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MALVERN HILLS AONB CASE STUDY

Overview

Ecosulis were commissioned in January 2020 to produce a series of maps and accompanying report to explore the provision of ecosystem services in the Malvern Hills Area of Outstanding Natural Beauty (AONB). This work was undertaken as a contributing element of a Nature Recovery Plan for the AONB. Ecosulis' work on the project built upon natural capital assessment tools that have been developed as part our ecosystem service mapping project with Gloucestershire Wildlife Trust.

The Challenge

A unique challenge posed by the Malvern Hills AONB project was the requirement to integrate concepts of landscape character into our natural capital mapping approach.

More broadly, while the provision of some ecosystem services can be directly quantified (carbon storage, for example), others are more challenging to map. Cultural ecosystem services, emerging as an outcome of both a natural capital asset and the interactions of people with those assets, are typically the latter.

Key Objectives

There were two main aims of the project.

Firstly, to produce a suite of ecosystem service baseline and opportunity maps for the Malvern Hills AONB and a surrounding buffer area of 3 kilometres. This applied methods previously used within the Gloucestershire Wildlife Trust project.

Secondly, the integration of an analytical mapping technique recognising landscape character and the historic landscape, and how these interact with ecosystem services. The challenge of integrating landscape character with ecosystem services came in here.

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Solution and Results

The initial ecosystem service mapping element of the project was completed using the habitat service scoring matrix (HSSM) approach developed by Natural England and the Environmental Change Institute at the University of Oxford.

Landscape character assessment and mapping was previously undertaken by local authorities within the AONB. Through this assessment, landscape character types within the AONB were mapped and described.

In collaboration with local heritage specialists, Ecosulis developed an approach to extend the HSSM to recognise the role of different habitats in contributing to each of the landscape character types identified through the landscape character assessment.

Through bridging the HSSM and landscape character, Ecosulis were able to explore the relationship between landscape character and ecosystem service provision in the Malvern Hills AONB.

Impact

Biodiversity

The spatial mapping exercise carried out by Ecosulis will contribute to the development of the Malvern Hills AONB Nature Recovery Plan. The overall aim of this plan is to enhance wild nature and stop and reverse biodiversity decline, both within the AONB, and as part of a nationwide Nature Recovery Network.

Habitats

Functional, healthy habitats that are rich in wild nature are better able to generate the ecosystem services that people rely on. Mapping the natural capital assets and the ecosystem services they generate within the Malvern AONB will enable decision making that leads to the upgrading of natural habitats.

People

The people living in and around the Malvern Hills AONB rely on the benefits that nature provides. Accurately mapping the area's ecosystem services, and the natural assets which generate those services, will enable those benefits to be protected and enhanced.