DECIDE: Delivering Enhanced Biodiversity Information with Adaptive Citizen Science and Intelligent Digital Engagements

Participant information sheet

**Project summary**

The people and organisations who need to use biodiversity information don’t simply require more records: they require better information. This requires us to construct good biodiversity models generated from the available data, communicate these models well, and preferentially target effort to add records from times and places that optimally improve the model outputs. This project seeks to achieve all of this by addressing three important questions. Firstly, can we enhance existing biodiversity information through near real-time, fine resolution, species distribution models? Secondly, can we make biodiversity information more accessible and useful to end users through data flows and automated data communication? Thirdly, can we encourage adaptive sampling behaviour in recorders, by using intelligent digital engagements, so that they re-deploy a portion of their effort to optimally improve biodiversity models? In this project we will produce fine-resolution distribution models for about 1000 insect species across the UK (in this study focusing on butterflies, moths and grasshoppers) using earth observation sensor data, and a data lab (an online analysis platform) to automatically update outputs as new data are available. We are using a service design approach that actively engages data users (from national to local levels) and biodiversity recorders alongside the research team. It is important to communicate these results and their uncertainty so, in collaboration, with data end users we will develop interactive and automatically-generated visualisations and text to do this effectively.

**Your involvement**

We are inviting you to take part in the study either as someone who uses biodiversity data, or as someone with an interest in species recording. Initially, we would like to conduct an interview with you in order to understand your motivations and needs. The interview will take place over the telephone or via Zoom and last approximately an hour. We may also invite you to take part in the next stage of the research, where we would like to work together to develop methods and tools.

Information you provide as part of the interview will be collated with other interviews and inform the next stages of our research as well as be written up for publication. We will not identify you, or the organisation you work for (if applicable) without your express permission. If at any stage you would like to withdraw from the study, you can freely do so, and we will withdraw your data. Your data will be anonymised and stored on secure University of York servers accessible only to the project team. Once the project is over, these data will be archived on the ReShare platform in order that other researchers can access them.

