

# **Beech Estate**









# Conservation is at the heart of Beech Estate's past, present and future

## **BEECH ESTATE**

The 2,000 acre (792 hectare) <u>Beech Estate</u>, owned by the Wills family, sits to the north of Battle in East Sussex. It is made up of a number of Wealden farms consisting of organic arable land, permanent grassland, and wildflower meadows, including a Coronation Meadow. The Estate is surrounded by a mixture of commercial, semi natural and ancient woodlands.

The Estate has been actively managed by the family and now supports a range of diversified enterprises including residential and commercial property, and an award-winning campsite.

Conservation is at the heart of everything on the Estate, and as an organic farm, there is no use of chemical fertilisers, pesticides or feed additives for the livestock, providing healthy food, and supporting a diverse wildlife population.

- The Estate's medieval wildflower meadows are in an isolated location surrounded by woodland and, as such, provide a look into the past and its myriad wildlife.
- 6 metre field margins surround the arable fields and include a 24 metre grass margin by a river to act as a buffer zone. Wild bird and nectar strips provide winter food to a thriving bird population, and nectar for bees.

- ✓ Woodland is managed in order to encourage habitats that support biodiverse populations of flora and fauna. The rides are intensively managed to create a mix of structured zones and open areas to encourage different species.
- ✓ 20 kilometres of hedges provide a vital nesting and alternative habitat for a number of species, and opportunities to replant and lay new hedges are always sought. The Estate is also working hard to reinvigorate and recreate ponds where possible.
- The woodlands and meadows support birds of prey including Hobby, Buzzard, Kestrel, Sparrow Hawks and Barn Owls. The meadows are incredibly species-rich from the sweet vernal grass and beautiful Quaking Grass, Oxeye Daisy, Common Knapweed, Common Spotted-Orchid and Common Bird's-Foot-Trefoil, along with less often seen flowers like Dyer's Greenweed. As it stands 34 different species of butterfly have been identified, including Clouded Yellows and Painted Ladies, as well as a number of rare insects and moths.





## THE CHALLENGE

Despite the Estate's healthy mix of diversified enterprises, which provide multiple income streams, the heavy Wealden clay soils make conventional organic farming on its arable land difficult and unproductive; the 1,000 Romney ewes grazing the permanent pasture produce marginal returns and there is untapped value from its woodland.

Harry, Beech Estate's present incumbent, is always looking for more income generating activities and, following our open day and farm tour at Bank Farm near Ashford, he asked <u>Beyond</u> <u>Zero</u> to discover and unlock additional opportunities from natural capital for every hectare of the Estate.

Harry also asked us to calculate the Estate's current carbon balance and certify its 'farm gate' Net Zero position, an important consideration to its arable, woodland and livestock enterprises.





### THE SOLUTION

A Beyond Zero project was set up with the objective of establishing Beech Estate's current carbon balance and developing a short, medium and long-term carbon reduction and carbon removal plan to improve upon its position, and to further enhance biodiversity. Securing payments from natural capital markets, including biodiversity net gain, carbon and nutrient neutrality, was also a fundamental deliverable.

All projects start at the beginning and so we began by establishing a robust and holistic baseline across all of the Estate's enterprises.

The baseline included an independent carbon audit using the Farm Carbon Calculator, which recorded Beech Estate's current emissions (from livestock, fuels, inputs, distribution, materials and processing, etc.), and a detailed analysis of its current carbon sequestration. This involved analysing third-party data, including Cranfield University's National Soil Map and Bluesky's National Tree Map,

and commissioning up-to-date high resolution habitat mapping and ground-truthing from Environment Systems. A comprehensive soil testing survey was then undertaken using an algorithm that generated random what3word locations. All data is managed and shared via interactive dashboards and story maps using Esri's market leading ArcGIS platform, providing a robust baseline for future monitoring and updates to identify, measure and record change.

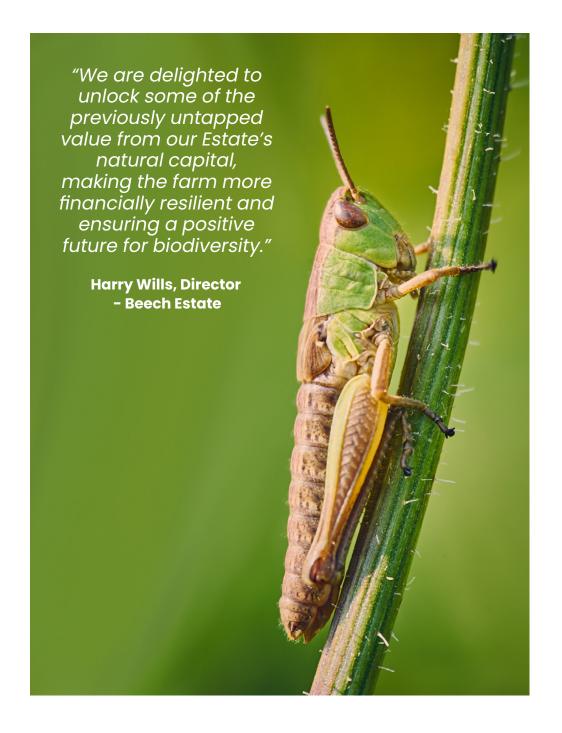


Beech Estate's carbon emissions, sequestration and balance data is displayed on a project specific interactive, multi-faceted dashboard.









# THE OUTCOME

As a result of our analysis, Beech Estate is now certified by the UK Carbon Code of Conduct (UKCCC) as beyond Net Zero.

The Estate is benefiting from a substantial new income stream from trading robust carbon credits, and holding some for future sale or in-setting.

Beyond Zero has unlocked 5,000 carbon credits per year via the UKCCC Registry which are available for sale to the voluntary carbon market. At current pricing, these credits generate an additional income for the Estate of around £100,000 per annum.

Credits are verified by the UKCCC annually, with a full baseline update every five years.

The baseline analysis and wider project have identified further income streams that ensure a thriving biodiversity through Harry's commitment to improvements in management practices.

### THE UNLOCKED VALUE

Working with Nature Broking, a leading carbon credit broker to the voluntary carbon market, Beyond Zero has enabled Beech Estate to trade over 2,500 carbon credits to Devon County Council during 2024. The Council has set a Net Zero target





by 2030 and is implementing a carbon reduction plan to reduce its emissions by 70%. This leaves about 112,000 tonnes of carbon dioxide equivalent (tCO2e) to offset at 2030/31 and beyond.

"Devon County Council is leading the way in carbon reduction and unavoidable emissions mitigation and is also focused on carbon removal through habitat restoration. Beyond Zero's unique holistic approach to carbon credit generation at Beech Estate, with real benefits to wildlife, really worked for them." Luke Baldwin, CEO - Nature Broking

"I found the site visit to Beech Estate vital to see for myself the power of high-integrity UK based carbon offsets and the reasons behind the Council's decision to offset its residual carbon to reach its Net Zero target." Sarah Alsbury, Climate Change Officer - Devon County Council



Harry (left) with the UKCCC, Nature Broking, Devon County Council and Beyond Zero teams at Beech Estate

