

# A CLA INTRODUCTION TO NATURAL CAPITAL



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# WHO WE ARE

Founded in 1907, the CLA is the membership organisation for owners of land, property and businesses in rural England and Wales. We exist to champion, protect and enhance our rural economy, environment and way of life.

Our aim is to unlock the potential of the rural economy by promoting innovative ideas to a national audience and providing practical support to members. We do this so our members can feed the country, create jobs and prosperity, invest in communities and protect the environment for future generations.

Together, CLA members own and manage around half the rural land in England and Wales and more than 250 different types of businesses. The work they undertake in the best interests of the land has a positive effect on wildlife and the natural environment, and their diverse and successful businesses are the heart of rural communities.

The CLA's formal, incorporated name is the Country Land and Business Association Limited, and its registered office is at 16 Belgrave Square, London SW1X 8PQ.

# A CLA Introduction to Natural Capital

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# FOREWORD

In response to the decline in biodiversity, decreasing soil quality and the threat of climate change, the Government, business and non-governmental organisations (NGOs) have been seeking new ways to encourage sustainable production, environmental protection and nature restoration.

One response to this has been an approach based on natural capital. This seeks to better account for the economic value of the natural environment and the benefits it produces, such as clean air, healthy soil or pollinating insects.

This guide, *A CLA Introduction to Natural Capital*, is intended as a simple reference manual on the basics of natural capital to help our members understand the new thinking, and to begin assessing and taking account of their own environmental assets within business plans and decision-making.

The creation of markets for environmental management, whether funded by the private sector or public money, represents fresh ideas and an opportunity for CLA members. This promises to deliver much-needed new investment and income streams for the rural economy.



Mark Bridgeman  
CLA President







# 1. WHAT IS NATURAL CAPITAL AS A CONCEPT?

The Natural Capital Committee (a Government advisory body) defines natural capital as:

*"elements of nature that directly or indirectly produce value or benefits to people, including ecosystems, species, freshwater, land, minerals, the air and oceans, as well as natural processes and functions"*<sup>1</sup>.

This way of thinking sees the natural environment as an asset to be managed, rather than "simply a constraint on or a victim of development"<sup>2</sup>. Natural capital can be seen in the same way as other business assets, such as staff, financial capital, business outputs and knowledge<sup>3</sup>. A natural capital approach aims to measure and manage these assets so as to maximise the benefits they produce, both to a business and to wider society. This approach is now widely used by Government and by the private sector around the world.

This framework (similar to so-called "triple bottom line" accounting) helps to understand and report on the various costs and benefits a business has. This includes those less tangible social and environmental impacts (positive or negative), not always captured in traditional accounts or business plans. It brings together scientific, economic and social evidence and analysis about the natural environment. This aids strategic decision-making, better cost-benefit analysis, risk assessment, and investment decisions.

Below are some examples of natural capital assets and the ecosystem services they produce.

| NATURAL CAPITAL ASSET | SERVICES PROVIDED                                                                                                                 |
|-----------------------|-----------------------------------------------------------------------------------------------------------------------------------|
| Soil                  | <ul style="list-style-type: none"><li>• Medium for growing crops</li><li>• Carbon storage</li><li>• Water regulation</li></ul>    |
| Woodland              | <ul style="list-style-type: none"><li>• Timber</li><li>• Recreation</li><li>• Wildlife habitat</li><li>• Carbon storage</li></ul> |
| Water                 | <ul style="list-style-type: none"><li>• Crop irrigation</li><li>• Wildlife habitat</li><li>• Drinking water</li></ul>             |

1. Natural Capital Committee, 2014

2. Defra, Enabling a Natural Capital Approach Guidance, p.7 – [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/858808/natural-capital-enca-guidance-pdf.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/858808/natural-capital-enca-guidance-pdf.pdf)

3. <https://integratedreporting.org/what-the-tool-for-better-reporting/get-to-grips-with-the-six-capitals/>

## 2. WHAT ARE THE FINANCIAL AND ECOLOGICAL BENEFITS?

There are obvious ecological benefits to well-managed natural capital, such as clean air, higher water quality and mitigation of climate change.

Environmental benefits can also lead to economic benefits, and there is an increasing focus on developing revenue streams from the management of natural capital. This could be direct income from a Government scheme (eg for looking after soil health), or a rural tourism business deriving custom from being located near a site of natural beauty.

For others, particularly private investors or corporations, the revenue comes in the form of cost savings, often from reducing risk. A full understanding of natural capital can allow environmental risk to be priced into decisions, and financing can then be allocated to less risky (ie more sustainable) projects and moved away from more risky ones. For example, in some cases it may be cheaper to invest in land management that helps prevent flooding, rather than to build expensive, artificial defence structures to reduce the impact of flooding.

In summary, positive environmental management can deliver value and minimise costs for a great number of beneficiaries, including land managers and investors. That is why both Government and the private sector are beginning to look at paying for both the benefits of environmental management and the day-to-day stewardship.

Given the complexity surrounding the contractual arrangements between landowners and private environmental investors, the CLA strongly advises CLA members to take independent, appropriate and timely advice. This CLA guide provides preliminary advice about this matter but it is extremely important that you take your own specific ecological, legal and taxation advice from suitably experienced professional advisers. If you are unsure whether a professional adviser does in fact have the necessary experience to advise you, there is no harm in asking the adviser to demonstrate their past experience, successes and failures.





### 3. EXAMPLES OF EMERGING MARKETS

There are a number of emerging areas where land managers can be paid to manage their natural capital. Some of these are driven by Government activity, most notably in new agricultural policy. In other cases, the private sector is investing directly in managing or improving the environment. While many of these initiatives are in the early stages of development, below are areas to watch.

#### 3.1 Environmental Land Management (ELM) scheme

In England, the Government's proposed new Environmental Land Management (ELM) scheme will be replacing the Common Agricultural Policy (CAP) as the main source of public investment in the agriculture and land management sector. Defra has said that the scheme will pay for a range of public goods under the following six headings.

- Clean air.
- Clean and plentiful water.
- Thriving plants and wildlife.
- Protection from and mitigation of environmental hazards.
- Mitigation and adaptation to climate change.
- Beauty, heritage and engagement with the environment.

While the details of how the ELM scheme will work are still being determined, farmers and land managers can begin to identify the natural capital assets they have which could contribute towards delivering these benefits.

The Welsh Government has yet to announce what their new agriculture policy will look like, but has indicated that they will also develop a payment for public goods model.

More detail on how to carry out a natural capital assessment is available in the *CLA Guide to Writing a Rural Asset Management Plan* and in the *CLA Guidance Note Natural Capital Tools, Assessments and Plans*. This Guidance Note also includes links and descriptions of various tools and ways of measuring natural capital, such as Defra's Biodiversity Metric (used in biodiversity net gain) and the Woodland Carbon Code.

#### 3.2 Carbon markets

The UK Government's legal target to reach net zero greenhouse gas emissions by 2050 will require concerted action from all sections of the economy and society. Land managers are in the unique position of being able to deliver negative emissions, by sequestering and storing carbon from the atmosphere in trees, plants and soil. As carbon intensive industries such as transport, aviation, agriculture and manufacturing are required to reduce and offset their emissions, businesses are increasingly turning to land as a solution.

"There are a number of emerging areas where land managers can be paid to manage their natural capital."

There are several mechanisms in place to help develop carbon markets, including requirements for businesses to measure and disclose their climate risk. Another vital element is standard carbon measurements, allowing business and Government to be certain about how much carbon is being emitted or stored. The Woodland Carbon Code, for example, provides a standard way of measuring the amount of carbon sequestered in new woodland. The Government's Woodland Carbon Guarantee (WCaG) is a scheme which guarantees a minimum price for carbon for those entering new woodland planting schemes. More information on this scheme is available on the Government website<sup>4</sup>.

### 3.3 Biodiversity net gain

The Environment Bill, expected to become law later in 2021, introduces the concept of biodiversity net gain into the planning system. This will mean that for a new development such as a housing scheme to receive planning permission, it will need to demonstrate that it has produced a net positive outcome in terms of biodiversity. Where this is not possible through sustainable design and construction, the developer will need to pay to create compensatory habitat (or offsets). Estimates vary as to the potential impact of this new policy but it may represent a significant new income stream for land managers. This could involve land managers entering directly into contracts with local planning authorities or developers to deliver certain areas and types of wildlife habitat for a given length of time. Alternatively, a market for biodiversity credits is emerging, with developers buying the number of credits they need from a broker who in turn pays land managers to set aside and manage land for conservation benefit to produce the number of credits required.

### 3.4 Water companies

Water companies face an increased cost and challenge of dealing with polluted water, which needs to be cleaned before it can be used for drinking water. Often this requires building expensive water treatment plants.

In some cases, the same results can be achieved by incentivising land managers upstream to reduce the burden within the catchment. For example, in the land surrounding Poole Harbour, farmers are being paid to plant cover crops which reduce nitrate leaching<sup>5</sup>. This approach is less expensive for the water company than building the treatment plant. Other schemes around the country are also in place funded by water companies. You can find out more information about this via the Catchment Sensitive Farming programme<sup>6</sup>.



4. <https://www.gov.uk/guidance/woodland-carbon-guarantee>

5. <https://www.bbc.com/news/health-56888888>

6. <https://www.gov.uk/guidance/catchment-sensitive-farming-reduce-agricultural-water-pollution>

### 3.5 Agri-food supply chain

Using a natural capital approach allows those nearer to the customer in the agri-food supply chain to appreciate their reliance on the natural environment and act accordingly. This has encouraged some processors and retailers to incentivise more sustainable land management. For example, Nestlé and First Milk have teamed up to create their own agri-environment scheme<sup>7</sup>. This is tailored to produce the benefits that Nestlé wishes to see, such as more sustainable resource use and land management that reduces the risk of flooding. In exchange, farmers are paid a premium for producing to these standards.

Other agri-food companies are increasingly following suit and realising that in the face of climate change and ecological stress, it makes long-term sense to pay producers to manage their natural assets in a sustainable way. This will ensure a more resilient and secure food supply, while also providing other benefits.

“Both the public and the private sectors have reasons to invest in the environment.”

#### Public vs Private Goods

Both the public and the private sectors have reasons to invest in the environment, depending on the benefits (or goods) provided.

There has been much discussion of public goods recently, following the Government's decision that new agricultural policy will centre around “public money for public goods”. The concept of a public good is used in economics to refer to a commodity or service that is available to all (“non-excludable”) and where one person's benefit does not prevent others from also using it (“non-rivalrous”). Clean air is a good example, because it is hard to prevent people enjoying this benefit, and one person doing so does not stop all others in the area from also benefiting.

This is contrasted with private goods, which are normally easier to control and commodify. For example, a crop harvest is sold to a single buyer and can only be used once. For this reason, private goods are easier to exchange on the open market through contracts between buyers and sellers. Imagine the difference between trying to sell a crop of wheat compared to trying to sell a pleasant view or clean air.

7. <https://www.nescafe.com/gb/milk-plan>



## 4. HOW CAN YOU MEASURE YOUR OWN NATURAL CAPITAL?

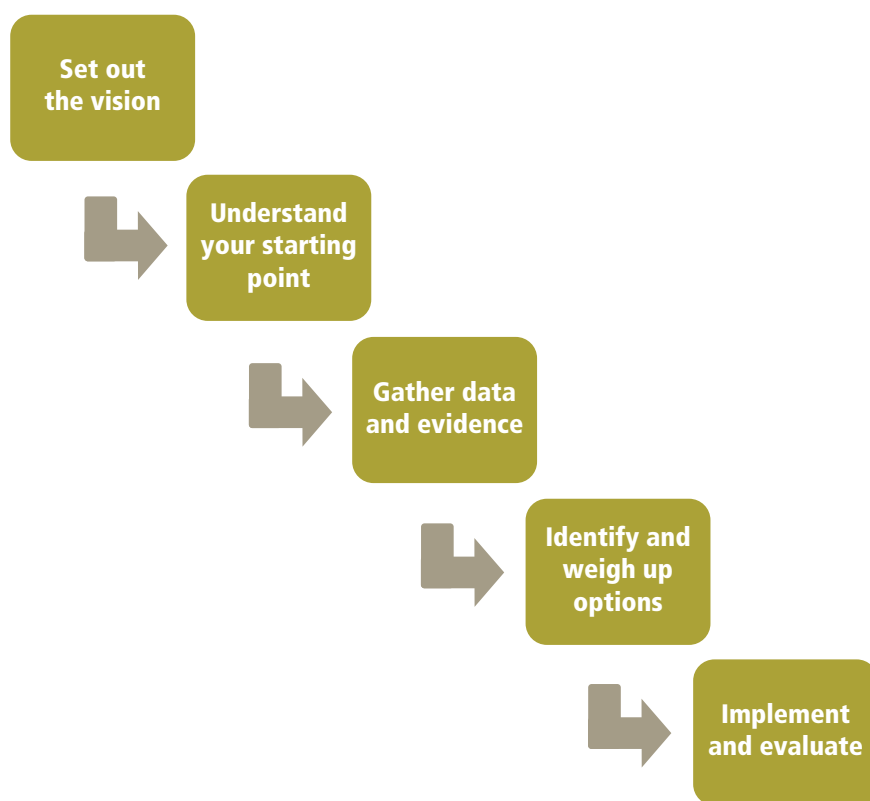
### 4.1 Natural capital assessments

To integrate environmental decisions into business and the economy, significant effort has been spent trying to explicitly quantify the benefits from natural capital. As the saying goes, “If you can’t measure it, you can’t manage it”, and it is in order to improve management and investment decisions that measurement methods have been developed.

Undertaking a natural capital assessment may give you a better understanding of how your business interacts with the environment. In the same way that business accounts and budgets help inform decisions, including by gathering information about assets and their condition, a natural capital asset audit presents environmental data in an understandable way so that it can inform business decisions. A better understanding of your natural capital may also allow you to access investment, whether through Government environmental schemes or private sector investment.

This allows you to think about the value of your environmental assets, opportunities to improve their value, and any risks or trade-offs. It may also draw attention to areas of land where natural capital is being lost.

At its most basic, a natural capital assessment will consist of a process that results in a number of outputs that can be used by the business. One version of the steps involved is as follows<sup>8</sup>.



8. Taken from the Natural Capital Committee’s “How to do it: A Natural Capital Workbook” – [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/608852/ncc-natural-capital-workbook.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/608852/ncc-natural-capital-workbook.pdf)

## Value, Price and Cost

It should be noted that working out the full natural capital value of an environmental asset or service will not necessarily give you the price you can be paid for it. Environmental markets will function in the same way as regular markets, with the price based on interactions between buyers and sellers and their willingness to pay and accept a given price. From the point of view of a landowner, as the supplier of an environmental good or service, the key information needed is how much it will cost to deliver that benefit, including the opportunity cost, in other words what else could be done on the land. This will give a floor price needed to break even on the delivery of the benefit.

"A natural capital appraisal allows you to scope, package and market environmental goods and services to potential buyers."

## 4.2 Case Study: Spains Hall Estate, Essex

### Measuring natural capital to unlock opportunities

CLA member Archie Ruggles-Brise manages the Spains Hall Estate in Essex, a mixed estate of mainly arable farmland with areas of woodland. Archie's background in water and catchment management means he runs the estate increasingly with the ecosystem approach in mind.

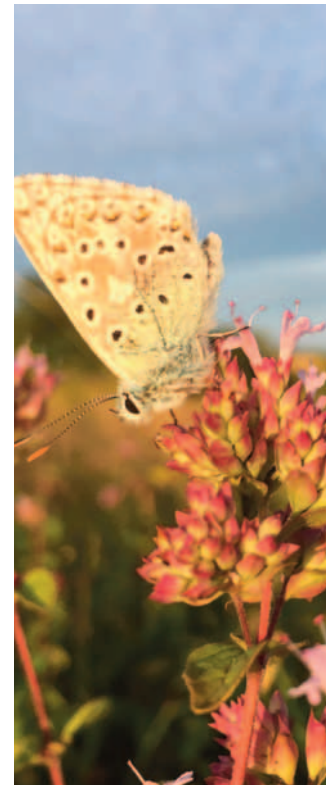
Archie carried out a natural capital appraisal of the estate in order to understand in more detail the potential of the land to deliver more, including services that there was not currently a market for. It also helped reveal some of the risks linked to current land use practices. The natural capital appraisal allowed Archie to scope, package and market environmental goods and services to potential buyers. It also helped to inform decisions relating to entering Government-funded, agri-environment schemes and the design of land-use projects in the pipeline.

The appraisal represented a considerable investment, in terms of both cost and estate staff time, but the process enabled the business to produce an accurate and detailed natural capital baseline, which can now be articulated alongside a coherent estate vision. This greater understanding, supported by evidence of the current and potential value generated from the land, opened up a range of new avenues and opportunities for the business.

This was used to develop and refine projects that maximise the natural capital and ecosystem services that the land delivers. Using the figures and structure produced, Archie was able to successfully bid to be one of only nine national Biodiversity Net Gain (BNG) pilot projects. As a result, he has been provided with BNG unit calculations and a management plan outline for some of the proposed changes without incurring any cost. He is now in a position to respond rapidly, and in terms aligned to the BNG agenda, when developers seek offset sites (which they are starting to do). He is yet to strike a contract but having had the natural capital appraisal this has reduced the costs of entry and ability to access that potential market. The estate is now part of a number of further bid consortia accessing funding streams that would otherwise be unavailable to it. None of this would have been possible without the structure and evidence that a natural capital appraisal offers.

The estate has plans to continue to work with beaver reintroductions, allied to tree planting and development of mixed farming systems. The natural capital appraisal allows the estate to understand the relative natural capital merits of each project and their potential in both public and private environmental goods markets.

“I would strongly recommend that all land managers get a handle on the value their land produces in natural capital terms,” says Archie. “A more thorough understanding of how they can deliver environmental goods from land management will be central to future Government policy and funding. There is also increasing scope for private sector investment in natural capital or payment for the services that good land management can deliver.”





## 5. ENTERING THE MARKETPLACE

When entering into the marketplace it is key to understand the role of the supply chain, in order to protect your interests when it comes to contractual arrangements.

### 5.1 Investors

As environmental markets develop, investors see an opportunity to benefit from investing in natural capital as a new type of asset, one which offers a return on investment while delivering environmental and social benefits. Most investors will not be well placed to be involved in the detail of delivery on the ground. They will therefore need certainty that what is claimed to be delivered (eg carbon sequestration, biodiversity gain) actually is delivered over time. They will also want a reliable indication of the value of these outcomes to themselves or others, which can be captured in corporate accounts.

### 5.2 Natural capital brokers

The CLA expects to see a growth in this industry, providing a middle man between investors and buyers and those delivering the natural capital projects. They should have an understanding both of what the buyers want and what is practical for land managers to deliver. This will include an understanding of costs, values and prices to help facilitate the best deal for all parties. This is an emerging market, it is important to choose a reliable broker.

### 5.3 Project aggregators

Larger investors, such as a bank or an airline, will be looking to do natural capital projects on a large scale so may work with a number of farmers and landowners in collaboration on certain projects. Collaboration between a farmer cluster across a catchment or landscape can help combine multiple smaller projects or agreements into a large-scale programme. This has been cited within the plans for the new ELM scheme as a way of producing large-scale delivery, and enabling the smaller landowners to participate.

### 5.4 Environment banks

In order to make the marketplace function, one option is to use a credit system to convert natural capital or ecosystem services into tradeable units. These need to be verifiable according to an agreed method of measurement and audit. Environment banks can manage these credits, creating a marketplace and ensuring a reliable supply of credits. A credit system can also help to aggregate individual projects or farm-level activity into something of a suitable scale for investment.

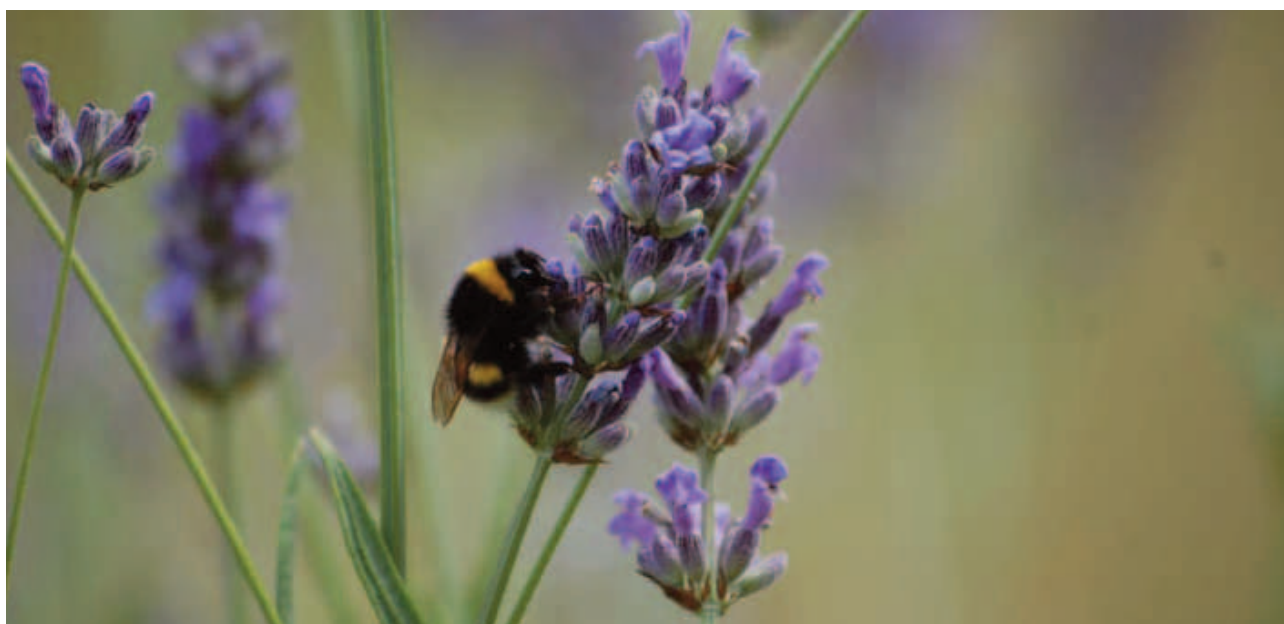
## 5.5 Contractors

In some cases, a landowner may supply land and leave another organisation (including long-term tenants) to manage it in the required way to deliver environmental benefit. In this case they may lease the land or enter into a conservation covenant (a legal agreement that runs with the land) but leave the delivery of environmental management on the ground to another party. It is also worth noting that tenants may be able to enter into environmental contracts (as they do currently with agri-environment schemes) depending on the terms of the tenancy.

## 5.6 Natural capital auditors

For all of the other components of the supply chain to operate there must be a shared understanding of the quantity and value of the environmental goods or services being provided. For this reason, many of those people and businesses described above will use a metric or tool to measure the environmental outcomes and value being delivered. In some cases, this will be a market standard, such as the Woodland Carbon Code or Defra's Biodiversity Metric (which is used to measure biodiversity units for Net Gain).

Some companies are offering natural capital accounting as a standalone service, with the ability to carry out natural capital audits or assessments of farms or estates. As well as giving an indication of the potential value of the land from an environmental point of view, a natural capital evaluation can also give information useful to guide land management. For example, it can identify areas of land that have a low economic value to the business but a high environmental value. These areas can then be a focus for Government or private sector environmental investment.



## 6. FINDING THE CORRECT MARKET

### 6.1 Exploring opportunities

Once you have confirmed you have an interest in entering these new markets, the next step is to identify the correct project for your business. Some opportunities are or soon will be widely available, such as the new ELM scheme and tree planting schemes to sequester carbon. Other opportunities will be very place-specific and depend on the local economy, geography and environment.

If you are not already aware of what opportunities exist in your area, consider contacting one or more of the following to gain general information and advice, have an initial exploratory discussion or, in some cases, discuss a more developed proposal for your land:

- local farm or environmental advisers;
- land agents;
- local authorities (especially regarding Biodiversity Net Gain);
- government bodies: Natural England, Forestry Commission or Environment Agency;
- environmental charities or NGOs;
- local businesses or organisations that may have an interest in how you manage land; and
- neighbouring farmers and landowners.

### 6.2 Case Study – Claydon Estate, Buckinghamshire

#### **Delivering biodiversity net gain for Network Rail**

The Claydon Estate in Buckinghamshire, owned by CLA member Nicholas Verney, is bisected by the Oxford to Cambridge East-West rail line, while HS2 also runs through the estate, meaning they have become used to dealing with infrastructure projects in recent years.

Network Rail had undertaken to operate under the principle of biodiversity net gain, which meant that in certain situations they needed to deliver new wildlife habitat sites to offset some of the harm done by the construction of the new line. An initial proposal was based on a number of small sites dotted around the estate. Network Rail was persuaded, however, to abandon this in favour of a single larger site for a longer period.

The contract consisted of a 5-year lease to Network Rail, that would create the wildlife habitats, which included putting in a hibernacula for reptiles, badger sets, and insect habitats. Once this creation phase has finished, the land will revert back to the Claydon Estate



under a 25-year deed of agreement to manage it for the benefit of wildlife. The estate will be paid for the on-going management of the land, as well as an upfront lump sum.

“We had to take a fairly proactive approach to negotiate a deal with Network Rail that worked for the estate. But in the end both sides got what they wanted from the deal,” said Nicholas Verney. He also highlighted the need to look carefully at any contract to ensure it is clear where responsibilities lie and to minimise any risks.

This is a good example of the win-wins available through a natural capital approach, with Network Rail able to demonstrate that there has been a net gain for wildlife, while the estate was able to find a more lucrative use of what was otherwise relatively unproductive land.



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