

Penny Anderson Associates is a leading UK-based ecological consultancy with expertise spanning ecology, hydrology, soils, geomorphology and GIS. Working across both the private and public sector, the company delivers comprehensive environmental advice to support a wide range of projects.

Environmental Consultancy

Aerial Photography

Chris Chapman, Senior GIS Consultant
Penny Anderson Associates Ltd.

Penny Anderson Associates supports projects ranging from small private developments to large-scale infrastructure and landscape-scale restoration schemes. To ensure accurate habitat assessments, often in remote, upland landscapes, the team relies on access to quality, up-to-date data. By integrating Bluesky's high-resolution aerial photography at different process stages including planning, field surveys, and post-analysis, the team can navigate sites more effectively, map habitats with greater precision, and maintain a consistent and efficient workflow.

Challenge:

Accurate, current data is essential for effective habitat assessment, particularly with the requirements set out in Biodiversity Net Gain legislation. This can often be complicated by the environments in which the surveyors work – vast and remote areas such as moorland - where limited ground features make navigation difficult when relying solely on an Ordnance Survey base map.

Habitat condition assessments also require field surveys, meaning teams need dependable data that supports both pre-survey preparation and confident, real-time decision making in the field, without compromising efficiency or accuracy.

Solution:

High-resolution 12.5cm aerial photography is used within ArcGIS to create detailed site maps for surveyors before visiting a location, helping them to understand terrain, habitat extent, and often the general habitat type. During fieldwork, aerial photography is printed or accessed via GIS-enabled mobile devices, enabling surveyors to navigate, annotate, and map habitats in real time. After a survey is completed, the GIS team uses the same imagery to refine and accurately define habitat boundaries.

Results:

Bluesky data has become a fundamental part of Penny Anderson Associates' methodology. The high-quality aerial photography improves visibility of habitat extent and characteristics, supporting more accurate ecological assessments and mapping outcomes. Applying aerial photography consistently throughout the end-to-end workflow enables teams to maximise the value of a single data source throughout the project

lifecycle. In challenging environments where base maps can fall short, access to aerial photography is essential as it provides an accurate representation of on-the-ground conditions. As a result, the team considers it critical to delivering their work effectively. Combined with an easy ordering system and reliable data delivery, this approach ensures data is both accessible and practical at every stage of a project.

Specification		
Resolution	5cm Imagery	12.5cm Imagery
Coverage	England, Wales and Scotland*	England, Wales and Scotland
Accuracy XY	± 10cm rmse	± 30cm rmse
Formats	Include: JPG, TIFF, ECW, SID, KMZ	Include: JPG, TIFF, ECW, SID, KMZ
Bands	RGB / RGBI	RGB / RGBI
Standard Projection	British National Grid	British National Grid
Tile Size	1km x 1km (20,000 x 20,000 pixels)	1km x 1km (8,000 x 8,000 pixels)
Metadata	Gemini 2.3	Gemini 2.3

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