



# Tree Conditions Dataset

Treefit is a database service offered by Cranfield University that can match some 60 tree species to areas having their optimum growing conditions across England and Wales. The system draws on the unique databases of soil, climate and landuse in Cranfield's 'LandIS' Land Information System to determine the tree suitability for nominated regions, as well as potential timber yield classes.

## Optimising tree planting by location

Treefit is a unique resource for identifying optimal conditions for some 60 species of tree, both native and imported, and deciduous and coniferous. Account is taken of the ability of tree species to cope with a range of environmental factors including seasonal water-logging, soil depth, soil acidity and fertility, droughtiness, accumulated temperature and related climatic criteria. Assessments may then be used to provide recommended management regimes, and suitability for such factors as biomass, fencing, floristry, game covert and timber.



## What is included in the Treefit dataset?

Treefit is supplied as a set of geographically-referenced database tables which may be incorporated within a GIS application. Treefit can be linked easily with other project datasets. Separate Treefit reports may also be obtained from NSRI for specific sites having an associated site questionnaire completed - obtainable at [www.landis.org.uk/treefit](http://www.landis.org.uk/treefit).

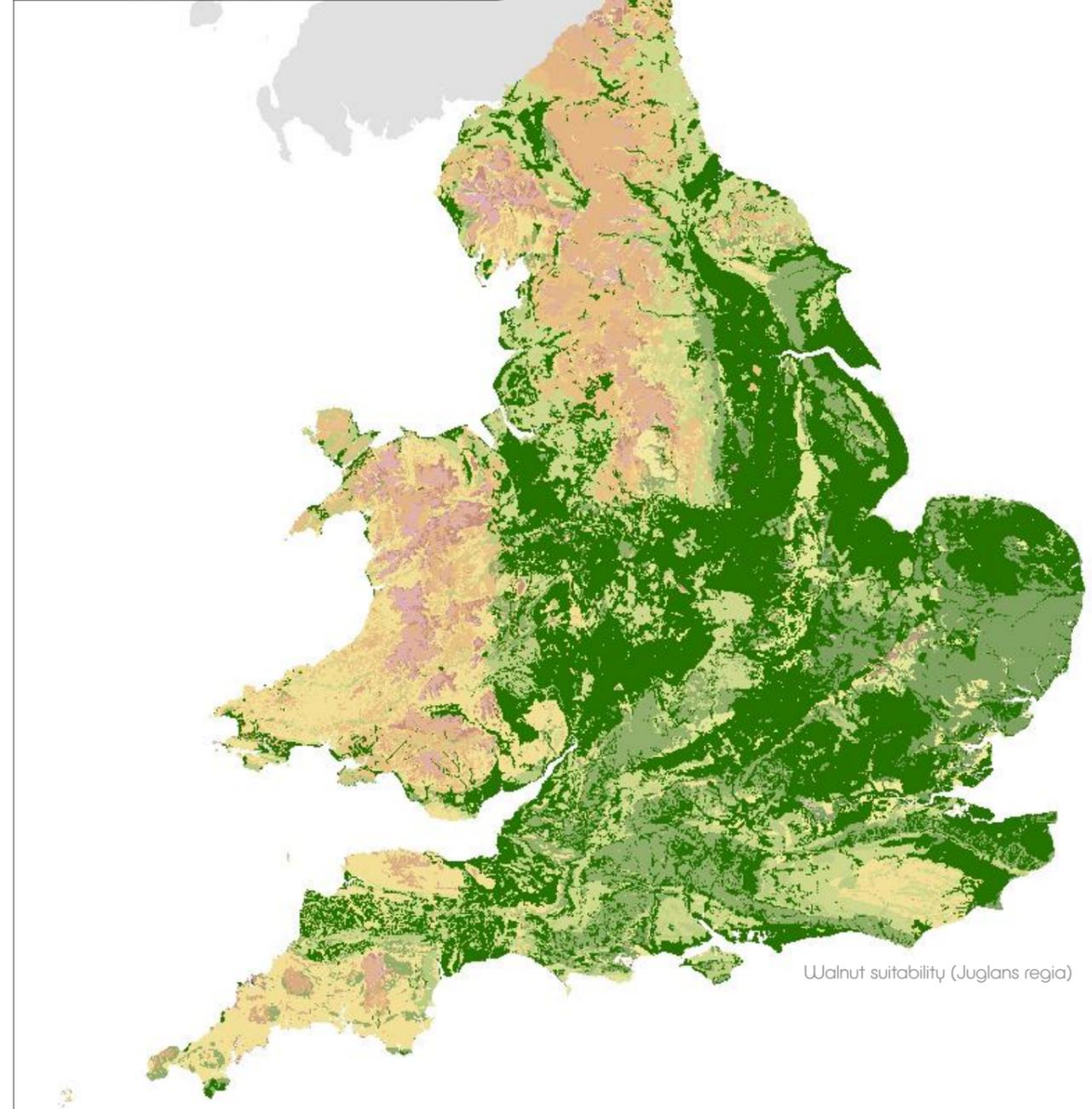
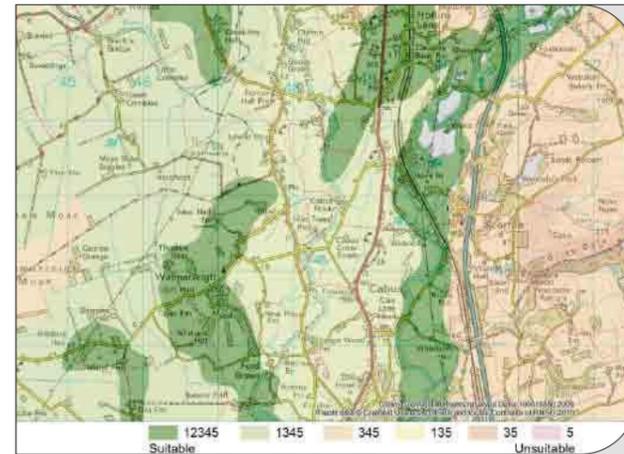
## How to use the Treefit dataset

Treefit incorporates a wealth of locational tree suitability information. The dataset can be used to characterise sites as part of a land planning process, to maximise investment potential and to match tree species to their optimal growth conditions. Treefit can be used for developing site reports, or for the production of regional silvicultural assessments.

## Treefit in use

Treefit is designed for use in a wide variety of contexts including commercial forestry, amenity planning, land resource management, community forest planning, conservation volunteering and consultancy.

- Preparation for planting grant applications
- Land restoration planning
- Community forest action planning
- Carbon offsetting studies
- Regional land use and ecosystem services policy planning



Walnut suitability (Juglans regia)