

DSC-40 Improving garden green space statistics

2018-05-03

The Office for National Statistics (ONS) publishes a regular statistic on natural capital, including estimates of natural land or green space in the UK. Currently, these figures assume all residential garden space is green. This project will generate a more accurate estimate of the green space within UK gardens.

Team members

- Chris Bonham
- Sonia Williams
- Ian Grimstead

The need

Our project will improve on the accuracy of estimates of natural capital, by considering more detail within residential gardens.

Impact

We will share our work through a written report and publish our code on GitHub. We will also support the incorporation of this work into the official estimates of natural capital.

Data science

First we will build on the work completed through the urban forest project by using some of the same methods. Then we will build on this using computer vision techniques to identify living objects in residential gardens, for example, trees and plants.

Stakeholders

We are working with the Natural Capital team and Ordnance Survey (OS).

Related and existing work

This work is closely linked to the Urban forest project.

Delivery

- [x] Obtain data from OS detailing the area of residential gardens in Bristol
- [x] Obtain image data with satellite or aerial photography for Bristol
- [x] Calculate the percentage of green pixels in the images of residential gardens
- [x] Improve on the initial estimate by using computer vision techniques to identify living green objects
- [x] Publish technical report and make code available on GitHub
- [x] Work with the Natural Capital team to incorporate this into their green space estimates
- [x] Agree next steps with Sustainable Development Goals (SDG) team

Further information

Please contact datasciencecampus@ons.gov.uk for more information.

Updates

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Chris Bonham wrote a report on the findings of this project in July 2019.