments Week					Purple	
Collate current management survey results	Pink	Pink	Pink	Pink	Pink	Pink

Itemised Budget for the Project: £100 for access to private land-use data.

Prerequisites:

Essential: Map reading, ARC-GIS, Environmental Science and/or Geography related topics, Excel, data management, communication, and organisational skills.

Desirable: Knowledge of open access, public and private historical land-use records.

For more information, please contact kate.randall@northumbria.ac.uk