Case Study

Farm Mapping and Land Management Support – North Wales

Client

Private landowner and livestock farmer, North Wales

Site

Approx. **160 hectares** of mixed agricultural land including pasture, rough grazing, field boundaries, tracks, and access points.

The Challenge

The client required an accurate, up-to-date understanding of their farm holding to support effective land management. Existing maps were outdated and lacked the precision needed to:

- Clearly define and verify field and holding boundaries
- Measure land use by category (e.g. grazing, tracks, woodland, unproductive land)
- Identify and plan access routes for machinery and livestock
- Support future management, stewardship, and compliance decisions

A traditional ground survey alone would have been time-consuming, disruptive to farm operations, and limited in its ability to visualise the site as a whole.

The Solution

Image Surveys was commissioned to deliver a **drone-based aerial survey** combined with professional geospatial processing and analysis.

Using survey-grade drone data capture, we mapped the entire **160-hectare holding** in a single coordinated operation. The data was processed to create:

- **High-resolution 2D orthomosaic maps**
- **Accurate 3D terrain and surface models**

These outputs provided a complete, measurable digital representation of the farm.

Deliverables

The client received:

- A georeferenced **2D site map** suitable for boundary marking and measurement
- **3D visual models** enabling terrain understanding and landform assessment
- Clearly defined field boundaries and features
- Area calculations allowing land use to be measured and categorised
- Identification of existing and potential access points across the holding

All data was supplied in formats that could be used directly for farm management, planning discussions, and future reporting.

Outcomes & Benefits

The aerial survey enabled the client to:

- Confidently **mark and verify boundaries** across the holding
- Accurately **measure land use by category**, supporting better decision-making
- Visualise the entire farm in 2D and 3D, improving understanding of layout and terrain
- Plan and manage **access routes** more efficiently
- Establish a robust digital baseline for future management, compliance, or grant applications

The approach minimised disruption on the ground while delivering a level of insight not achievable through traditional methods alone.

Why Image Surveys

Image Surveys specialises in **land and drone-based environmental and habitat data services**. We do not sell drones — we deliver **defensible, decision-grade spatial intelligence** that supports land management, planning, and compliance across the UK.

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