

# Building the Monster Map of Trees, and more...

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The Open University



Research funded by:

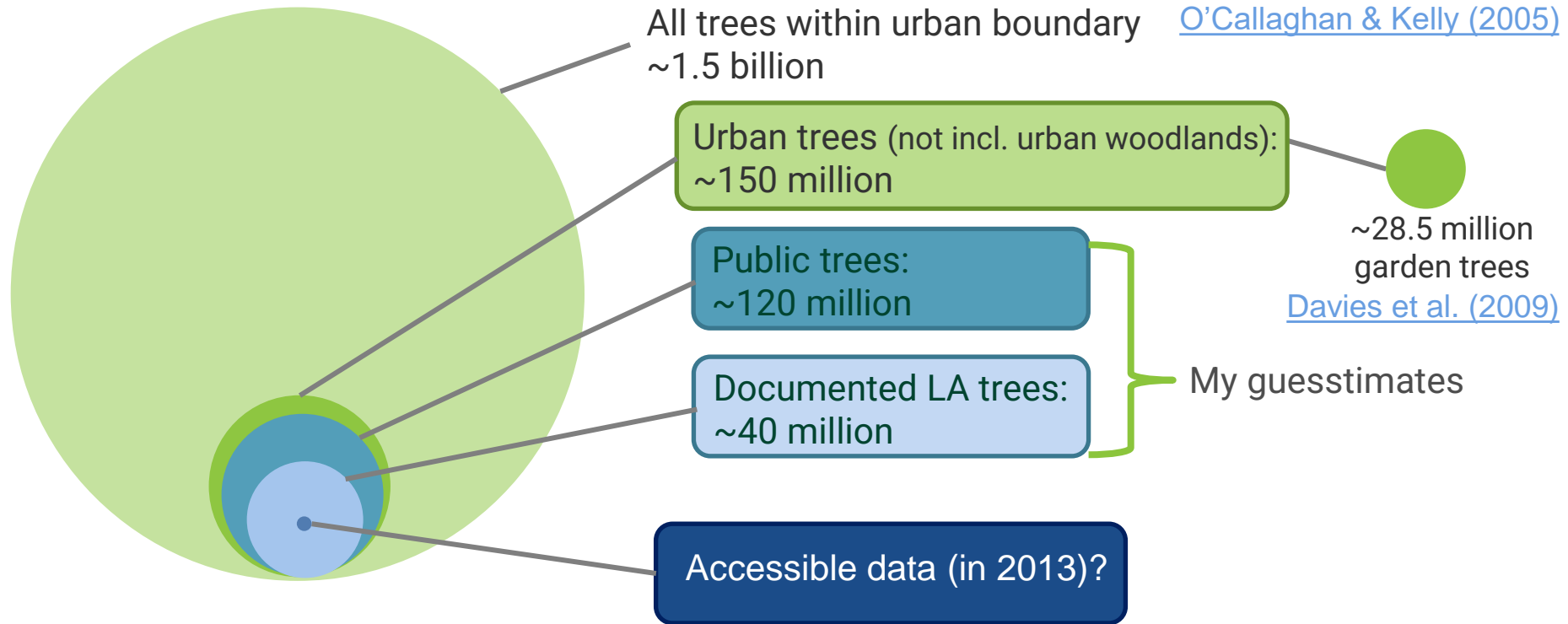


Natural Environment Research Council



Geospatial Commission

# A tiny fraction of UK's Urban trees were in open maps



# Enter Treezilla! The Monster Map of Trees

## Aims:

- 🌳 Engage a diverse range of publics and organisations in mapping, measuring and monitoring trees.
- 🌳 Build a UK-wide database of (urban) trees, including location, species, condition, pests etc.
- 🌳 Introduce members of the public to the concept of Ecosystem Services and their valuation.

# Potted history of Treezilla



- 2013: Launched funded by Wolfson Foundation
  - Partnership between OU, Forest Research and Treeconomics



- 2015-2017: NERC-funded VITAL project
  - Upgraded platform, increased database (~600k records)  
increased engagement



- 2019-2020: Geospatial Commission-funded COMMUNITREE project (FR lead)
  - Revamped platform, increased database (1.1 million records)  
brought in new collaborators, developed apps.
  - Aligned with Individual Tree Data Standard

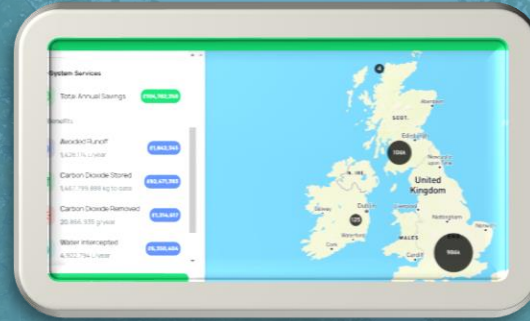


**A platform for  
citizen  
engagement**

**A tool for  
recording trees**

**A platform for  
collaborative  
surveying**

# Treezilla is:



**The UK's largest open tree map:  
>1 million records  
>600 active users**

**A resource for  
learning about  
trees**

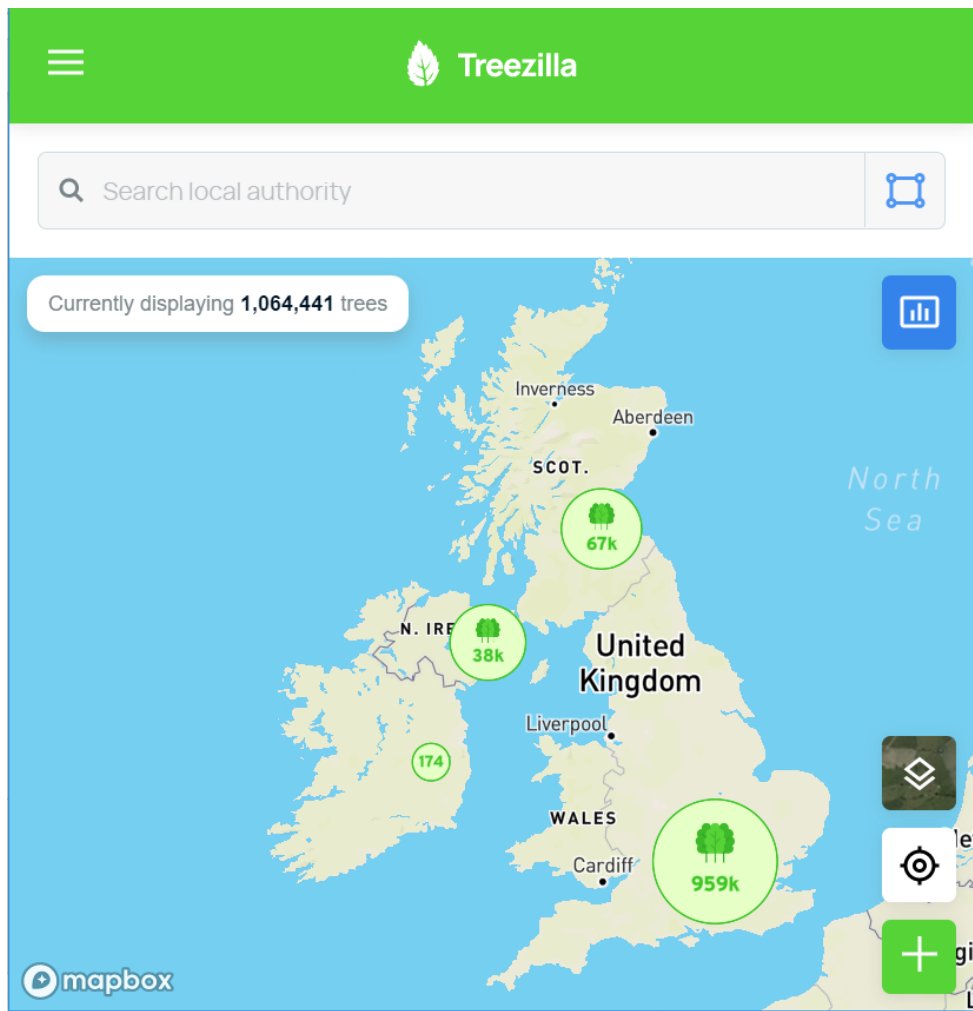
**A standardised  
tree database**

**An ecosystem  
services  
assessment tool**

# Introducing Treezilla

Simple mapping platform and tree database.

Data fields aligned to Individual Tree Data Standard\*



🔍 English Oak ✕

🔍 Milton Keynes ✕

Select record status ▼

Only show my records

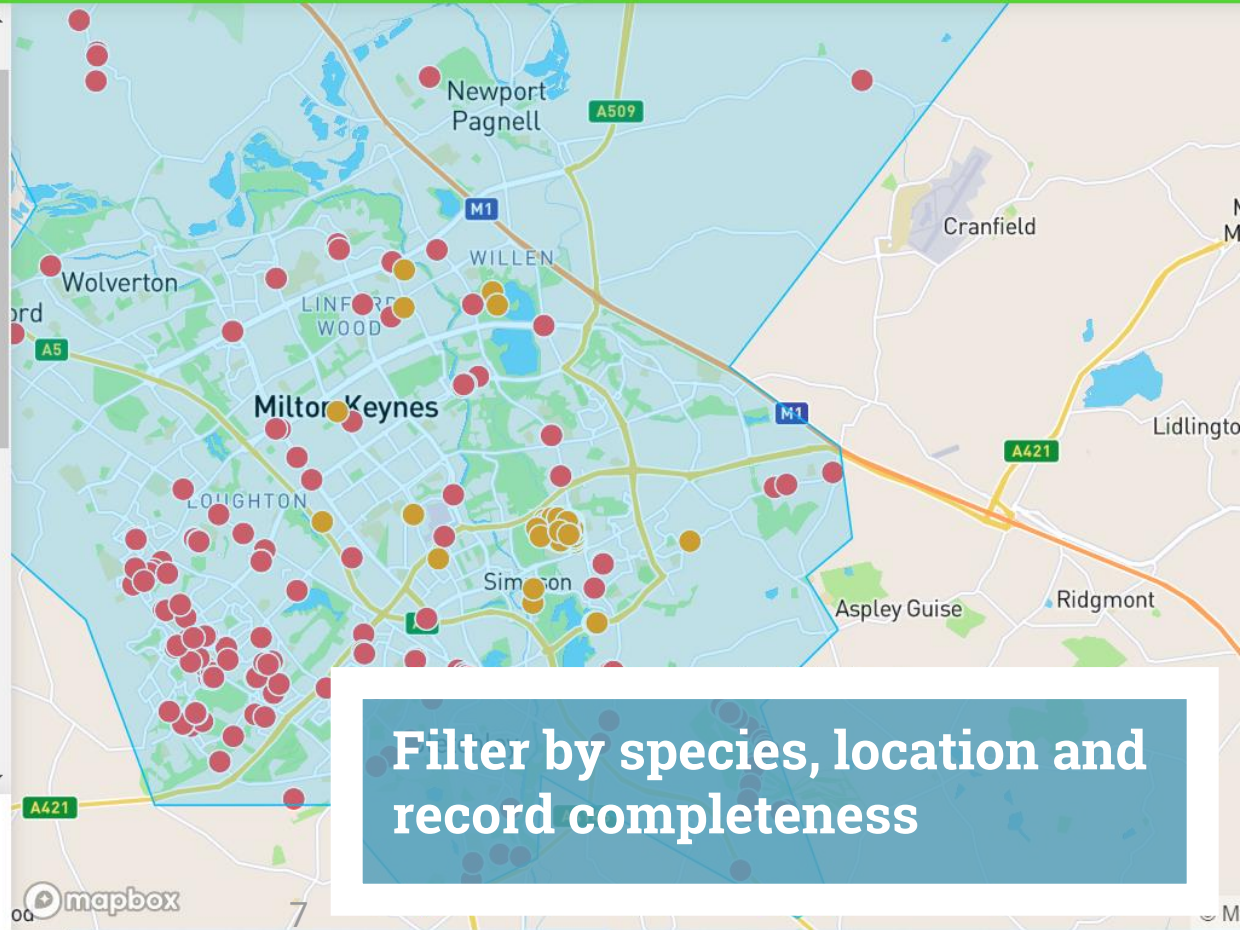
CLEAR FILTERS

Ecosystem Services

£13,761  
Annual Savings

440  
Total trees

+ ADD TREE



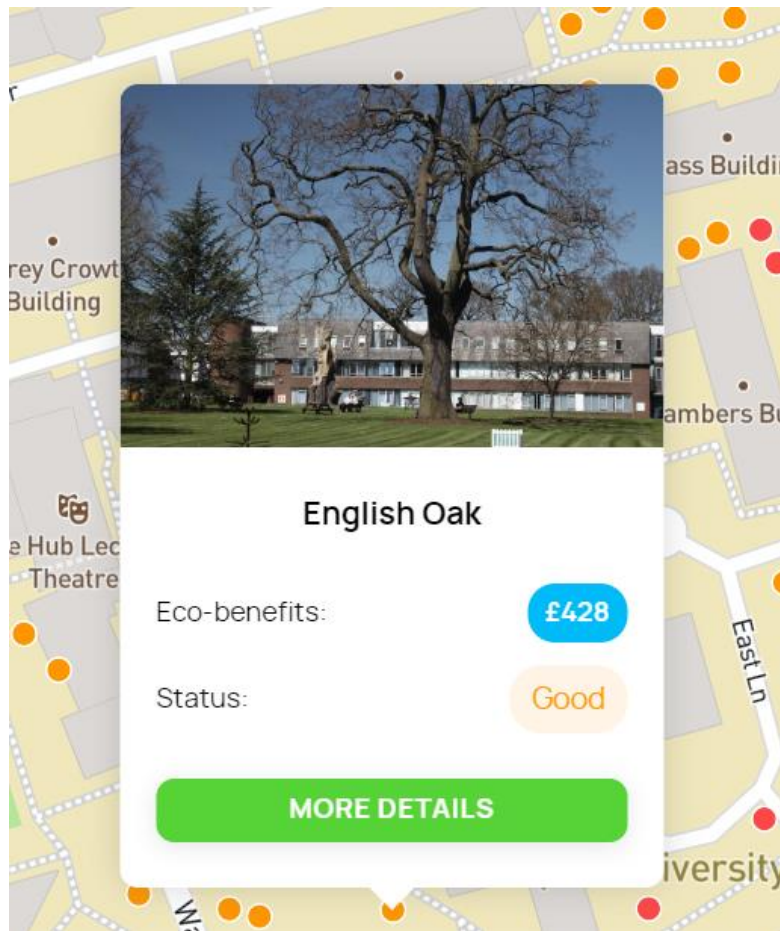
Filter by species, location and record completeness

# View and update records



## Record status:

- Needs updating:  
old or incomplete record
- Good:  
recent and relatively complete
- Excellent:  
current and complete



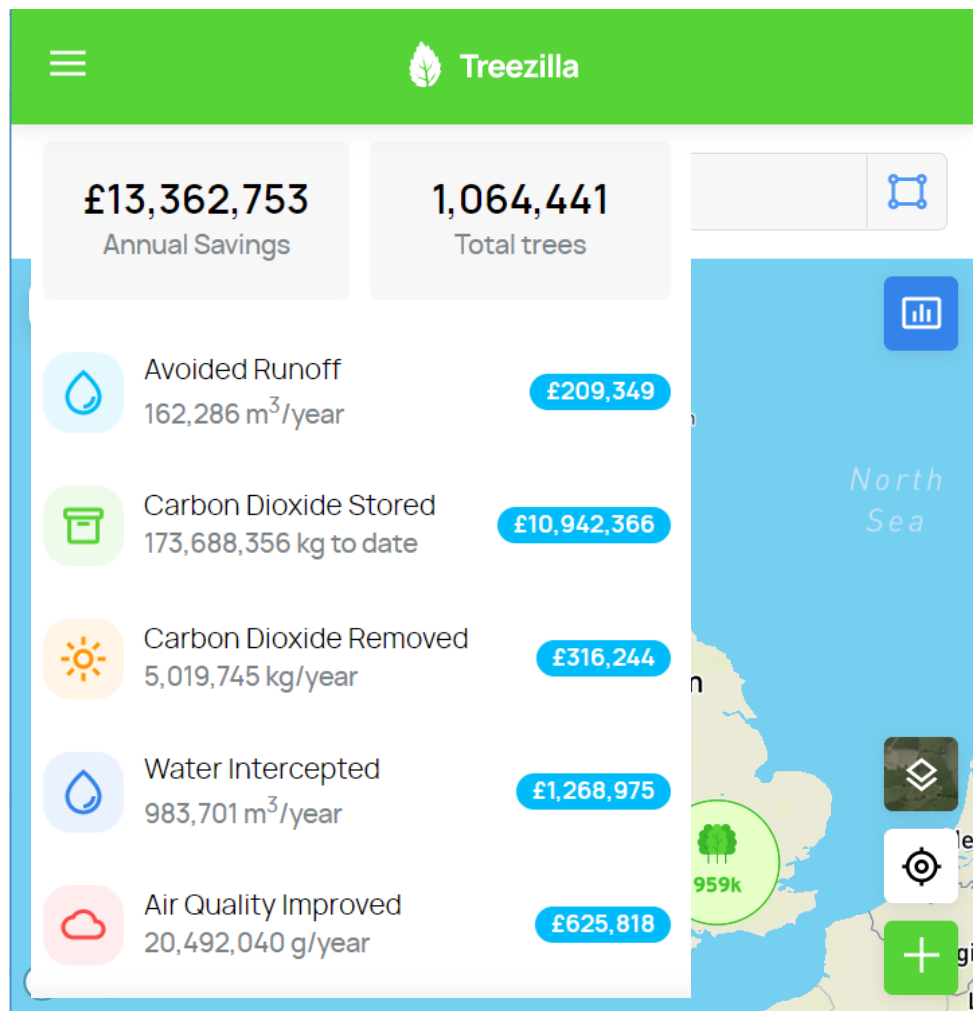


# Valuing trees

● Ecosystem Services calculations based on iTree.

● Requires location, species and CBH/DBH.

● Focus on regulating services.



# Treezilla Resources

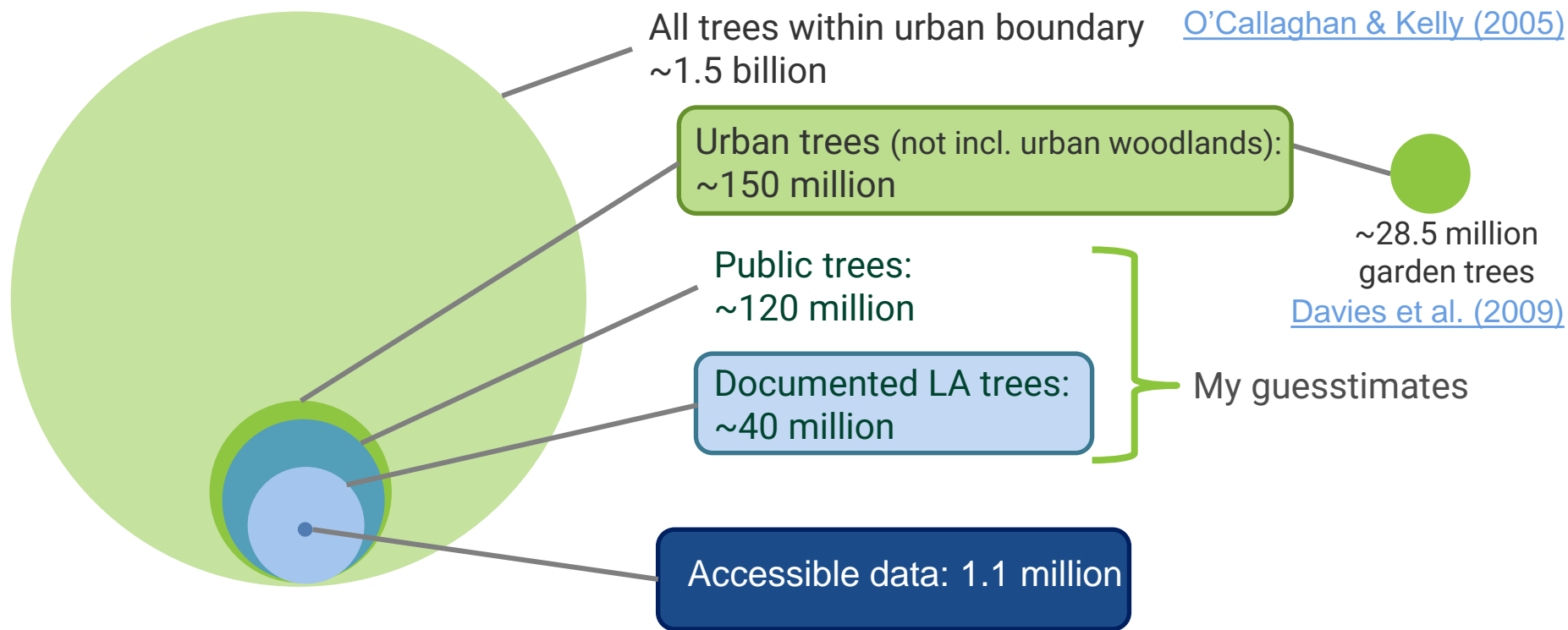
- ID Guide to ~50 most common urban species.
- 'How to Survey' guide – focused on ITDS (not for novices)

The screenshot displays the Treezilla website interface. At the top, there is a green header with a menu icon and the Treezilla logo. Below the header is a search bar with the placeholder text "Search local authority" and a location pin icon. A notification bubble indicates "Currently displaying 1,064,441 trees". The main content area features a map of the United Kingdom with a red location marker near Inverness. Two resource cards are overlaid on the map:

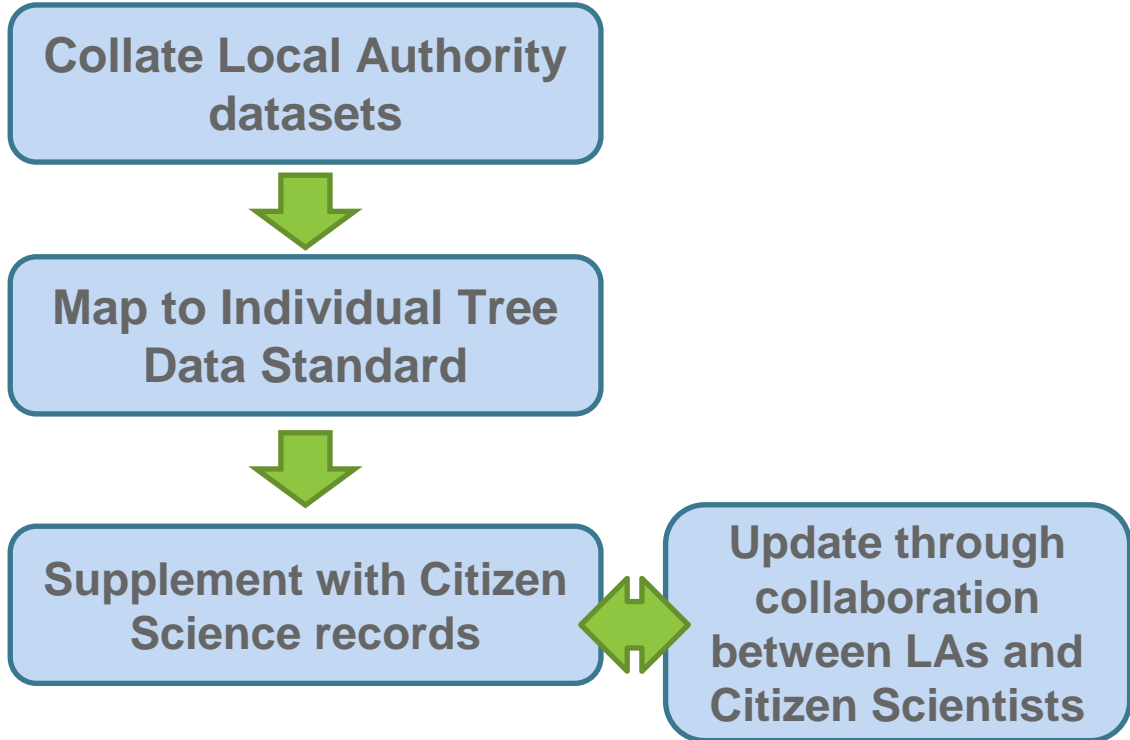
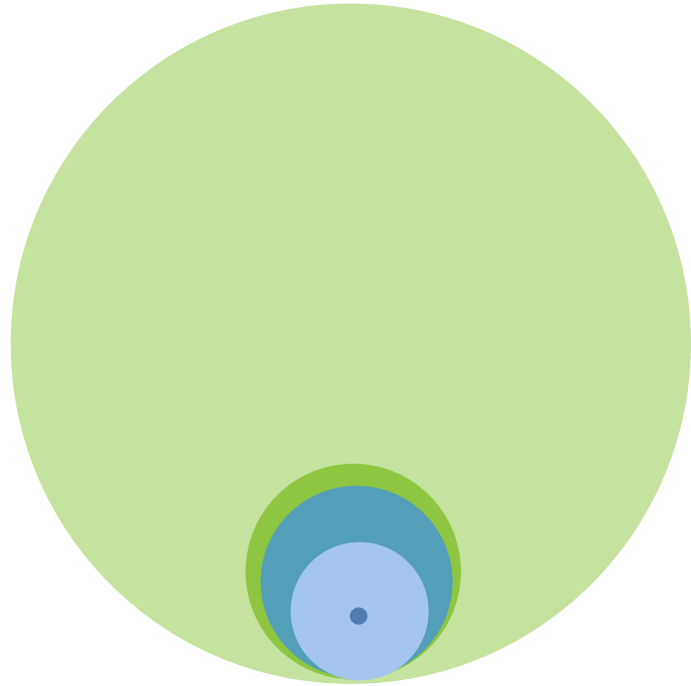
- Tree Identification Guide:** A card showing six different tree species and the Treezilla logo with the tagline "The monster map of trees".
- How to Survey Individual Trees:** A card featuring a photograph of a large tree and the title "How to Survey Individual Trees".

At the bottom of the interface, there is a Mapbox logo and a row of partner logos including Forest Research, Treezilla, The Open University, natural aptitude, and Trees Environmental Practice.

# Still only a tiny fraction of UK's Urban trees are in open maps!



# How can we make the little blue dot bigger?





ABOUT

APPLY

PROJECTS

NEWS

EVENTS

RESOURCES

# Future of UK Treescapes

Improving treescapes for the benefit of environment and society

LEARN MORE



5-year UKRI programme led by NERC with AHRC & ESRC



6 interdisciplinary projects in Phase 1



£14.5m programme

# Branching Out

New Routes to Valuing Urban Treescapes



Loughborough  
University



UNIVERSITY  
*of York*



Forest Research

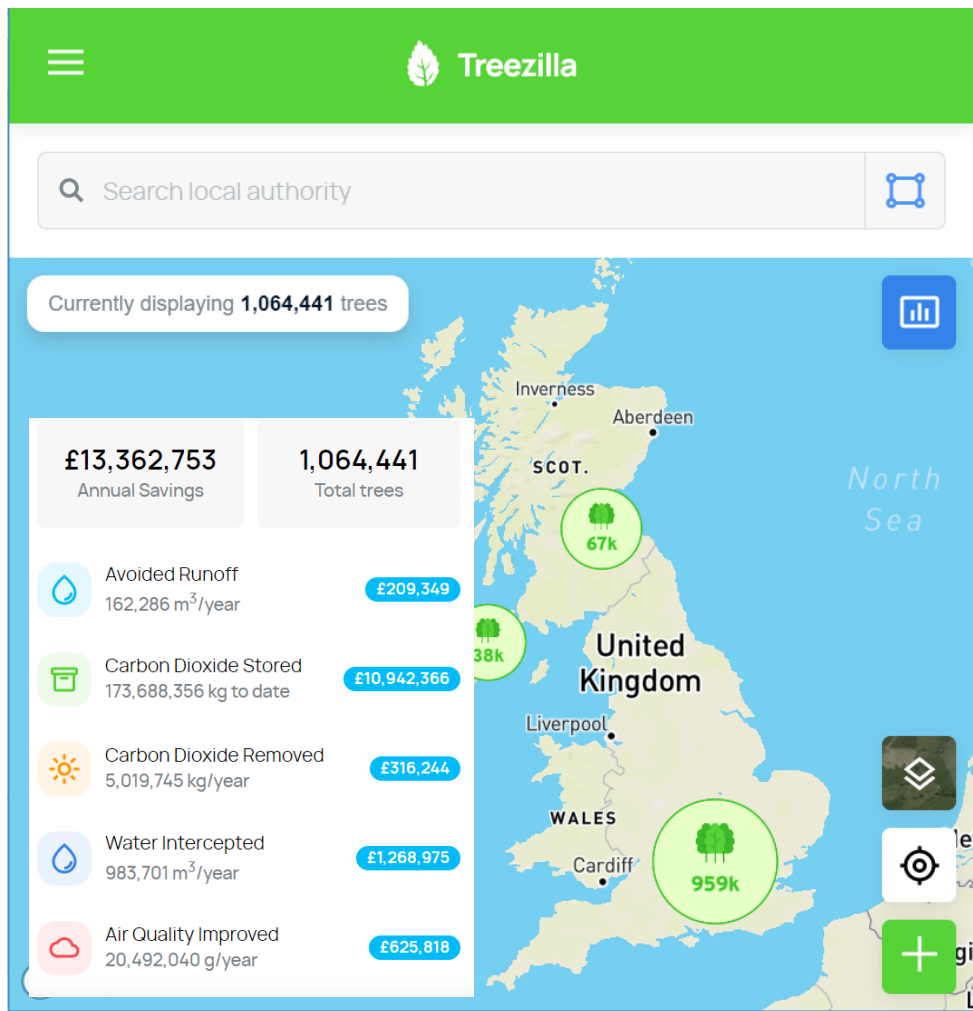


UK Research  
and Innovation

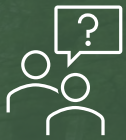
# Beyond regulating Ecosystem Services

Treezilla focuses on regulating services.

Branching Out considers social and cultural services.



# How can we measure social and cultural values provided by urban trees?





# How can we measure social and cultural values provided by trees?

## Co-production

Interdisciplinary  
retreats

Build values framework  
– language to describe  
social and cultural  
values

Design jams



## Storytelling

Scenarios

Performances

Participation

Deliberation



## Mapping

Historical mapping

Hyperspectral remote  
sensing

Future urban treescapes

Urban tree observatories



# Urban Tree Observatories



Hyperspectral  
remote sensing

Teams of citizen  
scientists to record tree  
data in Treezilla

6 x 1 hectare  
plots per city



# Combining the data

**Social & cultural values from co-production and storytelling**

**Biophysical data from urban tree observatories**

**Remote-sensed data from aerial surveys**

**New maps, tools and techniques that communicate the diverse values of trees**



# Outputs to look out for

## S&C value maps

Maps illustrating a range of social and cultural values of trees



## CAVAT-RS

CAVAT-like assessments from Remote-sensed data



## Treezilla + S&C

Incorporating Social & Cultural values within the platform



# Find out more

- **Treezilla: [www.treezilla.org](http://www.treezilla.org)**
- **Future of UK Treescapes: [www.uktreescapes.org](http://www.uktreescapes.org)**
- **Branching Out:  
<https://www.uktreescapes.org/projects/branching-out/>**

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**The Open University**