

CASE STUDY

2023



Beyond
Zero

Spier Estate





Beyond Zero helps Farmer Angus turn Spier Estate into a financially and climatically resilient business

OVERVIEW

The Spier Mob Grazing and Rewilding Project, led by Angus McIntosh, is a pioneering regenerative agriculture initiative on the [Spier Estate](#) near Stellenbosch, South Africa. Utilising rotational, multi-species, ultra-high stock density grazing (mob grazing), the project is enhancing soil health and increasing carbon removal. Livestock include pasture fed cattle, and outdoor reared pigs and poultry.

Spier Estate has integrated this approach with other sustainable farming practices to lower operational carbon emissions and offset any residual impact. A collaboration with [Beyond Zero](#) supports the measurement, verification, and monetisation of nature-based carbon removal projects on the estate.

THE CHALLENGE

Spier Estate has committed to a 20-year mob grazing strategy, alongside a rewilding programme, which involves planting indigenous trees and shrubs propagated from locally sourced seeds in its own nursery. While these initiatives are significantly contributing to reducing emissions and capturing carbon, the estate lacked a comprehensive, up-to-date carbon baseline.

Without precise measurements, tracking progress and formulating a structured reduction plan was

challenging. Additionally, Spier Estate aimed to generate carbon credits, 50% of which would be shared with employees. Making an accurate assessment of its carbon position was therefore essential.

Beyond Zero was engaged to create a habitat map and baseline CO₂e balance (removals from emissions) assessment for the year ending March 2023. This data would support an application to the [UK Carbon Code](#) (UKCCC) for recognition as a high-integrity carbon project.

THE SOLUTION

Spier Estate partnered with Beyond Zero, a leading Environmental Asset Manager, to serve as an independent carbon auditor and project developer. The engagement focused on establishing Spier's carbon balance and crafting a structured reduction and removal strategy. A key objective was securing revenue from natural capital markets, as well as unlocking co-benefits.

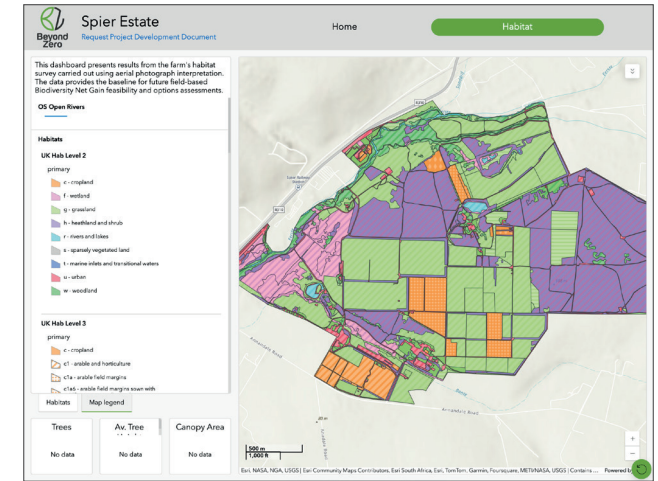
The project commenced with a holistic baseline assessment covering habitat classification, soil carbon stocks, and total emissions. An independent carbon audit using the Farm Carbon Calculator quantified emissions from livestock, fuels, inputs, distribution, materials, and processing, while a detailed removal analysis was conducted.

Beyond Zero applied the UKCCC framework to measure, report, and verify the carbon balance which included reporting of Scope 1, 2, and 3 emissions. Data was organised into interactive dashboards on Beyond Zero's platform, ensuring a transparent and auditable baseline for ongoing monitoring.

Additionally, estate-wide basemaps of natural capital were created to track

carbon capture, and habitats and hedgerows were mapped to assess above-ground biomass and vegetation sequestration. Beyond Zero further processed and analysed emissions and sequestration data using the latest authoritative sources.

All findings were made available via interactive dashboards, providing Spier Estate with an auditable, updateable platform for tracking progress and engaging stakeholders. Annual monitoring will ensure that targets remain aligned, with a full re-baseline assessment scheduled for 2027 to measure changes.



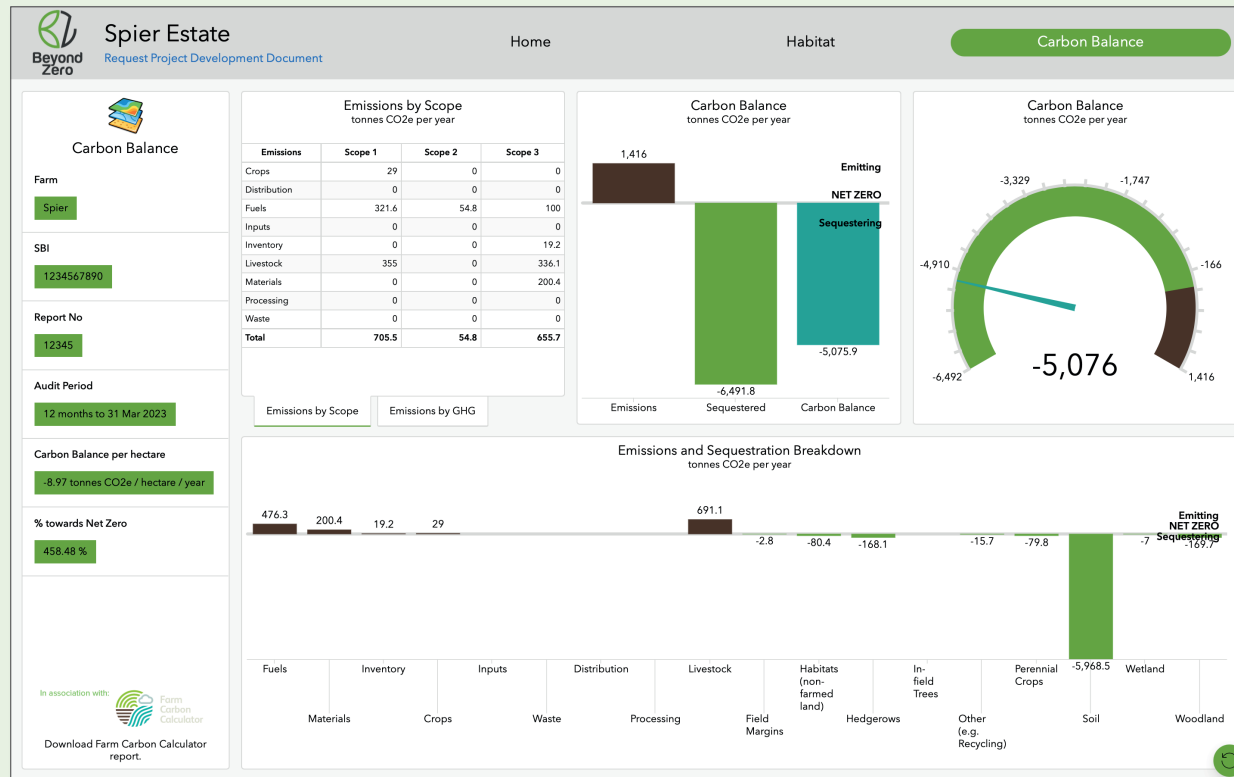
Habitat maps help quantify the above ground biomass and vegetation carbon storage.



THE OUTCOME

The project's rigorous assessment demonstrated that Spier Estate sequestered more carbon than it emitted, achieving a net carbon balance of more than -5,000 tonnes of CO₂e per year - well beyond Net Zero. This surplus qualifies for sale as high-integrity carbon credits.

UKCCC methodologies align with global standards, including the Science Based Targets initiative (SBTi) and the Integrity Council for the Voluntary Carbon Market (ICVCM). Approval under the UKCCC ensures high-integrity credit issuance for international market transactions.



THE UNLOCKED VALUE

As a result, 3,046 high-integrity carbon credits are available annually for sale via the UKCCC Registry.

Furthermore, 50% of the revenue generated from credit sales is allocated directly to employees, offering meaningful social benefits. While subsequent audits will assess the impact on well-being and poverty alleviation, even at South Africa's conservative carbon pricing, the initiative delivers tangible social co-benefits.





“Working with Beyond Zero has been a game-changer for Spier Estate. They have helped us truly understand our carbon footprint and how to turn our sustainability efforts into real, measurable impact.”

Beyond Zero’s guidance made the whole process clear and manageable, and the tools they provided make it easy to track our progress. This partnership has not only strengthened our commitment to regenerative farming but also created real benefits for our team and the environment.”

Angus McIntosh – Spier Estate

PARTNERS



For project details and further Case Studies:



(+44) 0203 189 4000 | hello@beyondzero.ag

Beyond Zero

Registered address: Three Queen Street, Mayfair, London, W1J 5PA