

Biodiversity Baseline Monitoring and Monetisation for Farms and Estates



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The Opportunity

Monetize a thriving nature

Whilst food production remains the main income stream for most farms and estates, there is significant opportunity to monetise **additional ecosystem services through biodiversity and carbon credits**. Projects that demonstrate biodiversity uplift and carbon sequestration attract substantial interest from **private sector investors**.

Monetising ecosystem services requires **baseline biodiversity quantification** and **external verification**; this is critical for all biodiversity methodologies. So, how does one do this **cost effectively** and in **formats accepted** by verification bodies?



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Our Solution

Holistic biodiversity monitoring

To overcome this challenge, **rePLANET**, in conjunction with **Mozaic Earth**, have developed a:

Biodiversity baseline monitoring package that costs £10,000* to quantify baseline farm and estate biodiversity in a format that can be submitted for a Biodiversity Futures Initiative 'Stage 2 Review'.

This high quality, verifiable package is at least **3X cheaper** than alternative site-based ecological surveys and it combines **AI with remote sensing, metabarcoding** and **farm team training** for data collection and ecological survey equipment usage.



Advantages of this approach: (1) Independent academic verification, (2) Quantification and verification in agreement with the leading biodiversity credit methodology, (3) Internationally recognised biodiversity credit generation.

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The Monitoring Process

Simple to implement

Professional ecologists co-ordinate the entire process remotely and package costs include:

- Provision of **equipment** for data collection (excl. smartphones)
- Farm team **training** for: data collection and Mozaic app use
- Expert ecologist **data analysis** (photos, audio files and trap samples)

The output provides data on **five metrics**: habitat structure (DEFRA biodiversity metric 4.1) and the species richness, conservation value and relative abundance of higher plants, ground beetles, pollinators and breeding birds. Data is then packaged for independent academic verification and biodiversity uplift quantification using the **Wallacea Trust Methodology**.



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External Verification

The Biodiversity Futures Initiative

The **Biodiversity Futures Initiative** (BFI), a grouping of academics from a range of universities, offers the **most cost effective** way of externally verifying the package's biodiversity claims (e.g. project 'A' has achieved a 100% increase in biodiversity across 1000 hectares compared to the baseline).

BFI verified biodiversity uplift claims can be used to:

- **Increase carbon credit sale price** through quantification of their biodiversity co-benefits
- Generate separate **biodiversity credits via a block chain registry**
- Support **corporate nature-positive strategies and reporting**



For further information on whether this package is suitable for your site please contact Dr Max Bodmer

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*Package assumes that the land is <500 hectares and that it can be stratified into a maximum of 5 habitats with 50 replicate quadrat photos taken once in May/June and again in July/August for higher plants, 40 X 5 day pollinator samples each month from May to September, 200 x 5 day pitfall trap samples, 100 x 10 minute audio recordings in May and June. Costs can be adjusted for larger sites or for those with more complex habitat structure.