Case Study

Natural England

Client:

Natural England is the UK government's adviser for the natural environment in England. Established by an Act of Parliament in 2006, its purpose is to help conserve, enhance and manage the natural environment for the benefit of present and future generations, thereby contributing to sustainable development.

Industry:

Central Government

Product:

Aerial Photography

> *"Bluesky provided excellent customer service and timely delivery of quality products for the England Ecosystem Survey. Their high-resolution aerial imagery supports evaluation and decision-making, aiding the 25 Year Environment Plan's objectives."*
>
> Rosie Nicoll - Senior Data Scientist, Natural England

Summary:

Natural England is using Bluesky's aerial imagery in applications for collecting habitat and ecosystem data for surveyors as part of the England Ecosystem Survey (EES), the largest field survey ever undertaken in the UK.

Working at thousands of sites on a 5-year cycle, surveyors are collecting information on soils, vegetation, and landscape change across the country. The results will allow them to make national-scale assessments on the state of vital resources, and their ability to keep underpinning ecosystem services like food production and biodiversity.

Challenge:

Data on ecosystems and landscape is often of variable quality, expensive to collect, difficult to access, and out-of-date. To make informed environmental decisions, Government and other organisations require better data, and the England Ecosystem Survey has been set up in response to this.

To effectively undertake the desktop study part of the survey, high resolution aerial imagery is needed to capture the most accurate data.

Solution:

Using Bluesky's 12.5cm aerial imagery via the APGB download portal, Natural England has been able to apply the data in applications for collecting habitat and ecosystem data for surveyors.

The aerial data enables much easier completion of the desktop study section of the survey and, additionally, offers more detailed insight for surveyors in the field.

Results:

High-resolution aerial imagery has been utilised to create an application that identifies optimal sites for soil surveys. This technology enhances surveyor safety, improves planning accuracy, and increases surveying efficiency, especially during winter when daylight hours are limited.

The imagery is also incorporated into data collection applications, which raises the quality and accuracy of the gathered information. This, in turn, will inform the State of Natural Capital Report, a national-scale assessment of environmental assets.

Additionally, high-resolution aerial imagery supports evaluation and decision-making through national land management programs such as Environmental Land Management schemes, Biodiversity Net Gain, Nature Recovery Networks, and Protected Sites. It aids in achieving the objectives of the 25 Year Environment Plan by informing specific targets such as B6, D1, and G1. Moreover, the data contributes to the Soil Health metric (E7) and will be employed in the development of the government's baseline map of soil health.

	Imagery Specification	
Resolution	**12.5cm**	**25cm**
Coverage	Great Britain	Great Britain
Accuracy XY	± 30cm rmse	± 60cm rmse
Formats	Include: JPG, TIFF, ECW	Include: JPG, TIFF, ECW
Standard Projection	British National Grid	British National Grid
Tile Size	1km x 1km (8,000 x 8,000 pixels)	1km x 1km (4,000 x 4,000 pixels)
Metadata	Gemini 2.3	Gemini 2.3

Get in touch today at **support@apgb.co.uk**