UKCCC Annual report Template

Version: 1.0 draft

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Key Information	
Farm / Company name	Beech Estate
Project Developer	Beyond Zero
Project reference	BZ00010
Annual monitoring visit date	5th June 2024
Conducted by	Douglas Wanstall UKCCC
Requirement to alter risk buffer?	No
Report completion date	24th September 2024
Latest vintage released	Yes
Approved by	Douglas Wanstall UKCCC
Location	East Sussex
Key contact (name)	Harry Wills
Key contact (email)	Harry@beechestate.co.uk
Key contact (phone)	
Project Owner	Beech Estate
Project Information	
Project description	Habitat creation, woodland management, regenerative agriculture
Proposed main activities	• *Arable reversion to Wildflower meadow creation, hedge planting, active woodland management*
Project size	*850ha*
Target outcomes	• *Carbon removal* • *Biodiversity improvements and connectivity*

MAIN PROJECT IMPACTS

UN Sustainable development goals (SDG's) met as part of project	**Expected outcome of project**
SDG 13 Climate Action	Net Zero status surpassed
SDG 15 Life on land	Numerous species identified and biodiversity habitat creation and connectivity enhanced.
SDG 12 Responsible consumption and production	Complete removal of chemical and fertilizer usage
Main social impacts of project	• Increased employment, • Cleaner air • Cleaner water • Numerous outreach events held for local and national groups • Reduced flooding risk
Principle environmental impacts of project	• CDR removal, • Biodiversity enhancement

BASELINE UPDATE REQUIREMENT	
Which baselines are required:	
Soil tests to UKCCC protocol V1.2	2026
UK Hab map to 1m resolution	2026
Current emissions	2026
Net zero calculation	As before

REVERSAL AND REBOUND RISK

Item	
Has the risk of reversal been considered, and a risk assessment completed?	Yes, low risk identified
Is there any potential rebound effect	None identified
Annual Net carbon removal	5686
Annual uncertainty buffer changed?	No
Total annual buffer (not including NR)	113
Total credits released to market	5402

Commentary

The 2024 annual monitoring visit was carried out in early June and I spent many hours with Harry Wills, the project owner walking and talking about the estate, the work to date and the future of the project.

One can never fail to be impressed by Harry and the Beech Estate of which he is the current steward. Although on similar land and not too far away from the Knepp Estate, Harry has taken a different approach to land management and rather than just allow things to rewild, letting nature take its course has made a conscious effort to build the number of the estates highly diverse and important wildflower meadows.

One in particular is thought to date back to Tudor times, never having been ploughed, has a stunning array of orchids and wildflowers that require a lot of management. Harry's aim is to build upon these, creating a mosaic of these important habitats across the entire estates former arable lands. However this takes time and success is not guaranteed and so a managed approach is key, enabling a steady transition to the more valuable and diverse habitat. To create wildflower meadows with the desired diversity is a process of succession and cannot be forced.

Harry pioneered a method to spread wildflower seed by a process of green hay gathering where grass is cut and collected from a wildflower rich donor field onto trailers and then spread onto receptor fields. This has been quite successful in helping to improve some of the less diverse fields

The former arable land has all been converted to organic production and all has now been reverted away from cereal production into either modern wildflower meadows, pollen and nectar or winter bird feed fields, all helping to deliver on the SDG 15 Life on land goal.

Harry has planted several hundred kilometres of hedgerow which will be recorded on the updated habitat register, these will not yet contribute to emissions removals and will be added at the next verification cycle.

The woodland improvement program is continuing and will soon have covered the whole estate. The woodland has transitioned from being undermanaged where carbon removals had reached a position of virtual stasis to now where trees are selectively felled and where natural regeneration is allowed. This management approach increases carbon removal and it

is now demonstrating why as many small trees start to grow as the canopy opens and they get the chance to flourish.

Many rare species were noted on the visit including many common spotted orchids, Dyers Greenweed and Hedge Woundwort. On the day of the inspection few butterflies of note were observed but the estate is known to play host to a number of rare species including Clouded Yellows and Painted Ladies.

There was nothing seen on the visit that caused concern that the project was at risk of carbon removal reversal, no negative unintended consequences have been observed.

Very little has changed within the farming system at the Beech estate and therefore there is no need to recalculate emissions at this stage. The habitat maps and soil carbon data will be updated at the end of the current verification cycle.

Future project options

Beyond Zero and Harry have identified a number of options for future project development and Harry has expressed an interest in developing further carbon removal interventions. These include:

Wetland creation. A number of low lying areas liable to flood have been identified as possible sites for wetland creation. The areas in question are of low ecological value at present and the creation of wetland and introduction of reed species could increase carbon removal, help clean water and slow the flow of water in flood events, helping to alleviate issues further downstream.

Agroforestry. In some of the areas of newly created wildflower, bird feed and pollen and nectar mix fields it is possible to introduce agroforestry, especially where the aspect lends itself to north south planting orientation where the row crop would grow well and not shaded by the trees. Tree species could include Paulownia and cricket bat willows along with species that add diversity and interest.

Enhanced Rock Weathering (ERW) ERW is an opportunity on the Beech estate if rock can be sourced at an economic rate as it can be applied to the land in the spring and slowly react and remove atmospheric carbon. Care would need to be taken to ensure that the rock dust didn't have a deleterious effect on the soil that in turn effected the balance desired by the wildflower population.

More Hedgerows. Harry has planted a lot of hedgerows in the last few years, reinstating ancient field boundaries. There is still more that could be planted to increase carbon removal and improve biodiversity connectivity.

Douglas Wanstall

UKCCC Commissioner