



**Forest of  
Marston Vale**

# Creating the green heart of Bedfordshire

A review of progress in creating the Forest of Marston Vale, and a summary of the impact and value of these achievements to date

**Trees  
Make Life  
Better**

**1995**



**2015**



# Foreword

In 1991, the Government designated 61 square miles between Bedford and Milton Keynes as one of 12 Community Forests across England – and the vision of creating the Forest of Marston Vale was born. To drive that vision forward, the Forest of Marston Vale Trust was created by the founding partnership of the Local Authorities, Natural England, the Forestry Commission and local industry. As an independent charity, the Trust's role has been, and remains, to lead on creating the Forest of Marston Vale.



Previously home to the London Brick Company, the Marston Vale landscape was once dominated by over 100 brick chimneys. The industry's decline left a legacy of a despoiled landscape littered with abandoned clay pits and major landfill sites – an area environmentally impoverished. At the time of being designated, the Forest area had just 3% tree cover, compared to nearer 10% for England at that time and an average of around 35% across Europe.

A core target for creating the Forest is increasing tree cover to 30% – a ten-fold increase – as a means to transform the social, economic and environmental prospects of the area. Working with local communities, businesses and partners over the last 20-plus years to plant millions of trees has not just been about transforming the landscape though, it's also about boosting the local economy, growing a new sense of place and helping set the scene for future growth and prosperity.

To better understand our progress to date and the resulting benefits, the Trust commissioned an academic study on behalf of, and with support from, our partners Bedford Borough Council, Central Bedfordshire Council, the Forestry Commission and Natural England.

This document provides the key findings of that study, indicating the impact of the creation of the Forest of Marston Vale so far, and reflects on the value of the benefits that flow from all that has been achieved to date. It also provides an opportunity for the founding partners to reaffirm our joint ambition to continue creating the Forest over the coming years.

As the charity leading the creation of the Forest, the Forest of Marston Vale Trust has already worked with partners to increase tree cover to 15% – a truly impressive achievement – but we still have some way to go to achieve the target and fulfil the full vision of the Forest.

All of us involved are committed to making the Forest a thriving place to live, work and play and I'm sure you understand not just how much benefit the Forest has already brought to our local communities, but how much more we can achieve with our combined efforts, continued commitment and investment – especially as the research shows that every £1 invested in creating the Forest to date has returned at least £11 of benefits.

*Debbie Hassall, Chair of Trustees*

# Our story so far

The first seeds of the Forest of Marston Vale were planted in 1991, when the area was chosen by Government to become one of 12 Community Forests as part of an ambitious new national programme. Each Community Forest lies close to large population centres – in our case Bedford and Milton Keynes – and covers areas scarred by past industries and activities – here, a century of clay extraction to supply a once world-leading brick industry, and subsequent major landfill activity.

Collectively, Community Forests have formed the largest environmental regeneration initiative in England. The Forest of Marston Vale, like other Community Forests, utilises woodland creation as the catalyst for regeneration – using extensive tree planting to transform the landscape, transforming perceptions of the area, so improving social and economic prospects.

The vision to create the Forest of Marston Vale was founded by a partnership between local authorities, local industry and national Government agencies. This 40-year shared vision of ‘environmentally-led’ regeneration was set out in the inaugural Forest Plan published in 1995. At this point, tree cover was just 3% – only a third of the national average and amongst the lowest in the country at that time – and the area’s environment was in urgent need of regeneration.

In 1998 the founding partnership created the Forest of Marston Vale Trust, a new and independent charity, to drive forward and lead on the creation of the Forest on their behalf. Since then, the Trust has accelerated the growth of the Forest of Marston Vale, whilst growing itself to become a thriving model of social enterprise.

“I’ve lived in the area from 1994 – 2014 and enjoyed watching Marston Vale be transformed from brownfield and landfill into a wonderful green landscape.”



Fast forward 20 years and you find a vibrant landscape, transformed through the planting of over a million trees; a landscape far richer in wildlife, with many more opportunities for local communities and visitors to explore it. At the heart of the Forest is the multi-award winning Forest Centre & Millennium Country Park, a model of self-financing greenspace and part of a growing leisure economy in the region.

The vision for creating the Forest of Marston Vale remains as clear and as relevant today as it was when it was established. The target remains to increase tree cover to 30%, requiring the planting of around 5 million more trees to achieve the desired 20 square miles of woodland across the landscape by 2031. All with the goal of regenerating the area; creating a better quality natural environment for the tens of thousands of people living, working in and visiting the Forest.

# Why trees?

Trees and woodlands make life better – for us as individuals, for wildlife, for communities and wider society as a whole, as well as for our economy.

Trees and woodlands help to cool and clean our air, lock up carbon and slow the rate of climate change. They provide places to relax and walk which improve our physical and mental wellbeing. They provide homes for wildlife, whilst producing renewable raw materials for building and fuelling a more sustainable future. Trees and woodlands are one of the most versatile and valuable natural assets.

“A treeless landscape affects the air we breathe, the water we drink, the food we eat, and the diversity of our wildlife, as carbon dioxide thickens the blanket of gasses around the Earth...We should be unequivocal about how woodlands form some of the greatest assets of our natural capital.”

Independent Panel on Forestry (Final Report)



The premise of the Forest of Marston Vale lies in seeking to harness the power of this ‘natural capital’ to transform and regenerate a once-degraded landscape.

Since its creation, the Forest of Marston Vale has already seen great achievements on the ground, but there remains much more for the Trust and partners to do in order to fully deliver the agreed vision of transforming the area and creating a new sense of place.

As we enter this next phase of the Forest’s growth, we all need to understand the progress and achievements to date, as well as – perhaps more importantly – the scale and value of the benefits that arise from what has already been achieved.

Understanding these benefits and their impact strengthens the business case for further investment in the creation of the Forest and helps inform how the initiative moves forward.

An academic study was commissioned to quantify and value the environmental, social and economic impacts of the creation of the Forest of Marston Vale to date. The approach used drew upon the concepts of natural capital accounting, economic valuation, and evaluating economic impact. The study looked at the ten types of environmental benefit for which monetary values are most well-established. By combining these with assessments of social and economic impacts, the study provides the first ever indication of the overall value of the benefits provided by the creation of the Forest of Marston Vale so far.

The aim of the study, which is summarised in this document, was to demonstrate the scale of what has already been achieved, and how continued investment in creating the Forest of Marston Vale will bring yet further benefits for local people, the local environment and the local economy – to show how trees really are making life better.

# Valuing the Forest

After just over two decades of activity, a huge amount of progress has already been made in creating the Forest of Marston Vale. Our research reveals that the original vision of a 'Forest' landscape is already taking shape and becoming a reality, providing the catalyst for the wider regeneration of the area. The study's key findings, below, show that there is much for all involved to be proud of.

In terms of the physical creation of the Forest, so far we have achieved the following results:

- **Increased tree cover from just 3.6% in 1995 to 15.4% by 2015** – which means that we're already past the halfway point of the original target of achieving 30% tree cover;
- **Created over 1,140 hectares of new woodland** – which has more than trebled woodland cover within the Forest area; and
- **Attracted inward investment of over £22.8m** to help create the Forest so far.

Millions of trees have been planted already, transforming the once-degraded landscape, but it's the social, economic and environmental benefits that this has brought to the area which are most profound. In monetary terms, our researchers estimate that the creation of the Forest over the last 20 years has already produced:

- **Overall benefits with an annual value of £12.83 million** – which equates to benefits with a net present value of £339 million;
- Estimated **annual benefits worth £11,247 from every hectare of woodland created** in the Forest so far.

Every £1 invested in the Forest of Marston Vale so far generates £11 of social, economic and environmental benefits.

Some examples of these benefits are set out in the next few pages

A map of the Forest of Marston Vale area showing woodland cover in 1995. The map is mostly white with sparse green patches representing existing woodland. A pink label 'Woodland cover in 1995' is positioned below the map.

Woodland cover in 1995

A map of the Forest of Marston Vale area showing woodland cover in 2015. The map shows a significant increase in green areas compared to 1995, indicating substantial new woodland creation. A pink label 'Woodland cover in 2015' is positioned below the map.

Woodland cover in 2015

We've increased tree cover from just:

**3.6%**

(in 1995)

**to 15.4%**  
(in 2015)

Our ultimate aim is to **increase that to 30%**

Creation of the Forest over the last 20 years has already generated benefits with an annual value of:

**£12.83m**  
**every year**

That equals a net present value of:

**£339m**

We've created over **1,140 hectares** of new woodland, providing annual benefits of: **£11,247 per hectare**

**Every £1 invested**  
in the Forest  
**will generate £11**

of social  
economic  
& environmental  
benefits



# Social benefits

The vision for the Forest of Marston Vale is as much about people as it is about trees, and there are significant social benefits that arise from the creation of the Forest – everything from improved health and wellbeing, to social cohesion, community engagement, and creating new partnerships and a renewed sense of place.

## Health and wellbeing

There is a growing body of evidence proving that the natural environment – and woodland in particular – has a positive effect on our health and wellbeing, including reducing respiratory illness, stress and anxiety.

Using both visitor data and research on how physical activity outdoors can reduce hospital visits and increase life expectancy, the value of the physical health benefits provided by the Forest was estimated as being £4.95m per annum. This doesn't include the benefits to mental health and wellbeing, for which there isn't yet an agreed, generic measure.

## Volunteering

The Forest couldn't grow without volunteers. They have been instrumental in supporting the achievements to date, and reflect the deep engagement of local communities in the creation of the Forest.

Over the last 15 years, volunteer support has increased significantly, totalling an estimated 79,890 hours of recorded volunteer time. On average, that's equivalent to 2.8 FTE jobs annually. The monetary value of this 'in kind' investment from volunteers was estimated at £655,098.

## Partnerships & engagement

The creation of the Forest of Marston Vale requires collaboration, which has a positive social impact – it fosters both social cohesion and the creation of a new sense of place.

To date, through engaging with local communities and landowners, and building new partnerships with public and private sector organisations, there has been an average of 15 partnerships a year. The power of these partnerships is revealed by the fact that they have so far helped secure over £22.8m of inward investment to help create the Forest of Marston Vale.



**£4.95m**

Annual cost saving to the NHS



Average of 2.8 FTE per year from volunteers since 2000



**79,890**  
volunteer hours



15 partnerships per year



**£22.8m**  
Inward investment attracted

# Economic benefits

The creation of the Forest is designed to boost economic prospects, but real economic benefits are already evident from the achievements over the last two decades – from providing employment, buying goods and services, and from creating a new visitor economy. When it comes to assessing these economic benefits, the study considered the concept of ‘additionality’ – calculating the impact of the Forest compared to what would have happened if the Forest hadn’t been created.

## Employment

As a net employment impact, it’s estimated that the Forest of Marston Vale has supported an additional 167 FTE jobs a year in the local area. That includes jobs directly created by the Forest, from spending with local services and the use of local contractors, as well as visitor spending in the local area.

## Goods, services & contractors

Creating the Forest to date has involved the preferential use of local goods, services and contractors as means to support the local economy. In turn, these local businesses then provide local jobs and boost local incomes. Between 1995 and 2015, it’s estimated that the total economic impact of this local spending has been £22.05 million.

## Recreation & tourism

The creation of the Forest of Marston Vale has dramatically increased recreational opportunities and helped create a new visitor economy in the area. The value of these to the local economy has been estimated at £6.91 million per year, a figure which supports an estimated 138 FTE jobs in the local economy.

## Enhanced setting

The growth of the Forest is providing a new, enhanced visual aesthetic that is part of creating a new sense of place. One aspect of this is the benefit to local residents by improving the residential setting and view from their homes. It’s estimated that proximity to woodland could increase average house prices in the region by up to £19,568.

The enhanced setting is also likely to attract more businesses. Local business surveys have revealed that businesses rank an attractive environment as amongst the most important factors when locating, with 67% of businesses in the SEMLEP area citing attractive (environmental) surroundings as a major reason for them choosing to locate locally.



**167** FTE jobs  
per year  
supported locally

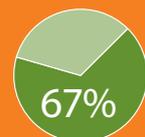


**£22.05m**  
Boost to local economy  
from spending locally

**£6.91m**  
Annual boost to  
visitor economy



Potential increase in  
average house prices



**Businesses**  
Cite attractive surroundings  
as a reason to locate here

# Environmental benefits

The creation of the Forest of Marston Vale naturally brings significant environmental benefits – from improving air and water quality, to reducing flood risk and providing timber as a sustainable natural resource. The study assessed the value of these benefits, as well as considering the impacts of converting farmland to woodland.

## Air quality

Trees are very effective at reducing air pollution. It's estimated that the new woodland already created is able to absorb 0.65 tonnes of sulphur dioxide (SO<sub>2</sub>) and 65 tonnes of particulate matter (PM<sub>10</sub>), providing an annual benefit of £1.18 million in reduced social damage costs. At the same time these additional trees sequester 4,917 tonnes of carbon dioxide (CO<sub>2</sub>) annually – equivalent to the annual emissions from around 2,000 family cars – which is a benefit worth £0.31 million per annum.

## Timber supply

As it grows, the Forest will increasingly provide a sustainable source of timber, a versatile natural raw material and renewable energy source. It's estimated that the creation of woodland over the last 20 years has already increased the potential timber yield by 9,127m<sup>3</sup> of timber annually. Over the next 50 years, this sustainable supply of timber has a value of at least £349 million.

## Agricultural impacts

Agriculture remains the principal land use across the Forest area, with most of the new woodland created from converting farmland. Whilst this reduces agricultural production, it has also removed the environmental impacts of modern, intensive agriculture – including reducing greenhouse gas (GHG) emissions from machinery and fertilisers. To date, the creation of the Forest has reduced agricultural GHG emissions by 1,747 tonnes CO<sub>2</sub>e per annum, an annual benefit worth £108,295 in monetary terms.

## Water flow & quality

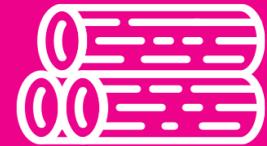
Woodland has been proven to help reduce flood risk and improve water quality. By 'slowing the flow' of water, the quantity of woodland created in the Forest so far is estimated to reduce peak flood flows by 5%, worth £27,722 annually. The study concludes that water quality benefits from woodland creation to date will have been considerable, but it's not yet possible to put a monetary value on this benefit.



Air quality benefits worth £1.49m per year



CO<sub>2</sub> removed from the atmosphere annually



9,127m<sup>3</sup> Annual increase in potential timber supply



Agricultural emissions reduced, worth £108,295 per year



In peak flood water flows

# Our future is growing

The first two decades of work to create the Forest have already begun to transform the area, delivering significant social, economic and environmental benefits. The Forest is taking shape – woodland cover has trebled and there's now over 15% tree cover – and we know that it's already providing benefits worth over £12.8m every year.

Overall, every £1 invested in creating the Forest to date has generated benefits worth an estimated £11, providing an incredible return on investment for the local area – and we're only at the halfway point in creating the Forest, so the potential value is even greater.

The Forest of Marston Vale began as part of a pioneering and ambitious national programme to create Community Forests. Much has changed since that time and yet the core proposition of environmentally-led regeneration has remained extremely relevant and contemporary over time.

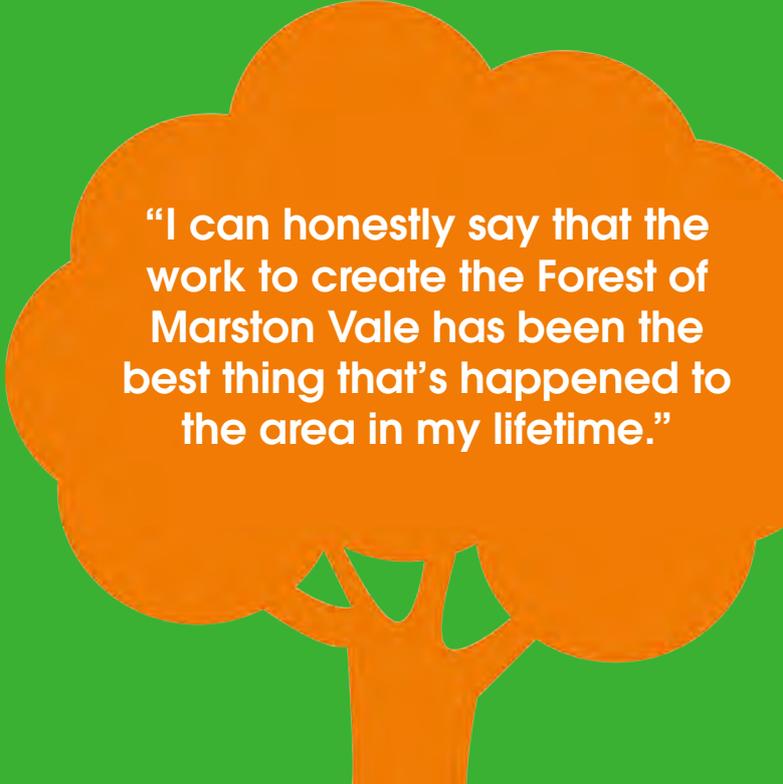
The Government's 25-year Environment Plan promotes investing in natural capital, supports Community Forests and sets ambitious targets for tree planting, whilst the National Planning Policy Framework recognises the importance of Community Forests in planning decisions. All of this provides a positive context to help accelerate the next phase of the Forest's creation. Moving forwards there are huge opportunities, but there will continue to be challenges to overcome.

The proposals for a growth corridor along the Cambridge – Milton Keynes – Oxford Arc demonstrate the area's potential as a strategic development corridor and are the latest example of the development pressure that's existed throughout the Forest's existence. The agreed, long-term vision for creating the Forest provides a strategic framework for influencing whatever change may come. Creating the Forest is about placemaking; it's about creating a new 'sense of place' and an opportunity to demonstrate how environmental regeneration can redefine an area and transform its prospects.

We now understand the value of the benefits provided from creating the Forest so far – an impressive £339 million (net present value) – and this provides an unequivocal case for continuing to work together to realise the full vision of the Forest. The key question is – how do we continue the level of success achieved to date? The answer is a simple one – by holding firm to the ambitious shared, long-term vision, and working together to deliver it.

All partners have important roles to play. As the founding partners, Bedford Borough Council, Central Bedfordshire Council, the Forestry Commission and Natural England will continue their strong commitment to creating the Forest of Marston Vale and champion the successes to date. As the charity leading the creation of the Forest on behalf of these partners, the Forest of Marston Vale Trust remains wholeheartedly committed to completing the creation of the Forest.

Our future really is growing. The Forest of Marston Vale is already taking shape – physically, socially and economically – providing benefits that are fuelling the regeneration of the area. By working in partnership across the public, private and charitable sectors, incredible things have already been achieved. It's now time to collaborate on this next phase of the Forest's growth, and discover how much more can be achieved by creating the Forest as a legacy for future generations.



**“I can honestly say that the work to create the Forest of Marston Vale has been the best thing that's happened to the area in my lifetime.”**




# Forest of Marston Vale



Produced by the Forest of Marston Vale Trust in partnership with:



Supported by  
**Central Bedfordshire Council**



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