



Introducing LAND360+

A science-based approach to auditing your natural landscape.

Understanding the value of your **natural capital**; helping future proof your business and land for future generations.

UNDERPINNED BY **R&D** | POWERED BY **TECHNOLOGY** | DRIVEN BY **DATA** | INFORMED BY **SCIENCE**





The Landscape

Now is a pivotal time for farmers and landowners to be making the most of their assets with input and labour costs squeezing profit margins as well basic payment scheme (BPS) payments being progressively reduced.

With the introduction of the Environmental Land Management scheme (ELMs) and the development of markets offering income generation through carbon storage and tree planting, for example, there are now increasing incentives for farmers to measure, track and invest in natural capital.

The term 'natural capital' often crops up in conversations around sustainable land management. The term is used to describe any element of nature that produces value or benefits to people.

When we talk about natural capital in the context of farming and land management, we are encouraging farmers or landowners to place a financial value on environmental assets, in the same way other farm business assets are valued, such as farm buildings or machinery.

To benefit from everything our landscape offers, such as footpath access, flood prevention and carbon sequestration, prioritising the improvement of our natural capital and our ecosystems is critical.

Creating a healthy state of biodiversity is of course also central to a productive agricultural system. The UK 2019 State of Nature report showed evidence that 70% of all UK animal and plant species are in decline, so it is growing ever more vital for country estate and farm managers to embrace farming strategies that can help protect and grow the biodiversity around them.

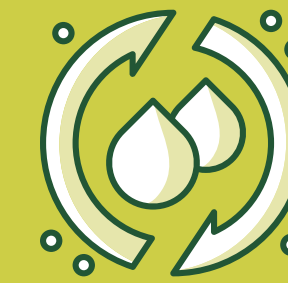
Examples such as maintaining and enhancing wildlife corridors, historic parklands and water sources could provide the potential to improve a business's resilience, as well as supply environmentally friendly income streams.

To explore the opportunities that could improve business resilience and create a positive legacy, understanding the natural capital across specific land areas is the first step.

By working either independently or together on natural capital projects, farmers can have a greater impact on the environment and really make a difference for the future.

Glyn Jones Head of Science (Plant) and Senior Economist

Natural Capital Examples



CLEAN WATER AND OXYGEN



BIODIVERSITY OF PLANTS AND ANIMAL SPECIES



CARBON CAPTURING PLANTS



FERTILE SOIL WHICH ENABLES FOOD PRODUCTION

Natural capital also includes elements with social benefits, such as positive effects on people's mental health and wellbeing:



PUBLIC ACCESS TO THE COUNTRYSIDE



HISTORICALLY SIGNIFICANT LAND



VIEWS OF THE LANDSCAPE





OFFERING SCIENCE-BASED SOLUTIONS FOR FUTURE LAND MANAGEMENT

With LAND360, Fera scientists use software, scientific tools and multidisciplinary expertise to help farmers and land managers measure exactly what natural assets they have across specific land areas.

LAND360 is a tiered service, with each tier offering a different approach to measuring and monitoring natural capital. LAND360 uses the expertise of the Fera team who identify solutions to help futureproof land-based businesses.

As part of the LAND360 service, Fera establishes a detailed baseline picture of the land and opportunities for future land management strategies.

We can also work with the landowner to consider how business and personal objectives can be met.



Our ecologists go onsite to assess biodiversity and measure hedgerows and trees to establish a picture of the quality of habitats that exist.



We have a remote sensing team who look at different aspects of the landscape in terms of canopy cover, species and linear features.



Our group of social scientists consider the objectives of the landowner and how they can interact with the incentive mechanisms in place to achieve environmental goals.

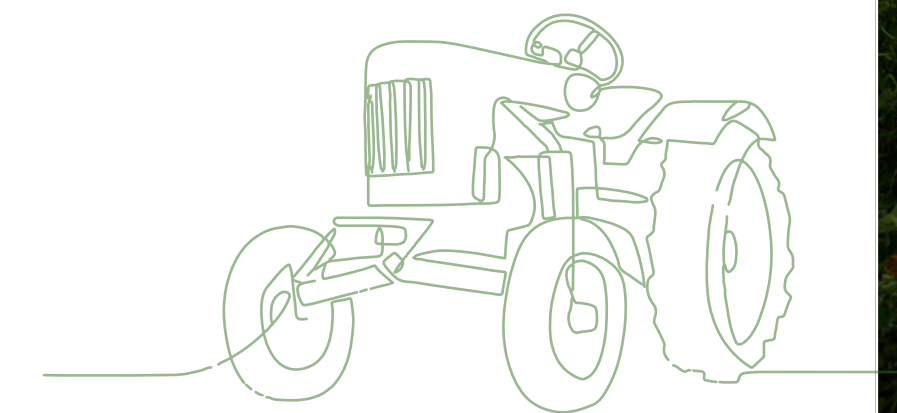


THE POINT OF LAND360 IS TO ASSESS WHAT NATURAL CAPITAL YOU'VE GOT IN THE FIRST PLACE.

IF YOU DON'T KNOW WHAT YOU'VE GOT AND WHAT YOU COULD HAVE, YOU CAN'T REALLY TRY AND GRAB THAT OPPORTUNITY.



GLYN JONES



Discover LAND360+ Packages

LAND360 HAS BEEN DEVELOPED TO **HELP LANDOWNERS AND FARMERS** REALISE THEIR **LAND'S FUTURE POTENTIAL** AS WELL AS **IDENTIFY ITS EXISTING NATURAL CAPITAL ASSETS.**



THE THREE TIERS OF LAND360 ARE:

MAPPING PLUS

A comprehensive baseline mapping service that provides a robust foundation for strategic land management planning and provides the data to make informed decisions.

- + **High resolution landscape mapping using 30cm satellite imagery to produce an accurate digitisation of your land**
- + **Detailed classification of landscape parcels and habitats using the UKHAB classification system**
- + **Basic analysis of carbon and biodiversity units**

[Find Out More](#)

SCORING PLUS

A step on from **LAND360 Mapping+**, this package uses proven methods to quantify natural capital providing tangible insights that encourage sustainable land management decisions.

- + **A calculation of biodiversity units to quantify the value of natural capital**
- + **Support from ecologists to validate identified natural capital and identify further opportunities for alternative land management options**
- + **Carbon density mapping**

[Find Out More](#)

ECOSYSTEM PLUS

LAND360 Ecosystem+ is a service whereby land use proposals are developed in conjunction with land management decision makers, stakeholders, and Fera scientists to identify opportunities for future revenue streams. This is based on detailed analysis gathered on available natural capital and business performance.

- + **Economic analysis combining LAND360 Scoring+ data with your own management records**
- + **1-2-1 time with Fera scientists to support with the development of long-term management options**

[Find Out More](#)



LAND360+ Estate Case Study



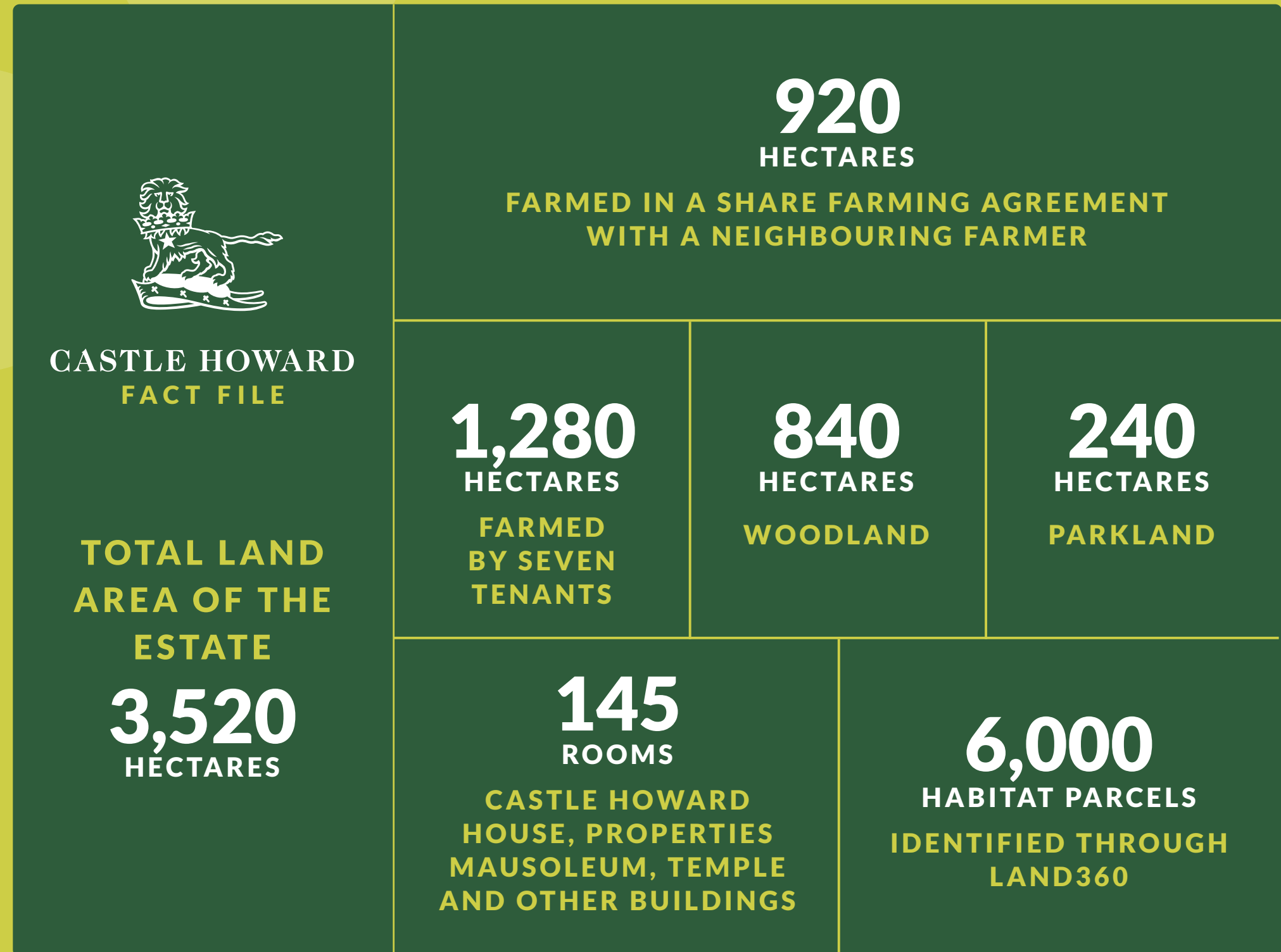
CASTLE HOWARD: ESTATE STRATEGY

For Castle Howard, the purpose of using LAND360 was to create an accurate picture of the existing landscape which would allow the estate team to adapt their management practices to increase carbon sequestration, enhance the natural environment, and support its tenant farmers.



Jasper Hasell, Estate Chief Executive at Castle Howard, explains that getting a clear understanding of the landscape's natural capital fits into the estate's three-pillared strategy:

- 1: Restoring** the estate's heritage
- 2: Regenerating** the landscape and soils
- 3: Reviving** the estate's rural communities



Benefits of Using LAND360+



BUILDING A NATURAL CAPITAL BASELINE

To achieve the landscape assessment of Castle Howard using LAND360, the process has included:



(Ecologists comparing mapped features to on-the-ground assessment)



The benefit to us of using LAND360 has been the **rich baseline we've created** from which we can make decisions that can help us **determine how** we change certain **land management operations**.

The next stage is about the soil health, the carbon store within soils, the biology and general health so we can make improvements to our land management and soils.

Fera is working with us to devise a programme so we can measure changes every 2-3 years to see our progress.

The next piece of the jigsaw is scenario testing, so that's understanding what we do with different land parcels, what's the best decision in terms of land use, and how that meets objectives – whether that's carbon sequestration, biodiversity, or gross margins in terms of profitability.

JASPER HASELL



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CLICK TO WATCH OUR VIDEO: AND MEET JASPER IN THE **LAND360 CASE STUDY: CASTLE HOWARD**

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