

Escrick Park Estate, Yorkshire

Biodiversity net gain land management

Biodiversity net gain (BNG) offers flexibility to landowners who have ambitions for nature recovery on their land. This article explores one landowner approach to preparing for BNG.

Lessons in approaching BNG

Just south of York, [Escrick Park Estate](#) has been privately owned by the Forbes Adam family for over 300 years. The family were early adopters of agri-environmental schemes in the 1990s, concentrating on a long-term plan of conservation for current and future generations. These schemes were successful to a degree, but the current financial climate – including the winding down of the largest rural payment scheme, the Basic Payment Scheme – has meant that the family continue to pursue a range of revenue streams.

In 2020, Escrick Park was selected to be one of Natural England's statutory biodiversity credits pilots, in preparation for mandatory BNG. Monies from sale of statutory biodiversity credits will be invested in habitat delivery in England. Together with Defra, Natural England is investigating the potential projects in which the Secretary of State may choose to invest in future.

Setting the vision

Escrick Park Estate has a clear goal to “protect, maintain and promote our environment to ensure everyone's success and survival.” This has guided the overarching approach to BNG and the various actions taken throughout the time on Natural England's statutory biodiversity credits pilot scheme. Escrick Park is currently piloting 230 hectares of the 3,000 hectare estate.

Credit: Hermione McCosh



“It is best to start by mapping the site constraints and then work to align these with the big overarching vision,” says Beilby Forbes Adam, the project lead. “We did it the other way around, which meant having to retrospectively adjust and dial down our ambition to fit our land constraints. Mapping the constraints means you have the outlines of your plan which can then be filled with colour and ambition from the strategic vision.”

It takes an investment of time and money to complete the feasibility stage. A successful BNG project will require both the big vision and the practical constraints of delivering it on the ground. Having professional expertise is invaluable in balancing these two factors.

Working with experts

The aim is to have good ecological information about your land, and a clear, implementable, and well-costed plan for how to work with what your land offers to best enhance nature recovery. It can feel unusual to some ecologists to span both aspects given a traditional distinction between habitat surveying and practical conservation.

Occasionally these skills are found in one person. To get the very best results it is often best to bring together the specialist surveyors for all the different habitats, and then feed this detailed information to a more strategic and delivery-focused applied ecologist.

“It takes time to coordinate a project for investment readiness,” Beilby Forbes Adam continues. “We found that we needed to speak to a lot of different specialists, from soil experts to hydrologists and everyone in between. This was a positive experience and we learned so much about our land, but it does take time.”

Having a wealth of information about the land being proposed for BNG means that a landowner can both provide evidence for the biodiversity baseline and understand the best approach to take to deliver BNG.



Bigger, better, more joined up

BNG is one of a variety of ways to help deliver enhanced habitat for nature. It is part of the Environment Act 2021, and aims to deliver the Lawton principles of more, bigger, better, and more joined up. Escrick Park Estate is delivering all these principles.

The BNG metric supports the ambition to create connectivity and extend important habitats. Escrick Park Estate is blessed with a National Nature Reserve (NNR), [Skipwith Common](#). The presence of an NNR is an excellent way to focus on how to connect parts of the landscape that are already rich in biodiversity.

The estate has undertaken surveys to understand which habitats would have the most appropriate potential for creation. This has involved historic analysis alongside hydrology and soil sampling.

Ultimately, Escrick Park Estate has pursued acid grassland/ heath with guidance from the project ecologist. Mark Hewitt explains that “working with the existing habitat resource we can provide the early successional phases of heathland creation. Heathland is our aim on these fields, but there is a process to reach that goal.”



Credit: Hermione McCosh

Right measure in the right place

“We’ve been dedicating our efforts towards conservation across generations now,” Beilby Forbes Adam notes. “One of the biggest lessons has been that there is no one right action to take, it is all about finding the right measure for the right place.”

For many farmers, the agricultural grading of soils is critical to their business models. In the same way that this informs where to place certain crops, soil grading helps to work out where BNG might make more sense from both an ecological and financial perspective.

“Where you have high quality cereal or vegetable crop producing land, there is a bigger question as to whether this is a good place for BNG,” says Beilby Forbes Adam. He welcomes the incoming land use framework from government.

On the odd occasion, the soil grading can be surprising. “We have fields in the middle of heathland which are not financially viable for food production, but which were graded as best and most versatile. The specialists we’ve spoken to have agreed that returning these fields to infill the heath will not negatively impact the soil quality.” This learning from his experience as a statutory biodiversity credit pilot is feeding into understanding of soil health and potential future policy. For some, it may be reassuring to know that the soil health will have further improved from BNG intervention.

Credit: Hermione McCosh



Hydrology

Hydrological interventions are among the top priorities for initial scoping activity. Water supply and drainage are among the key challenges for Escrick Park owing to historic field drainage systems, and potential overlap in responsibility with the Internal Drainage Board.

Project ecologist Mark Hewitt notes that “making changes to water-based habitats is particularly constrained and requires a huge amount of preparatory work. We undertook hydrological interventions at a later stage in our planning, but we should have looked at it earlier because there are so many knock-on effects which impact the wider project.” It requires early investment in data collection and water systems modelling. “The

potential habitat impacts are incredible, so we would encourage people to explore the opportunities offered by hydrological interventions. Just be mindful of the value of considering this in plans as early as possible.”

A large site approach

Escrick Park Estate is a large statutory biodiversity credits pilot project at 230 hectares. Owing to its size, there are smaller habitats and sites within the larger area, so lessons learned can be applicable to a variety of site sizes.

Each subsection requires a lot of preparatory work. Some of this is made more efficient by combining with other land parcels, but much of the work directly scales to the land area.

“Our work to date has been entirely focused on surveying and investment readiness”, Beilby Forbes Adam explains. “The challenge in preparatory work so far comes from combining different habitats rather than the scale.” He adds that “doing the right preparatory work in the right order” is also very important.

Credit: Hermione McCosh



Investing for the future

From its time on the pilot scheme, Escrick Park Estate believes that a 30-year commitment is reasonable if finances are robustly modelled. Beilby Forbes Adam has been reviewing the figures as he makes long-term

land management plans for the estate; “longevity offers assurances for all parties involved, but with time comes the greater need for flexibility in plans which can be difficult to secure.

“The 30-year agreement for BNG is more attractive to us than shorter agri-environment schemes as these do not give enough time to realise the habitat benefits. Additionally, we might be able to sell any uplift after the 30 years has passed (either as BNG or into other ecosystems service markets), but with the flexibility of choosing whether this is what we want in the climate at the time.”

Mark Hewitt has experience of 30-year agreements elsewhere, having worked as an ecologist to restore and enhance nature on quarry sites after operations close. “These agreements are already in place and working well”, he says. “The long-term financial planning sets expectations and a vision for future habitats and green spaces. For developers, landowners, and the communities involved, this feels like the right amount of time to show commitment and see real habitat delivery.”

BNG alongside other income streams

“It is tricky being a farmer right now,” Beilby Forbes Adam concludes. “It doesn’t feel like people are paying enough for food to cover basic operating costs and deliver a profit where the cost of production is no longer directly subsidised, and at the same time we’re seeing our natural habitats in steady decline. BNG feels like an excellent alternative to consider, either alongside normal operations, or potentially replacing them.”

BNG also potentially opens the door to income streams facilitated by the increase in nature provision. “We’re looking at Elmlee NNR which hosts weddings and is part-funded by eco-tourism,” Beilby Forbes Adam adds. “There is a lot of exploring to be done and we’re excited to see what this could look like for us.”



Natural England seeks to achieve thriving Nature for people and planet by building partnerships for Nature’s recovery.

Biodiversity net gain is part of the government’s Environment Act 2021. Natural England is working closely with and advising Defra on the design and development of BNG.