

an exemplar of Sustainable Development

Minister's Foreword

This report demonstrates how an organisation can assess the impacts of its business as well as its surrounding environment and take measures to contribute to sustainable development.

The support of the wider Defra Network (including Executive Agencies and Non-Departmental Public Bodies) is key to raising our level of ambition and demonstrating leadership. This National Forest Company report, in particular the framework for monitoring progress and its approach to leadership, is an exemplar of good practice that I encourage other organisations to follow.

The report includes actions that contribute to sustainable development, including further woodland creation, measuring social inclusion and well being, working with partners on developing the National Forest as a destination for sustainable tourism and extending wildlife habitats.

Since the publication of the 2005 UK Government's SD strategy Securing the Future, the National Forest Company has taken an active role in embedding the principles of SD into their business. This report also features the NFC's Sustainable Development Action Plan (SDAP), a key commitment for Government Departments and their Executive Agencies in Securing the Future.

Working in partnership and sharing best practice are essential if we are to tackle the challenges ahead. I am sure that the NFC and partners will put this into practice to make the most of future opportunities.

Therefore, I am very pleased to support this report *The National Forest – an exemplar of sustainable development.*

BARRY GARDINER

Minister For Biodiversity, Landscape and Rural Affairs June 2007

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Sustainable development and the creation of The National Forest

Sustainable development has been the guiding principle of the creation of The National Forest since the publication of the first National Forest Strategy in 1993. The goal of sustainable development, in all its dimensions, is the justification for the public trust and resources which have been given to the National Forest Company in its leadership role. It is not one objective amongst many but rather the core of our mission to create a multipurpose forest for the nation, demonstrating social, environmental and economic benefits

THE REPORTING ROLE OF THE NATIONAL FOREST COMPANY

The National Forest Company therefore owes it to those who inspired this unique and ambitious project, who have funded it and who still engage in its creation, to measure the direct impacts of our activity and report transparently on the extent to which we are fulfilling Government, regional and local sustainable development objectives.

The Company also has an increasing leadership responsibility in providing information about the overall sustainable development status of the Forest, including aspects beyond our direct control. This report reflects both these roles. It also incorporates the National Forest Company's own sustainable development action plan, which as a non-departmental government body we are encouraged to do and have readily undertaken.

SUSTAINABLE DEVELOPMENT PROGRESS

This report evidences substantial and remarkably balanced progress against environmental, economic and social indicators which support both the UK Sustainable Development Strategy and the priorities of the National Forest Strategy 2004 - 14. There is much to do, including on transport, but in 17 short years a remarkable transformation has occurred. Above all, the

commitment is widely shared with our local communities and many other stakeholders.

The Company recognises its responsibility to take forward the messages of the report and continuously to improve its own practices. We will use the report actively, for dialogue and, more importantly, for working partnerships across all sectors to fulfil the shared vision for The National Forest.

ACKNOWLEDGEMENTS

I would like to acknowledge the contribution of all who have been involved in producing this report. Defra, as the sustainable development champion across Government, has provided the executive team with invaluable expertise, recognising the project's national significance. National Forest Company Board Directors have also been fully engaged.

Finally, the National Forest Company depends entirely for the creation of the Forest on the support of Government and of a wide range of partners, landowners and communities. Their commitment and contributions underlie the whole of this report and the successes and challenges it describes.

DINAH NICHOLS

Chair, National Forest Company June 2007

Introduction and Executive Summary

The National Forest

The idea of a new multi-purpose forest demonstrating best practice in lowland forest creation and management was first mooted in the Countryside Commission's 1987 policy document 'Forestry in the Countryside'. Extensive consultation and feasibility work resulted in a site being identified across 200 square miles of the Midlands, including Burton upon Trent, of brewery fame, Coalville and Swadlincote, of mining tradition, and Ashby de la Zouch, of historic interest. The population has grown and is now around 200,000, living across parts of Leicestershire, Staffordshire and Derbyshire.

The first planting took place in 1990. In the central area, mining and clay working had stripped the area bare, leaving dereliction, economic decline and massive potential for regeneration and environmental improvement. Beyond this central area, mixed farmland and, except in parts of the west and east, low levels of woodland, predominated. Overall, woodland cover was at 6%.

The National Forest is a unique national case study, given its scale and its aspiration to reflect and lead the integration of social, environmental and economic policy drivers. This report provides evidence of the extent and balance of the transformation achieved to date.

THE REPORTING ROLE OF THE NATIONAL FOREST COMPANY

This publication builds on two earlier ones demonstrating the social and economic benefit of the Forest and supplementing reporting that already existed on its main, environmental, impact. It brings all those elements together in a 'triple bottom line', aligning our monitoring of the Forest's creation and the area's broader sustainability with national sustainable development reporting, in particular the contribution of the Forest to the UK Sustainable Development Strategy (see Appendix 1).

The National Forest Strategy 2004 – 2014, agreed with Government, provides a

comprehensive framework for action to create the Forest. This report provides additional evidence on priorities through a sustainable development analysis.

THE PURPOSE OF THE REPORT

The purpose of this report is therefore to:

- Assess the current status of The National Forest as a UK sustainable development exemplar and provide a robust framework for future monitoring.
- 2. Identify future priorities for the achievement of sustainable development, (both activity and monitoring), by the National Forest Company, its partners and stakeholders.
- **3.** Provide a model of an approach that could be replicated by other organisations.
- **4.** Demonstrate the National Forest Company's leadership role in taking responsibility for its own operations and impacts in relationship to sustainable development.

FINDINGS AND ACTIONS

The environment

Woodland cover, the key target for the Company, has almost trebled to 17.5%. The Forest is sequestering carbon and making a contribution to the reduction of greenhouse gases. Sustainable landscape change is being achieved: through creating a range of habitats,

through agricultural diversification and through reclamation of derelict and mineral worked land. 1,300ha of habitats have been created or brought into management, helping to reverse past habitat and species losses.

Actions: Environment

The National Company will, with and through partners:

- 1. Continue to drive the creation of the Forest and its effective management to meet the objectives and woodland creation targets of the National Forest Strategy 2004 2014.
- 2. Extend and improve wildlife habitats to meet the Forest's Biodiversity Action Plan targets.
- **3.** Monitor the quality of the habitats and species prioritised in the National Forest's Biodiversity Action Plan.
- **4.** Monitor bird populations, particularly woodland birds.

The economy

Employment rates exceed regional and national averages and unemployment is considerably lower than regional and national averages. The National Forest Company has directly supported the growth of employment in tourism and the woodland economy and the Forest has benefited from £115m investment in regeneration between 1995 and 2006. The report paints a picture of a generally robust economic performance across the Forest with areas of relative economic disadvantage in parts of both the former coalfield and Burton upon Trent.

Actions: Economy

The key economic challenges in relation to sustainable development rest with partners:

- **1.** To reduce inequality in income and employment.
- **2.** To evidence sustainable economic activity

The National Forest Company will:

- **1.** Continue to invest directly and lever in other public funding and private sector sponsorship.
- 2. Actively support partners in developing
 The National Forest as a sustainable leisure
 and tourism destination.
- 3. Continue to build the woodland economy.

The social

The proportion of the Forest's population living in areas amongst the most deprived in England has declined significantly since 2000. Average healthy life expectancy is in line with the England figure and environmental equality is strong, with most of the Forest's population living within 500m of an accessible woodland. However significant pockets of deprivation remain.

The direct contribution of the National Forest Company in this aspect of sustainable development is substantial. Around 13% of those involved in Forest activities led by the National Forest Company and partners come from socially excluded groups. Sustainable development education (with a focus on the environmental) was provided to 200,000 children between 1995 and 2006. More widely, there is increasing evidence of the increase in community spirit, pride and belonging. The Forest only came into being with wide local and partner support and this has continued and grown.

Actions: Social

The National Forest Company will continue to build a collaborative approach by:

- 1. Working with local partners and Government to improve measures of satisfaction, social justice and inclusion, healthy living and well-being.
- 2. Continuing to push for the widest possible participation in the social and educational benefits of the Forest.
- 3. Contributing to strong community and civic leadership to complement environmental and economic developments.

Introduction and Executive Summary (continued)

TABLE 1 - NATIONAL FOREST SUSTAINABLE DEVELOPMENT INDICATORS -SUMMARY OF PROGRESS.

Indicator title	Progress	Indicator title	Progress
Greenhouse Gas Emissions	Ø	Investment	Ø
Land Use	Ø	Deprivation	Ø
Woodland Cover	Ø	Life Expectancy and Health	
Land Recycling	0	Active Community Participation	0
Biodiversity Conservation	⊘ • *	Sustainable Development Education	Ø ••
Bird Populations	•	Access and Mobility	Ø
Farming and Environmental Stewardship	0	Environmental Equality	0
River Quality	8	Social Justice (Inclusion)	• •
Employment	Ø	Satisfaction in Local Area	0
Economic Growth	Ø	Wellbeing	•

KEY TO INDICATORS:

Change in the indicator over time.

Clear improvement Elittle or no change Insufficient data for the Forest area

TWO OUTSTANDING POLICY AREAS

There are two other issues deserving of particular mention, given their significance to the long term future of the Forest, which warrant further attention.

Transport

Increased traffic generated by prosperity and car-borne visitors could compromise the sustainability of the Forest for businesses, residents and as a major, new visitor destination. Unfortunately, data on traffic

flows, the use of public transport and likely future local congestion is currently not disaggregated for the Forest area.

The National Forest Company does not have any direct responsibility for transport and is highly dependent upon the role of statutory transport authorities and other transport providers. However, the Company is addressing transport issues where it can, through its policy influencing role, sustainable tourism activity and providing alternatives to car use within the area. Initiatives include:

- 1. More overnight visitor accommodation, including a new youth hostel and forest lodges, to help encourage longer stays and reduce visitor day trips.
- **2.** The development of an extensive network of trails and cycle routes for residents and visitors to explore the Forest.
- 3. Promoting increased public transport to Forest sites and attractions, developing summer open top bus tours and promoting the Forest to coach operators.

The Company will continue to promote public transport with and through partners and will encourage better data collection.

Climate Change

The National Forest has an important and developing contribution in addressing climate change, through carbon sequestration, improved and resilient habitats, education and engagement. In this rapidly developing area of science and policy, the Company will keep abreast of the scientific evidence and collaborate with partners, who also face the challenges of converting it into appropriate programmes. Additionally, the Company will:

- 1. Monitor the carbon sequestered through woodland creation every three years.
- 2. Promote wood fuel as a source of green energy.

CASE STUDIES OF SUSTAINABLE DEVELOPMENT

The integrated environmental, economic and social benefits of the Forest are clearly seen in projects which demonstrate how the Forest is being created. Three case studies are included in the report which highlight how the Forest has stimulated coalfield regeneration, rural diversification and nationwide community and business involvement – all helping to achieve the Forest's creation.

THE NATIONAL FOREST COMPANY'S OWN PERFORMANCE

Complementing the external impact of the Forest, the National Forest Company has also undertaken an assessment of its own operations and ways of working, to help improve the efficient use of its resources and reduce its carbon footprint. An Action Plan has been produced which has provided the focus for improvements in reducing energy and transport use, procuring office supplies and services and using sustainable methods for producing publications.

CONCLUSION

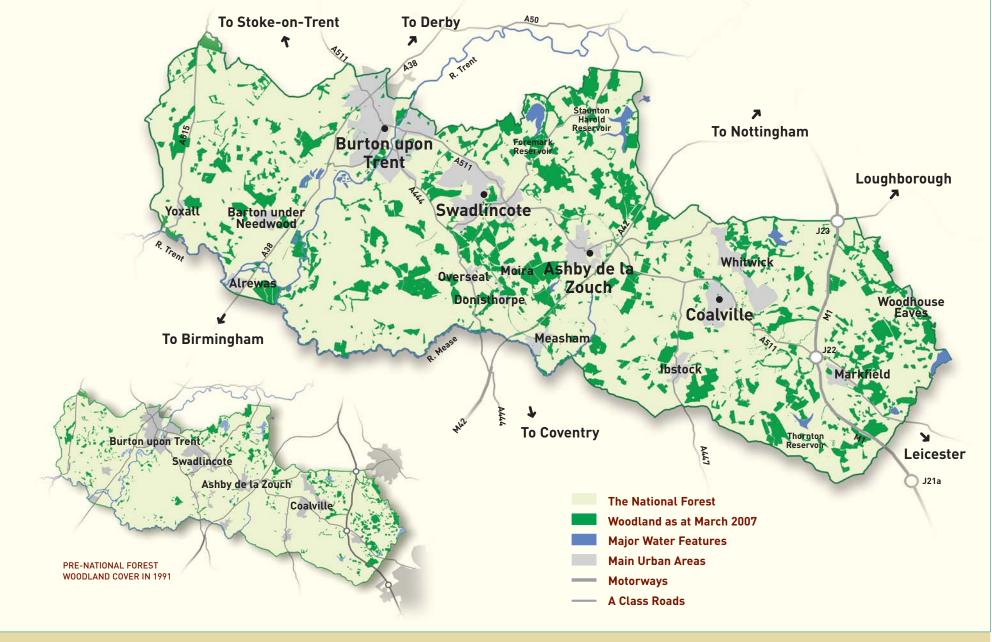
This report evidences substantial progress against indicators which, whilst largely taken from the UK Sustainable Development Strategy, support the priorities of the National Forest Strategy.

As this work has progressed, it has underlined the need for systematic work by the National Forest Company itself, particularly on the next phases of biodiversity monitoring and on quantifying and communicating its contributions to addressing climate change.

Equally, the work has underlined the ongoing importance of collaboration between the Company and its partners in key areas for sustainable development, both in data collection and joint action. This is particularly so in relation to the major issues of sustainable economic growth, social inclusion, well-being and transport.

The report demonstrates clearly the contribution of the Forest to national sustainable development objectives. We will use this report actively, for discussion and, more importantly, renewed, shared activity with Government, local authority, private sector, voluntary and other partners, to take forward the shared vision for The National Forest.

^{*} Two symbols - varied progress against certain indicator aspects.



The National Forest's Sustainable Development Indicators

Introduction

The project steering group selected 20 environmental, economic and social indicators that represent a balanced contribution to the sustainable development of the Forest area and how it can be monitored over time. The indicators demonstrate the exemplar role of The National Forest in contributing directly to the achievement of a wide range of UK sustainable development objectives.

SELECTION OF THE INDICATORS

The indicators are selected from UK sustainable development indicators, other regional/local indicators used by selected partner organisations and bespoke indicators relevant to the Forest area. The following factors guided the final choices:

- achieving a spread of environmental (8)¹, economic (3)¹ and social indicators (9)¹, which reflect the multi-purpose benefits of the Forest's creation and the integrated approach to the area's development.
- inclusion of a mix of UK Framework (10) and Supporting indicators (8).
- having a spread of indicators which demonstrate contributions towards the UK Shared Priorities for Sustainable Development Action.
 how they contribute to the UK Shared Priorities for Sustainable Development Action; and whether each indicator is a
- the National Forest Company's long-term need to measure progress against key objectives of the Forest's creation, set out in the National Forest Strategy, 2004 - 2014.
- selecting indicators for which data is easily available, reliable, regularly collected, easy to update and obtainable at reasonable or no cost.

There are three categories of indicators: contextual, ones which measure key features of The National Forest's creation, (for which the National Forest Company has particular responsibility), and others which track broader aspects of the area's development (where wider partners have lead responsibility).

Individually the indicators contribute towards meeting the objectives of 21 UK sustainable

development indicators. Appendix 2 also shows how the indicators have a direct tie-back to monitoring progress against the National Forest Strategy objectives.

PRESENTATION OF THE INDICATORS

The charts show:

- contextual or comparative data where relevant, (eg. national, regional or local authority data), followed by facts and figures from the Forest area.
- where possible, trends over time.
- direction of change, using the traffic light system for the UK sustainable development indicators.
- how they contribute to the UK Shared Priorities for Sustainable Development Action; and whether each indicator is a UK sustainable development framework or supporting indicator or a bespoke National Forest indicator.
- environmental, economic and social categorisation, recognising that some indicators may have relevance to more than one category.
- actions to take forward further development work and monitoring activity.

MONITORING DATA

Data has been drawn from a variety of sources, where possible based upon the Forest boundary. For future updates the National Forest Company intends to work closely with partners to achieve more refined data collection relevant to the area, for those indicators which need it.

KEY TO INDICATORS:

Change in the indicator over time:

- Clear improvement
- Elittle or no change
- Insufficient data for the Forest area

Type of indicator:

- **F** UK Framework Sustainable Development indicator
- S UK Supporting Sustainable Development indicator
- NF Bespoke National Forest indicator

Sustainable Development Focus:

- **En** Environmental
- Ec Economic
- So Social

Contribution to shared priorities for UK Sustainable Development Action:

- **SCP** Sustainable consumption and production
- **CCE** Climate change and energy
- NRP National resource protection
- CSC Creating sustainable communities

INDICATOR ICONS:

Indicator title	Environmental (En), Economic (Ec) or Social (So) indicator	Framework (F), Supporting (S) or bespoke National Forest (NF)	Shared Priorities for UK Action
Greenhouse Gas Emissions	En	F	SCP, CCE, NRP
Land Use	En	S	CCE, NRP
Woodland Cover	En	NF	SCP, CCE, NRP
Land Recycling	En	S	SCP, CCE, NRP
Biodiversity Conservation	En	S	NRP
Bird Populations	En	F	NRP
Farming and Environmental Stewardship	En	S	SCP, CCE, NRP
River Quality	En	F	SCP, NRP
Employment	Ec	F	CSC
Economic Growth	Ec	F	SCP, NRP, CSC
Investment	Ec	S	SCP, CSC
Deprivation	So	NF	CSC
Healthy Life Expectancy	So	S	CSC
Active Community Participation	So	F	CSC
Sustainable Development Education	So	S	SCP, CCE, NRP CSC
Access and Mobility	So	F	CSC
Environmental Equality	So	F	NRP, CSC
Social Justice	So	F	CSC
Satisfaction in Local Area	So	S	NRP, CSC
Wellbeing	So	F	CSC

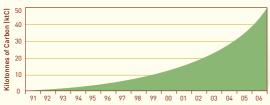
Note: the employment indicator combines two UK SD indicators [Employment and Economically Inactive]; as does Mobility and Access [Mobility and Access [Mobility and Access [Mobility and Indicators]; the Greenhouse Gases indicator also includes wood fuel energy supplied [contributing to the UK SD Energy Supply indicator.]



The National Forest's specific contribution towards combating greenhouse gas emissions and adapting to climate change is through carbon sequestration by tree planting and promoting wood fuel as a source of renewable green energy.

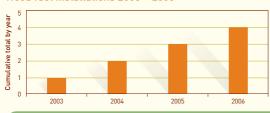
- Since 1991, more than 7 million trees have been planted.1
- Over the period 1990 2006, it is estimated that 50 kilotonnes of carbon (ktC) were sequestered by The National Forest. This is equivalent to the net removal of 182 million kg of CO₂ gas from the atmosphere.²
- At present planting rates, between 2008 and 2012 the Forest will sequester approximately 11 ktC per year. This will remove a further 40 million kg per year of CO₂ from the atmosphere 0.05% of the UK's contribution.² This is equivalent to the CO₂ emitted from 10,000 family cars in a year.

Sequestered Carbon 1991 - 2006



Future monitoring will also need to include potential contributions of the Forest to emissions, such as visitor traffic – no information is available for this at present.

Wood fuel installations 2003 - 2006



• 4 new wood fuel heating systems were installed between 2003 – 2006, contributing around 160 kilo watts³ of green energy per year.

***** ACTION:

- 1) Continue to promote tree planting to achieve the Forest's creation.
- 2) Monitor the Forest's contribution towards reducing greenhouse gas emissions every 3 years, including research on the impacts of carbon dioxide emitted from visitor traffic.
- 3) Continue to promote wood fuel systems.

DATA SOURCES:

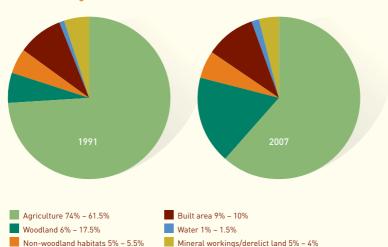
- 1) NFC annual monitoring (2007).
- 2) Estimates of carbon sequestration in The National Forest Centre for Ecology & Hydrology (2004). Figures for 2003 2006 are updated estimates produced by CEH in 2007.
- 3) NFC estimates based upon current system outputs (2007).

NRP



This contextual indicator shows change over time in the area's land use.¹ The data measures National Forest Strategy land use change in relation to woodland cover, biodiversity, agricultural diversification and mineral/derelict land restoration.

Land use change 1991 - 2007



- Land used for agriculture has reduced from 74% to 61.5% between 1991 2007, while woodland cover has increased from 6% to 17.5%.
- Land use change has been tracked by monitoring progress against the National Forest Strategy objectives and through independent audits since 1994^{2,3,4}.

***** ACTION:

- 1) Continue to promote mechanisms to achieve the mix of land uses required to deliver the National Forest Strategy.
- 2) Monitor land use change annually.

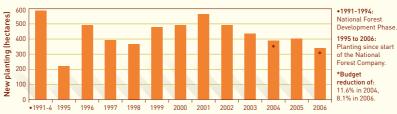
- 1) NFC annual monitoring (2007).
- 2) The National Forest Strategy Audit, 1994 2002 National Forest Company (2002).
- 3) The National Forest Strategy Review Entec UK Ltd. (2002).
- 4) National Forest Landscape Character Assessment update Sheils Flynn (2004).

The National Forest Company's unique contribution to land use change is through multi-purpose Forest creation. This is transforming the landscape and biodiversity of the area, creating a new recreation resource and developing a new woodland economy – all improving the quality of life of local residents and visitors.

- The aim is to increase woodland cover from 6% (1991) to around a third. By 2006 woodland cover had risen to 17.5%, with over 7 million trees planted.¹
- 5,785ha¹ of woodland creation has been achieved through the National Forest Tender Scheme, land acquisition*, restoration of mineral workings and derelict land and development-related planting.

*The NFC only holds up to 300ha of land at any one time.

National Forest planting 1991 - 2006



Woodland cover (cumulative)



 Management of existing woodlands is also a high priority – for their biodiversity, landscape and recreation value and to stimulate the Forest's woodland economy. In 2006, 38% of existing woodlands were under management (1140ha).²

***** ACTION:

- 1) Maintain woodland creation and management activity to meet the National Forest Strategy targets
- 2) Monitor activity annually.

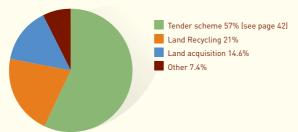
- 1) NFC annual monitoring (2007).
- 2) NFC research (2006).



The National Forest Company promotes the restoration of brownfield land to woodland, biodiversity, recreation and tourism uses, to help achieve the Forest's creation. Derelict land reclamation, restoration of mineral workings and landfill sites and development-related landscaping all contribute to this.

 1,205ha of the Forest area has been created through land recycling since 1991, 21% of the total Forest hectarage.¹

Forest creation 1991 - 2006: 5,785ha



Land Recycling 1991 - 2006: 1,205ha



A further 2,000ha of active mineral workings and landfill sites and derelict land is expected
to be restored to Forest-related uses: 4% of the Forest area.²

***** ACTION:

- 1) Continue to promote Forest-related after uses for mineral worked and landfill sites and derelict land.
- 2) Monitor progress annually.

- 1) NFC annual monitoring (2007).
- 2) National Forest Strategy, 2004 2014. National Forest Company (2004).

5 Biodiversity Conservation



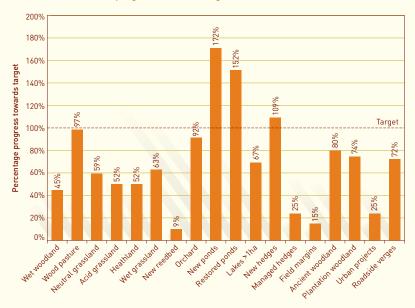


The National Forest is creating landscape-scale ecological change that will ultimately link together around 19,000ha of new and existing woodlands, hedgerows, meadows, heathlands and wetlands. This is creating a more resilient landscape for wildlife to thrive and adapt to climate change. This indicator measures how this activity is meeting National Forest Biodiversity Action Plan 2004 – 2010 (BAP) targets and contributing directly towards achieving the UK BAP.

HABITAT PROGRESS

- Since 1995 1,300ha of habitats have been created or brought back into management, (in addition to land for tree planting).
- 82km of new hedgerows have been planted and 91km of existing hedgerows have been brought back into management.¹
- Habitat surveys have been undertaken across the Forest area by the County Ecological Record Centres and Wildlife Trusts to quantify the ecological resource.² However, further research is required to determine the quality and status of habitats.

National Forest BAP: progress towards targets 1998 - 2006



SPECIES PROGRESS

• 9 priority species feature in the National Forest BAP. Baseline status surveys have been undertaken (2005 – 2007) for otters, adders, black poplar, barn owls and redstarts.





Otter (Photo: Gordon Hudson)

Ruddy Darter dragonfly (Photo: Gordon Hudson)

• Species enhancement works since 19981 have included:

17 new holts installed; otters have returned to the Rivers Trent and Mease.	
440 bat boxes installed.	
5 new hibernacula created.	
102 new planting sites.	
103 new planting sites.	
194 ponds, scrapes and larger water bodies created or brought back into management.	
2 sites enhanced.	
See Bird Populations indicator.	

ACTION:

- 1) Continue to work with partners and landowners to meet National Forest BAP targets.
- 2) Instigate a rolling programme of habitat status surveys.
- 3) Undertake baseline surveys for remaining BAP species and monitor progress every 5 years.

- 1) NFC annual BAP monitoring.
- 2) The National Forest Biodiversity Action Plan Audit Middlemarch Environmental (1998).

6 Bird Populations



The National Forest is significantly improving and extending habitats for woodland and farmland birds (see Biodiversity Conservation indicator). This indicator aims to measure the status of bird populations. Whilst comprehensive data for the area is not yet available, the indices below highlight regional trends and the local monitoring which has so far been undertaken.

 Between 1994 – 2005 woodland bird populations in the East Midlands increased by 9%, but otherwise regional populations have declined.¹

East Midlands	Woodland birds Farmland birds	9% increase 6% decrease
West Midlands	Woodland birds Farmland birds	3% decrease 15% decrease

 The NFC has undertaken detailed monitoring of birds at two new woodlands – Willesley Wood (12 years old) and Sence Valley Forest Park (10 years old).²



Song Thrush (red list species) at Sence Valley Forest Park and Willesley Wood (Photo: John Harding)

- Between 1998 2006 there have been significant increases in woodland/ woodland edge birds*, including new arrivals (e.g. green woodpecker), increased breeding success (e.g. willow warbler) and several Red and Amber List species (UK birds of conservation concern).
- *As areas of new planting have matured some grassland birds have also been displaced.

Woodland site	Red list species	Amber list species
Sence Valley Forest Park	Song Thrush Linnet Bullfinch Starling Grasshopper Warbler	Green Woodpecker Lesser Redpoll Dunnock Willow Warbler
Willesley Wood	Song Thrush Bullfinch	Green Woodpecker Willow Warbler Dunnock

- The Forest area also includes several kilometre squares used in the national British Trust for Ornithology Breeding Bird Survey. Between 1994 and 2005 these indicate the presence of other Red and Amber List species in the area.³
- The NFC has chosen redstarts (woodland birds) and barn owls (farmland birds) as two of its Biodiversity Action Plan (BAP) species. In 2005 baseline surveys were undertaken for both species:

Redstart – no known breeding pairs; but evidence of sightings from 13 locations, mainly in Charnwood from 1971 – 2004.

Barn Owl – 7 breeding pairs; plus sightings from 30 other locations across the Forest since 1989.⁴



Redstart (red list species) (Photo courtesy of the RSPB)

Barn Owl (amber list species) (Photo courtesy of the RSPB)

 Since 1998, 155 redstart nest boxes have been installed and since 2004, 24 barn owl boxes, to help long-term species recovery.⁵

***** ACTION

- 1) Continue to undertake habitat and species improvement works to meet National Forest BAP targets.
- 2) Undertake a Forest-wide breeding bird survey.
- 3) Undertake site and BAP species surveys every 5 years.

- 1) Wild bird indicators for the English Regions 1998 2005. Defra (2007).
- 2) Willesley Wood and Sence Valley Forest Park site surveys Leicestershire Ecological Records Centre (1998 and 2007).
- 3) Breeding Bird Survey data (1994 2005). British Trust for Ornithology.
- 4) Species research for the National Forest BAP Barn Owls and Redstarts Leicestershire County Council (2005).
- 5) NFC annual monitoring.

V

A key objective of the National Forest Strategy 2004 – 2014 is to encourage diversification of farmland to Forest-related uses, including woodland, biodiversity, recreation and tourism. This is critical to the achievement of the Forest and it provides new environmental and economic opportunities for landowners. This indicator monitors the take-up of agri-environment schemes and the impact of the National Forest Tender Scheme.

Farming and Environmental Stewardship

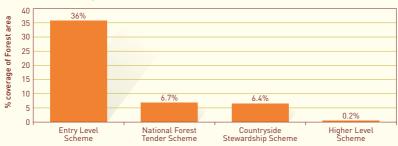
AGRI-ENVIRONMENT SCHEMES

- Since 2005, The National Forest has experienced slightly higher take-up of the Entry Level Scheme (36% of land area) than is currently the case across England (31.7% of land area).
- However, since 2005 the take-up of the Higher Level Scheme in the Forest has been very low (0.2% by land area) and this is lower than across England (0.74%).
- In 2006 there were 3,225ha of land under the (former) Countryside Stewardship Scheme, covering 6.4% of the Forest area.¹ In comparison Countryside Stewardship and Environmentally Sensitive Area Schemes covered 9.3% of England in 2003.¹

NATIONAL FOREST TENDER SCHEME

 From 1995 to 2006 the National Forest Company and the Forestry Commission have supported 180 farm-based National Forest Tender Schemes. These have diversified 3,359ha of farmland to Forest-related uses, covering 6.7% of the Forest area.²

Land covered by agricultural diversification schemes



***** ACTION:

- Continue to work with landowners and partner organisations to achieve Forestrelated agricultural diversification, including increased take-up of the Higher Level Scheme.
- 2) Monitor activity annually.

DATA SOURCES:

NRP

SCP

- 1) Defra agri-environment scheme figures (2007).
- 2) NFC annual monitoring.

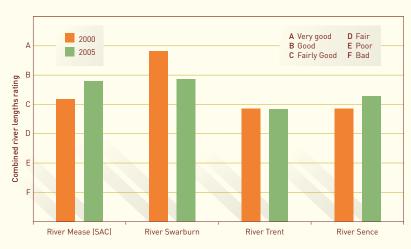
This contextual indicator measures the biological and chemical quality of rivers. Three of the sampled rivers fall largely within the Forest boundary (Mease, Swarburn and Sence) whilst the Trent has only a short stretch of its overall length. There are many factors that affect river quality. Over time, land management through the Forest's creation will help to reduce nitrate and fertiliser run off and soil erosion into rivers and improve riparian wildlife habitats.

BIOLOGICAL QUALITY

- In 2004 70% of English river lengths* were of good biological quality. Rivers in the East Midlands (61%) and West Midlands (55%) were below the national average.
- In 2005 55% of the river lengths along the Rivers Mease, Swarburn, Trent and Sence in the Forest area were of good biological quality with the Mease and Sence showing improvement since 2000.²
- In 2006 the River Mease was designated a Special Area for Conservation (SAC) under the EU Habitats Directive.

*Sampling lengths for rivers used by the Environment Agency.

Biological Quality of National Forest rivers 2000 - 2005



CHEMICAL QUALITY

- In 2004 62% of English river lengths were of good chemical quality. Rivers in the East Midlands (55%) and West Midlands (56%) were below the national average.

 1
- In 2005 67% of National Forest river lengths were of good chemical quality.²

Chemical Quality of National Forest rivers 2000 - 2005



***** ACTION:

- 1) Work with the Environment Agency (EA) and landowners to achieve sustainable land management along river corridors and enhance riparian habitats.
- 2) Liaise with the EA to monitor river quality.

- 1) www.susdev.gov.uk
- 2) Environment Agency Monitoring data (2006).

A contextual indicator on the area's employment. Employment structure is changing, reflecting the decline of coal mining and a vastly improved environment that is helping to attract new investment. Jobs are growing in tourism, forestry, construction, distribution and the service sectors, with continued decline in manufacturing and mining. Data is only available at District/Borough Council level, making analysis of just the Forest area difficult, as only parts of Districts are in the Forest.

Employment rates (77% – 85%) across all Districts are exceeding West Midlands (73%),
 East Midlands (76%) and national averages (74%) – March 2006.¹ Employment growth has been particularly strong in:

 North West Leicestershire
 19.6% (2000 – 2006)²

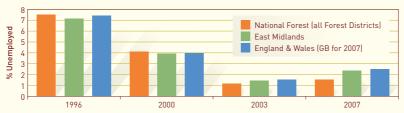
 East Staffordshire
 16.2% (1998 – 2004)³

 South Derbyshire
 12.8% (1998 – 2003)²

 Great Britain
 3.2% (2000 – 2006)²

Claimant count unemployment, averaged across the Forest's Districts, declined by 6% between 1996 – 2003, in line with national trends.⁵ In 2007 it averaged 1.6%, considerably lower than the East Midlands (2.5%) and Great Britain (2.6%).¹

Claimant Count Unemployment



The above data shows a strong performance across the Forest, but hides the fact that unemployment is 2-3 times above the local average in some coalfield settlements and inner areas of Burton upon Trent. District data may also skew the real picture for the Forest area. Future data collection will draw upon data at ward level, as it becomes available.

***** ACTION:

1) Monitor employment levels and changing characteristics every 3 years.

- 1) NOMIS Official Labour Market Statistics National Statistics (2006/7).
- 2) North West Leicestershire District Profile Leicester Shire Economic Baseline Study (2006).
- 3) Economic Profile of East Staffordshire East Staffordshire Borough Council (2006).
- 4) The State of the Derby and Derbyshire Economic Partnership Local Futures Group (2003).
- 5) Much More Than Trees 2 Staffordshire University (2004).





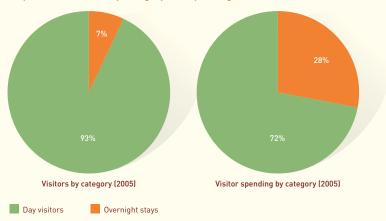
The Forest area is experiencing healthy economic growth. Between 1998 and 2006 business growth rose steeply in East Staffordshire (34.3%)¹; and North West Leicestershire (11.8%) and Hinckley and Bosworth (6.1%) outperformed the East Midlands average (5.5%) between 2000 and 2004.² New business formation in South Derbyshire was also above the regional average (2003)³; and only Charnwood registered poorer growth (0.9%) between 2000 and 2004.² (For employment data see Employment indicator).

In recent years there has been significant growth in the unique National Forest contributions of tourism and leisure and the woodland economy. These have great potential in developing a sustainable economy. Data specifically on sustainable economic growth is currently difficult to assess.

TOURISM AND LEISURE4

- Tourism supports 4,103 jobs and employment grew by 3.6% between 2003 and 2005.
- Visitor spending has grown from £229m (2003) to £249m (2005), a rise of 8.7%.
- The National Forest attracted 7.35m visitors in 2005, up 8.6% from 2003.
- 7% are overnight staying visitors. Overnight stays improve tourism sustainability by reducing visitor travel and contributing more spending in the local economy. The NFC aims to increase visitor accommodation (3,114 bed spaces in 2005) to help increase the proportion of overnight stays.

Proportion of visitors by category and spending



WOODLAND ECONOMY

- 225 jobs created/safeguarded between 1995 2003 through forestry, farm diversification and woodland businesses.⁵ This contrasts with a 5% fall in agriculture/forestry employment in the East and West Midlands (1991 – 2001).⁵
- The Forest aims to grow high quality timber contributing to national timber supplies. In 2006 the estimated value of standing timber was £600,000.6



Adding value to timber using a mobile saw bench. (Photo: Simon Greenhouse)

***** ACTION:

- 1) Promote sustainable tourism and the woodland economy.
- 2) Monitor the volume and value of tourism and growth of the woodland economy bi-annually.

- 1) Economic Profile of East Staffordshire East Staffordshire Borough Council (2006).
- 2) Leicestershire Economic Baseline Study Leicestershire Economic Partnership (2006).
- 3) The State of the Derby and Derbyshire Economic Partnership Local Futures Group (2003).
- 4) The National Forest Steam report Global Tourism Solutions UK Ltd (2007).
- 5) Much More Than Trees 2 Staffordshire University (2004).
- 6) NFC estimates (2006) based upon Quantification of the Forest Resource Eamonn Wall and Co. (2004).



The NFC and partner organisations contribute directly to the local economy by investing in the Forest's creation – through woodland planting and management, recreation and tourism infrastructure, biodiversity enhancement, rural diversification and urban and coalfield regeneration.

- Between 1995 and 2006 around £115m was invested in Forest–related projects and regeneration programmes in the area.¹²
- NFC invested £24m through the National Forest Tender Scheme, land acquisition and project grants.¹
- Partner organisations invested a further £36.5m in Forest-related projects, including the £18.6m Conkers Discovery Centre.^{2,3}
- The area also secured £54.4m² for coalfield, urban and rural regeneration programmes.
 This delivered wide ranging community benefits, with funding through the Lottery,
 RECHAR, Single Regeneration Budget plus other public sources.

Forest - related and regeneration investment 1995 - 2006



***** ACTION:

- 1) Work with partners to continue to secure public and private sector investment in the Forest
- 2) Monitor Forest-related investment in the area every 3 years.

DATA SOURCES:

- 1) NFC annual monitoring (2007).
- 2) Much More Than Trees 2 Staffordshire University (2004); supplemented with NFC data up to 2006.
- 3) Heart of the National Forest Foundation (2007).

SCP

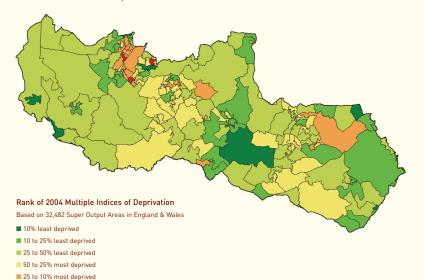


This indicator highlights deprivation trends using multiple deprivation, education and skills and household income as indices. Together with the employment, economic growth and healthy life expectancy indicators this provides a picture of the socio-economic health of the area.

MULTIPLE DEPRIVATION

- Between 2000 and 2004 there was a significant decline (26% 16%) in the proportion of the Forest's population living in the 25% most deprived areas in England.
- However, significant areas of deprivation remain in Burton upon Trent, South Derbyshire and North West Leicestershire, with 3 lower level Super Output Areas (SOAs) in the 10% most deprived in England and 18 others in the worst 25%.²

Combined Index of Deprivation 2004



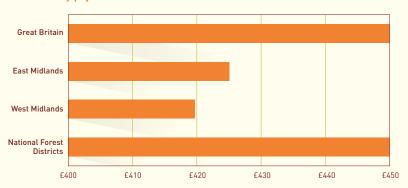
EDUCATION AND SKILLS

- In 2005 the proportion of 16 year olds with 5 GCSE grades A[⋆] − C, across the 6 Forest Districts, matched the England average (56%).³
- Since 2002 GCSE performance has notably improved in North West Leicestershire (49% 58%), Hinckley and Bosworth (49% 54%) and East Staffordshire (53% 56%)³.
 There has also been recent high performance in South Derbyshire.⁴
- Adult qualifications/skills remain low in parts of Burton upon Trent and many former coalfield settlements. 8 SOAs are in the 10% most deprived in England, with 18 others in the worst 25% (2004).¹

INCOME

- In 2002 average gross weekly earnings for full time workers across the Forest's Districts were below regional and national averages.¹
- By 2006 earnings were exceeding the regional averages and matching the national average.⁴

Gross weekly pay - full time workers 2006



 However, there remains severe income deprivation in Burton upon Trent, with 3 SOAs (out of 4 in the Forest area) in the 10% most deprived in England and a further 12 (out of 16) in the worst 25%.¹

***** ACTION:

- 1) Work with partners to target Forest creation activity in deprived areas.
- 2) Monitor deprivation levels every 3 years

DATA SOURCES:

- 1) Much More Than Trees 2 Staffordshire University (2004).
- 2) The English Indices of Deprivation Office of the Deputy Prime Minister (2004).
- 3) National Statistics Online (2006).
- 4) NOMIS Official Labour Market Statistics (2006).

■ 10% most deprived

13 Life Expectancy and Health



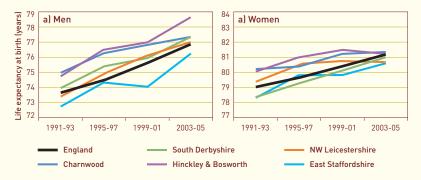


The National Forest is helping to create a healthier place for people to live in, work and spend their leisure time. The decline in coal mining, a vastly improved environment and an increase in healthy living initiatives are all contributing to this. This indicator includes changing life expectancy, healthy life expectancy and the role of healthy living initiatives.

LIFE EXPECTANCY

- Average life expectancy across the Forest's Districts¹ has steadily increased between 1991 2005, men by 3.3 years (slightly above the England average²) and women by 1.7 years (slightly below the England average²).
- In East Staffordshire however, both male and female life expectancy is notably lower than
 the national average.¹

Life Expectancy - Forest Districts and England



- Only 1 lower level Super Output Area (Newhall) is in the 10% most deprived in the country for health, but 23 others are in the worst 25%. 17 of these are in Burton upon Trent, with former mining communities in South Derbyshire and parts of Coalville also prominent.³
- Residents in the 10% least deprived areas have around 8.4 years longer life expectancy (e.g. Groby, average 83.3 years) than those in the most deprived areas.^{1,3}

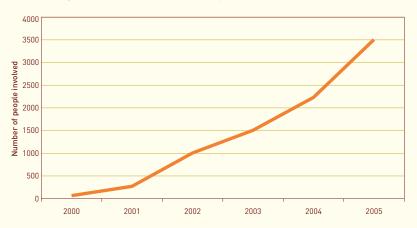
HEALTHY LIFE EXPECTANCY

• In 2001, healthy life expectancy for men across the Forest was similar to the England average, whilst for women it was significantly better. However, on average women lived longer in poor health (8 years) compared to men (6.5 years).

HEALTHY LIVING

 Between 2000 – 2006 almost 8,600 people have been involved in the National Forest's Walking the Way to Health and Get Active schemes run with South Derbyshire District Council and the Forestry Commission.⁵

Health living initiatives at Rosliston Forestry Centre



- In 2006 a further 400 people were involved in healthy walking activities run by East Staffordshire Borough Council.⁶
- The British Trust for Conservation Volunteers involves around 2,500 people per year in practical conservation volunteer projects – helping to increase physical activity and fitness.⁵

***** ACTION:

- 1) Maintain current healthy living initiatives and seek to influence the expansion of these activities through partner organisations.
- 2) Monitor activity annually.

- 1) Life expectancy at birth by local authority in England and Wales, 1991 1993 to 2003 2005. Office for National Statistics (2006).
- 2) Life expectancy at birth (years), England and Wales, 1991 1993 to 2003 2005. Office for National Statistics (2006).
- 3) Much more than trees 2. Measuring the social and economic impact of The National Forest. Update: Indices of Deprivation – Staffordshire University (2004).
- Life expectancy and healthy life expectancy at birth by local authority, England & Wales, 2001.
 Office for National Statistics (2006).
- 5) NFC annual monitoring.
- 6) Green Space Strategy East Staffordshire Borough Council (2006).

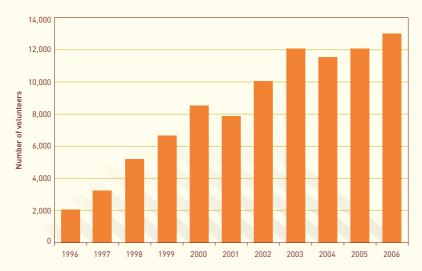


Community participation in creating the Forest is a key objective to ensure long-term ownership of the Forest by local communities and to raise awareness regionally and nationally. This indicator measures volunteering by adults: for schools activity refer to the Sustainable Development Education indicator.

Active Community Participation 14

- Volunteer involvement in Forest-related activities has grown annually from 2,400 people in 1995 to 13,400 in 2006.1
- Community engagement programmes include tree planting, conservation volunteering, health promotion, environmental education and arts activities. These programmes are currently running at full capacity, given NFC and partner resources.

Volunteer involvement in The National Forest



ACTION:

- 1) Maintain volunteer involvement in the Forest's creation at around 13,000 people
- 2) Promote leadership within the voluntary and community sectors to expand

DATA SOURCES:

1) NFC annual monitoring (2007).

15 Sustainable Development Education



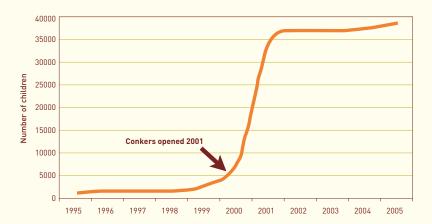


This national indicator is yet to be fully developed. The NFC's contribution to it is through promoting environmental education and lifelong learning to help develop understanding and appreciation of the Forest and a sense of 'ownership' for its long-term management. This indicator measures environmental education activity involving school children and adults.

ENVIRONMENTAL EDUCATION FOR SCHOOLS

- From 1995 to 2006 over 200,000 children experienced Forest-related environmental education visits to Conkers Discovery Centre (Heart of the National Forest Foundation) and Rosliston Forestry Centre (South Derbyshire District Council and Forestry Commission).¹
- Following the opening of Conkers and expansion of activities at Rosliston these centres have involved over 30,000 children each year since 2001.

Educational visits to Rosliston & Conkers



- From 2000 to 2006 372 schools have been involved in growing trees from seed, the Tree
 for All scheme, community tree planting, the Forest Songs project, arts projects and
 Forest-related events. This includes 75 inner city schools from Birmingham, Leicester,
 Derby and Nottingham.
- Additional environmental education activities are also run by partner organisations.
 Between 2004 2006 over 12,500 children were involved in activities run by Severn Trent Water at their Cropston reservoir centre²; and in 2006, 2,500 children experienced activities at Snibston Discovery Park (Leicester County Council).³

LIFELONG LEARNING FOR ADULTS

This area of activity also continues to grow, for example:

- From 2003 to 2006 735 people have taken part in practical conservation training courses run by the British Trust for Conservation Volunteers.¹
- From 2002 to 2006 over 200 people were trained as volunteer healthy walks leaders at Rosliston Forestry Centre.¹
- Between 2004 to 2006 approximately 1,200 adults and teachers were involved in environmental education courses run by Severn Trent Water (at Cropston reservoir); and in 2006 1,300 adults participated in events run by Snibston Discovery Park.³



Pond dipping at Rosliston Forestry Centre. (Photo: Rob Fraser)

***** ACTION:

- 1) Work with partners to maintain and where possible expand environmental education activity
- 1) Monitor activity annually.

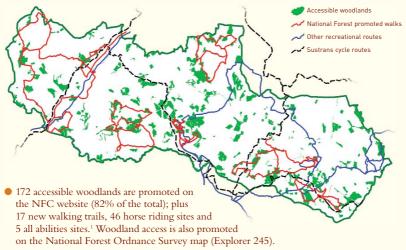
- 1) NFC annual monitoring.
- 2) Severn Trent Water annual monitoring.
- 3) Snibston Discovery Park annual monitoring.



A high priority is to create a welcoming and accessible recreation resource for local residents (200,000 people) and visitors to the area (10m people are within one hour's travel). This indicator measures accessibility to green space and mobility to recreation and visitor attractions. (See also Environmental Equality indicator).

- Between 1995 and 2006 80% of all new woodlands created (5,785ha) have some form of public access; and a further 8% of sites have access planned.¹
- From 1995 to 2006 489km of Forest trails have been created. These include new routes and promoted trails on rights of way – with provision for walkers, cyclists, horse riders and disabled people.¹

Accessible woodlands and recreational routes



 Around 74% of promoted woodland sites and other Forest visitor attractions are accessible by public transport (based upon 2001 – 2006 data).¹

***** ACTION:

- 1) Continue to create new recreational access and maintain existing access to the Forest area.
- 2) Work with public transport providers to update public transport information; and promote this to residents and visitors.
- 3) Monitor activity annually.

DATA SOURCES:

1) NFC annual monitoring.

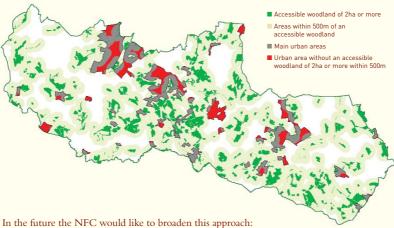
Environmental Equality 17



This indicator is due to be developed nationally in 2007. The National Forest's direct contribution is through creating new accessible green space close to where people live. This provides health and well-being benefits through increased physical activity, adds to recreation and biodiversity opportunities and improves quality of life.

- Using the Woodland Trust's Woodland Access Standards, in 2006 approximately 63% of the Forest's 200,000 population live within 500m of an accessible woodland of 2ha or more in size.² This compares with 10% of the population for England.¹
- 100% of the Forest's population live within 4km of an accessible woodland of at least 20ha, 2 compared with 55% for England.

Proximity to accessible woodland



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- To include all accessible green space, not just woodland.
- To apply Natural England's Urban Greenspace Standards to assess natural green space access in urban areas, especially in deprived communities.

***** ACTION:

- 1) Create new accessible green space through the Forest's creation.
- 2) Monitor green space standards every 3 years.

- 1) Space for People: Targeting action for woodland access Woodland Trust (2004).
- 2) NFC research applying the Woodland Trust's woodland access standards (2006).





A Social Justice indicator is yet to be developed nationally. The National Forest Company promotes social inclusion to enable disadvantaged, minority, ethnic and disabled groups to be involved in the Forest's creation and to enjoy the area's many attractions.

• The National Forest's creation is contributing to social justice by involving:

Unemployed people – in midweek conservation projects (run by the British Trust for Conservation Volunteers); and intermediate labour market trainees (through projects run by Groundwork).

Inner city and urban communities – through free trees schemes; environmental education visits; and Tree for All schools work (run with the Woodland Trust, Forestry Commission and other partners).

Black and minority ethnic communities (BME) – through healthy walking; environmental education activity; inner city schools tree planting; and community events.

BME communities account for 3% of the Forest's population, with significant concentrations in Burton upon Trent.¹ The NFC also works increasingly with such communities from surrounding cities, in particular Leicester, which has a 52% BME population.







Environmental education visits to the Forest (Photo: Christopher Beech)

Disabled groups – through arts projects; healthy walking; and planning of all abilities Forest trails. **Single parent families** – involvement in healthy walking.

Deprived rural schools – through the Forest Songs project (run with Children's Music Workshop).

It is estimated that 13% of the 13,000 adults participating in the Forest's creation each year
and at least 13% of the 33,000 children involved in environmental education activity,² are
from socially excluded groups.

*

ACTION:

- 1) Continue to work with partners to involve socially excluded groups in the Forest's creation.
- 2) Develop monitoring systems to more effectively measure social inclusion.

- 1) Much More Than Trees 2 Staffordshire University, (2004).
- 2) NFC monitoring.



This indicator measures the quality of the area in which local people live and their particular satisfaction with how The National Forest is changing the area. Information on overall quality at a local level is generally lacking, though some contextual data is available regionally and through local authorities.

CONTEXTUAL DATA

- In 2002 satisfaction levels for people living in the East and West Midlands (87% and 85%)
 were in line with the England average (86%).
- In North West Leicestershire in 2003, 89% of respondents were satisfied with the District's parks and open spaces. Access to nature (35%) and parks and open spaces (20%) were identified as two of the top five things that had improved over the previous 3 years.²
- In East Staffordshire, user surveys have also identified general satisfaction with their parks and open spaces.³

SATISFACTION WITH THE NATIONAL FOREST

The NFC monitors public interest in the Forest's creation. The following indices indicate high levels of public satisfaction with The National Forest:

- Forest Strategy consultation (2003) 410 replies were received from local people showing widespread support for the Forest's future plans.⁴
- Social Research Research by Lancaster University (2006) concluded overwhelmingly
 that the Forest is positively perceived. It is closely associated with improving
 environmental and economic conditions and creating a new social place.⁵



Forest Strategy Consultation, 2003



Lancaster University Social Research, 2006

- Visitor surveys Surveys of six woodland sites in 1998^a and 2002⁷ showed high satisfaction rates.
- Community involvement Sample questionnaires from conservation volunteers, healthy walking participants and schools following environmental education visits show positive responses to the Forest's creation.⁸
- Public comments Satisfaction with the Forest is also demonstrated by an increasing number of unsolicited comments – following community tree planting events, visits to the area and talks to local groups.⁸



Picnicing at Conkers Discovery Centre. (Photo: Christopher Beech).



Local residents in Swadlincote Woodlands (Photo: Christopher Beech).

* ACTION:

- 1) Work with local authorities to develop joint public satisfaction surveys.
- 2) Monitor National Forest satisfaction annually.

DATA COLIDCES

- 1) www.sustdev.gov.uk regional sustainable development statistics.
- 2) Best Value satisfaction survey North West Leicestershire District Council (2003).
- 3) Green Space Strategy East Staffordshire Borough Council (2006).
- 4) Forest Strategy Review report to NFC Board (2003).
- 5) Growing Places A study of social change in The National Forest Lancaster University and Forest Research (2007).
- 6) National Forest Visitor Survey Loughborough University (1999).
- 7) The National Forest Visitor Survey Heart of England Tourist Board (2002).
- 8) NFC annual monitoring.



The National Forest is significantly improving the quality of life of local residents and visitors to the area. A greener, healthier, and vastly improved environment, new green space and recreation facilities, access to more local wildlife, growing community participation and increasing economic prosperity, are all improving people's wellbeing. There is now every opportunity for people's sense of well-being, their satisfaction with the area and indeed their assessment of their quality of life to be high.

However, renewing a strong sense of place and increasing the well-being of its population, whether in urban or rural settings, are some of the most complex things to achieve and to measure. The National Forest Company has a keen interest in assessing whether and how the pursuit of sustainable development fosters well-being. For example, the prosperity and mobility of much of the population is a benefit, but creates the complementary need for strong community networks and good civic leadership, particularly from local authorities, to create a sense of well-being in a locality.

Measures for the national well-being indicator have yet to be developed. However, based upon The National Forest's experience, it should add a qualitative perspective to the environmental, economic and social quality of life elements through many of the other UK SD indicators.



Walkers at Buildings Farm, Hartshorne. (Photo: Christopher Beech).



1) monitor and participate in the development of well-being indicators at national and local levels.

National Forest Case Studies of Sustainable Development

The integrated environmental, economic and social benefits of The National Forest are particularly demonstrated through projects which exemplify how the Forest is being created. This section includes three case studies which highlight The National Forest's role in stimulating coalfield regeneration, rural diversification and nationwide community involvement to help achieve the Forest's creation. Partnership working involving public, private and voluntary sector bodies, local communities and visitors to the area has been key to the success of these case studies.

The transformation of the Rawdon Colliery site into the celebrated Conkers Discovery Centre:



View of Bath Yard, part of the Conkers site, pre-1995.



Conkers Discovery Centre. (Photo: Christopher Beech)

Creating the heart of the Forest in the Ashby Woulds

BACKGROUND

The Ashby Woulds area lies at the heart of the former Leicestershire and South Derbyshire coalfield. It covers an area of 16 square kilometres in the centre of The National Forest.

By the late 1980s, deep mining in the area had collapsed leaving a legacy of a degraded environment, extensive derelict land (200ha), unemployment and declining social and welfare facilities. This was made worse by uncertainty surrounding the area's future and considerable mistrust between the local community and mineral companies. It became difficult to attract inward investment and with little prospect of landscape improvement there was a spiral of economic, environmental and population decline.

ASHBY WOULDS FORUM

In 1991, North West Leicestershire District Council commissioned a study¹ into opportunities to regenerate the area. This set out proposals to radically improve the area's image and environment within the context of The National Forest, to reclaim derelict land and reverse economic and population decline.

The study was widely welcomed and in 1992 it spurred the creation of the Ashby Woulds Forum, led by Leicestershire County Council. This brought together mineral companies, local authorities, the National Forest Company and local community groups under the common purpose of bringing about widespread improvements and building a sustainable future for the area.

ASHBY WOULDS STRATEGY

The Forum set out a shared future vision for the area in the Ashby Woulds Strategy in 1995. This reflected the Forum's desire for an action plan based upon The National Forest's principles. It set out proposals for environmental, economic and social regeneration across 650ha of land. Tourism, forestry and leisure uses formed the focus, coupled with the need for new housing and workspace. Continued mineral working was also a feature, enabling former dereliction to be tidied up.

ACHIEVEMENTS

In a little over 15 years, the Ashby Woulds has been transformed from a derelict landscape in decline into a new forested landscape that forms the heart of The National Forest as a major new tourism destination. The benefits have been dramatic and wide ranging. Pride of place is the £18.6m Conkers Discovery Centre – a new forestry centre set in 60ha of landscaping on the former Rawdon Colliery site. In total, improvements have been made to 22 sites, achieving multiple environmental, economic and social benefits:

continued over...

Coalfield Regeneration (continued)

Creating the heart of the Forest in the Ashby Woulds

Environmental benefits

- 380ha of derelict, mineral worked and other land developed for Forest uses.
- 500,000 trees planted contributing to CO₂ sequestration and local air quality.
- 2.5km of the derelict Ashby Canal re-watered.
- Moira Furnace restored a nationally important monument, symbolic of the area's mining heritage.
- 300ha of new recreational access created.
- 10km of new trails including the Ashby Woulds Heritage Trail.
- 2 nature reserves created at Newfield Colliery and Moira Sidings.

Economic benefits

- £40m invested in new tourism, recreation and forestry infrastructure.
- Conkers Discovery
 Centre developed as the
 Forest's main visitor
 attraction 200,000
 visitors a year.
- 10ha developed for new employment units.
- 572 new houses built with evidence of rising house prices.
- Around 100 new jobs created across the area.
- •£2.3m investment secured for a new Youth Hostel and Camping and Caravan Club site.
- New business created for local contractors, suppliers and tree nurseries.

Social benefits

- Ashby Woulds Forum a crucial focus for community engagement.
- Creation of a new Forest identity – evidenced in social research².
- At least 15 local tree planting events held involving over 500 people.
- Conkers developed as a new visitor attraction; education resource (34,400 children visited in 2005/6); and focus for social inclusion.
- Extensive local green space created – with woodlands, trails (including all abilities access), nature reserves and play areas.
- A growing population attracted by improved services and housing.

services and nousing.

The derelict Ashby Canal (1995).

Ashby Canal Festival along the re-watered canal.

In recognition of this success, the Ashby Woulds won the national Royal Town Planning Institute Silver Jubilee Cup for Planning Achievement in 2001. The judges remarked that "the transformation of the area is a success story of the highest order." They also highlighted the key partnership role of the Ashby Woulds Forum in "producing dramatic improvements to the environment, image and economy of the area" and in "transforming what had been a declining and dispirited population into one that now believes in itself and its achievements".

FUNDING

Funding for the area's regeneration has come from a variety of sources including the European Union, the Lottery, emda, English Partnerships, local authorities, the National Forest Company, Landfill Tax Credits, private sponsors, plus other public and voluntary sources.

LESSONS LEARNT

The Ashby Woulds is an excellent example of how environment-led regeneration of a declining industrial area can be achieved based upon sustainable development principles. A number of lessons have been learnt from this experience:

- An improved woodland environment has transformed the landscape, helped to attract inward investment, provided the setting for new housing and businesses and become the source of renewed community spirit and pride in the area.
- The Ashby Woulds Forum has been key to building confidence, enabling antipathy between the local community and mineral companies to be largely overcome.

- The Forum's shared vision has focused regeneration efforts and achieved coordination and local 'ownership' of the project.
- The process has not been straightforward or completely inclusive, as certain communities have been affected more than others by mineral working and approval for a new landfill site. 'Buy in' to the complete vision was not therefore as easy for some communities.
- Improving the environment and building confidence has led to new public and private investment in the area – in particular house builders are now active, which is a major turn around from 15 years ago.

FUTURE OPPORTUNITIES AND CHALLENGES

Building on this success further work is planned to fully realise the area's sustainable development potential, including:

- Developing a new Youth Hostel and Camping and Caravan Club site to encourage overnight staying visitors.
- Completion of the Heart of The National Forest Park around Conkers.
- Continued restoration of mineral worked and landfill sites to Forestrelated uses.
- Adding new recreation attractions including water sports and trails to link new woodlands.
- Completing the re-watering of the Ashby Canal to link it into the national canal network.
- Encouraging better public transport links to the area and between its attractions.

EFERENCES:

- 1) Ashby Woulds study Halcrow Fox and Associates, Sir William Halcrow and Partners Ltd and Liz Bancroft Associates (1991).
- 2) Growing Places Lancaster University and the Forestry Commission (2007).

An Exemplar of Rural Diversification

Farmland to Woodland - The National Forest Tender Scheme

BACKGROUND

One of the great successes of The National Forest is the way in which private landowners, especially farmers, have been involved in its creation. This has been achieved primarily through the National Forest Tender Scheme, a unique woodland incentive run by the National Forest Company in partnership with the Forestry Commission. It has been the principal mechanism for woodland creation and has delivered multipurpose recreation, biodiversity, cultural heritage, tourism and community involvement benefits. The Scheme has made an impact across the Forest area but has proved particularly successful with private landowners for rural diversification.

The Tender Scheme was introduced in 1995 following research for the original Forest Business Plan. This highlighted landowners' need for an incentive that:

- was financially attractive and flexible.
- allowed landowners to retain ownership of the land.
- allowed public benefits such as new access to be offered.
- encouraged voluntary participation.

OPERATION OF THE SCHEME

The Tender Scheme was designed to enable applicants to put forward woodland creation schemes with related public benefits and to state how much money they needed to deliver them. All schemes have to include at least 50% new tree planting and be designed to meet the objectives of the National Forest Strategy.

The tendering process has ensured competition, with schemes judged by the National Forest Company Board for their value for money and how they help fulfil the Forest Strategy. Winning schemes are bound by a 30 year contract with the National Forest Company to cover project delivery and long-term maintenance.

ACHIEVING RURAL DIVERSIFICATION

The Scheme has invested £29.6m into the local economy since 1995. This has helped over 120 landowners to diversify their farm businesses, vastly improve the landscape and biodiversity of their farm holdings and achieve wide-ranging social benefits for local communities and visitors. New woodlands have provided the focus for this investment which has enabled landowners to provide the setting for broader diversification activity. This has achieved multiple environmental, economic and social benefits.



Sence Valley Forest Park National Forest Tender Scheme [Photo: Christopher Beech]

Environmental benefits

- 3.460ha of land converted to multi-purpose woodland -2/3 of the Forest total.
- contributing to CO2 sequestration and local air quality.
- or brought into management.
- fertilisers, nitrates and livestock - helping to improve river quality and reduce greenhouse gas emissions.
- Enhanced landscape character - meeting objectives.

Economic benefits

- 5 million trees planted -
- Around 700ha of other wildlife habitats created
- Reduction in agricultural
- Forest Strategy landscape

- £29.6m invested in 192 Tender Schemes.
- 68 jobs created or safeguarded through new business diversification.
- New tourism and Forestrelated businesses created including: caravan and camping sites; parkland for deer and bison farming; four wheel drive and equestrian courses.
- Creation of an attractive environment - helping inward investment and to increase house prices.
- New business created for local contractors, suppliers and tree nurseries.

- Social benefits
- 2,770ha of new public access created including new walking, cycling and horse riding trails.
- Over 30 new recreation attractions including fishing, mountain biking and orienteering.
- Over 170 community tree planting events involving 7,000 people.
- 10 new woodlands created for environmental education.
- New social connections created between landowners, Forestrelated businesses and local communities.
- Improved environment and quality of life for local communities and visitors.

The value of the Tender Scheme and its multi-purpose benefits were endorsed by National Forest Ambassador, John Gummer MP, speaking at the Tender Scheme awards in 2004, "Ten years ago we had to find a way to create this Forest. It had to be big, innovative and without the heavy hand of

beaurocracy. It had to have variety and its own unique spirit through real and meaningful partnerships. The Tender Scheme has enabled people to have their own ideas... and in creating the Forest it is teaching many of the lessons much of the rest of the country needs to learn".



Buildings Farm National Forest Tender Scheme. (Photo: Robin Weaver).

2 An Exemplar of Rural Diversification (continued)

The National Forest Tender Scheme

FUNDING AND PARTNERSHIP WORKING

Funding for the Tender Scheme is provided by the National Forest Company (80%) and the Forestry Commission (FC) (20%). The FC pays for the woodland elements which have to qualify for the England Woodland Grant Scheme. Other public and private sources of funding have also been attracted to individual schemes.

Other delivery partners have included consultancy and contracting firms, private forest investors, local authorities and landowner advisory networks including the Country Landowner and Business Association, National Farmers' Union, Farming and Wildlife Advisory Group and access and conservation groups.

LESSONS LEARNT

The Tender Scheme (TS) has proved an excellent means of achieving multi-purpose rural diversification. Lessons learnt include:

- Woodland creation can encourage innovation and development of new business opportunities alongside high levels of environmental stewardship.
- The TS has proved particularly successful with private landowners – enabling them to retain land ownership and design schemes to meet their needs.
- Initial concerns about the Forest that farmers would not plant trees, provide public access or learn new forestry and business diversification skills – can all be dispelled through an attractive scheme.
- The competitive tendering process has worked – filtering out expensive and lower quality schemes, pushing up quality overall and achieving value for money.

 Networking between landowners through a Tender Scheme Club is an important mechanism for sharing best practice and keeping connected with the wider Forest project.

FUTURE OPPORTUNITIES AND CHALLENGES

- Working within the framework of the England Rural Development Plan, there is an opportunity to strengthen links between woodland creation, farming and environmental management.
- There are opportunities to target woodland creation in certain farmland landscapes where there has been little new planting.
- Targeting smaller woodland schemes in and around urban areas also offers future potential.
- Competing land uses may limit future opportunities in certain areas (e.g. horse paddocks, energy crops).
- Development 'hope value' around towns may also limit uptake of new planting.
- Increasingly, better quality farmland will need to be targeted, which is likely to cost more to develop for woodland creation.
- Care will be needed when considering further new planting in already wellwooded landscapes.

The National Forest's Plant a Tree and Business Benefits Schemes

BACKGROUND

Involving the community in helping to create The National Forest is a high priority – to foster a sense of ownership and pride in the Forest and to help towards its long term stewardship. It is also an excellent means of raising awareness and understanding about the Forest, which is vital for its future well-being.

Through its Plant a Tree and Business Benefits schemes the National Forest Company offers a unique opportunity for people and businesses from across the country to be part of the Forests' creation – and help towards the ultimate planting of some 15 million trees.

PLANT A TREE AND BUSINESS BENEFITS SCHEMES

The Plant a Tree scheme was launched in 2001. It invites people to buy a tree (currently £25), or group of trees, and to come and plant them as part of new community woodland schemes in the area. 2-3 special tree planting days are arranged each year which regularly attract between 500-800 people. Some people do not necessarily have a special reason to want to plant a tree in the Forest. However the real attraction of the scheme is that it offers a wonderful opportunity to celebrate birthdays, anniversaries and births as well as to remember loved ones.

Business Benefits was launched in 2004. This scheme encourages businesses to sponsor Forest creation and to involve their employees in planting the trees. This enables businesses to demonstrate their commitment to the environment and to develop links with the community in which they operate. Motivations for planting include corporate social responsibility reasons, carbon offsetting,

anniversaries and team building occasions.



Family members gathered at a recent Plant a Tree event, to plant commemorative trees. (Photo: Christopher Beech).



Plant a Tree event, Staunton Harold. (Photo: Christopher Beech).

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The National Forest's Plant a Tree and Business Benefits Schemes

For the trees bought, the recipients receive a personalised certificate and The National Forest bi-annual magazine 'Forest Scene'. Businesses also receive an acknowledgement on the National Forest website and appropriate publicity. Individual tree tags or plaques are not encouraged, in order to keep the woodlands looking as natural as possible.

ACHIEVEMENTS

Both schemes provide a special means for people to make a physical and emotional connection with The National Forest in ways that really matter to them. Planting events invoke a real spirit of common purpose; and the fact that families and business employees are willing to travel from across the country shows the depth of feeling that making a personal commitment to the Forest's creation really means. In so doing, this important social focus also delivers significant environmental and economic benefits as well.

Environmental benefits

- 11,000 trees planted contributing to carbon sequestration and local air quality.
- English grown Oak, Ash and Birch trees planted – contributing to biodiversity and landscape enhancement.
- 5 new community woodlands planted, with open public access.
- Reduction in agricultural fertilisers, nitrates and livestock – helping to reduce greenhouse gas emissions.

Economic benefits

- •£107,000 raised through both schemes towards Forest creation.
- New business provided for local tree nurseries and suppliers.
- New business provided on tree planting days for local cafes, catering outlets and visitor attractions.
- Repeat visits stimulated to view growing trees and explore more Forest attractions.

Social benefits

- 5,617 people involved in 18 tree planting events.
- 29 local to national businesses involved.
- New social connections created with the Forest – evidenced in social research.¹
- The Forest inspires the reason for a family or business occasion, shared with others.
- Raising awareness about the role of trees in climate change, biodiversity, landscape change and regeneration of the area.
- Promotion of the Forest as a major new visitor attraction.

The value of both schemes is demonstrated through many comments that the National Forest Company receives. For example:

 "The morning was brilliant – the atmosphere great with such crowds there, all enjoying a wonderful event.
 I felt privileged to plant my tree in such a beautiful location".
 Mrs Woodward, Derby.

- "Here is a memorial for Harvey that everyone participated in. His children and grandchildren can come and stand in this spot and know that people who loved him planted trees".
 Mrs Taylor, Virginia, USA.
- "Jon and I enjoyed planting the first dozen of our 450 trees. It was good to know we have played a small part in developing The National Forest. We intend to make tree planting an annual event and we are looking forward to seeing our contribution grow, in every sense, over the years". Chris Scothern, Anglia Courier Express Ltd.

FUNDING AND PARTNERSHIP WORKING

The schemes are administered by the National Forest Company and the planting events have been run with the Forestry Commission. Other organisations involved in the events include the British Trust for Conservation Volunteers, St John's Ambulance, Swadlincote Community Transport, private landowners and local venture scouts.

It is estimated that each scheme costs £2,000 - 2,500 a year to promote. A typical Plant a Tree event costs around £1,000, whilst a Business Benefits tree planting is considerably less (due to fewer numbers of people involved requiring comparatively less organisation).

LESSONS LEARNT

The experience of operating both schemes is still evolving. Lessons learnt so far include:

 It is important to capture people's imagination in environmental projects to gain buy-in and to foster direct community engagement.

- There are multiple benefits for businesses including developing corporate social responsibility, helping to enhance their reputation and stimulating employee motivation and commitment.
- The price for planting trees need not be minimal and should aim to reflect real costs.
- Careful planning of the details of an event, including risk assessment, car parking and numbers of people on site at any one time, is critical for safety and public enjoyment.
- Schemes such as Plant a Tree and Business Benefits provide an educational opportunity to put across sustainable development messages in a simple way.

FUTURE OPPORTUNITIES AND CHALLENGES

- Both schemes offer tremendous potential for expansion and could provide an important element in future marketing and fundraising for the Forest.
- Future expansion has to be balanced against the capacity of the National Forest Company and its partners to deliver them.
- The schemes contribute to carbon abatement with the trees sequestering carbon to help offset vehicle emissions resulting from people's journeys to the Forest to plant their trees.
- Available land could be a constraint upon expansion – publicly owned land with access in perpetuity is preferred.
- There is the risk that unsatisfied demand may result in people opting to choose other planting schemes operated by other organisations.
- Long-term management of the trees is essential so that people and businesses can value and be proud of the woodlands being created.

DEEEDENCES

1) Growing Places, 2007 - Lancaster University and the Forestry Commission.

The National Forest Company's Own Performance

INTRODUCTION

The National Forest Company is a small, delivery focused organisation, and has therefore chosen to devote most space in this report to the sustainable development impact of what we do externally. However, we strongly believe that whatever the size of the organisation and however environmental its remit, it still needs to apply sustainable development principles consistently internally as well as externally. The National Forest Company has therefore focused on re-assessing a range of its own operations and ways of working to help improve efficient use of its resources. This aims to achieve continuous improvement in our own carbon footprint.

THE APPROACH AND ISSUES CHOSEN

Specialist advice was sought from Defra's Sustainable Development Unit and the Peak District National Park. Ways of improving the NFC's performance were brainstormed at a special team meeting. This involved all NFC staff, ensuring commitment to the process. The main issues selected to review included:

- Stationery and office supplies procuring sustainable office supplies.
- Transport reducing staff mileage travelled.
- Electricity, heating and lighting reducing the amount of energy used.
- Publications using sustainable materials and production methods.

- Water reducing water usage.
- Catering using more local produce and not over catering for NFC events and business meetings.

ACTION PLAN

A detailed action plan has been developed to help the efficient running of the National Forest Company's business. This promotes and encourages best practice, identifies potential improvements and sets out methods to monitor progress and use of our resources. A summary of key points and progress is set out below, showing that significant achievements have already been made within the first six months.

Issue	Action	Progress
Stationery and office supplies.	 Review suppliers' environmental policies. Increase our use of environmentally produced and recyclable items. 	Meetings have been held with suppliers to review policies. Methods for monitoring products purchased have been established. Stationery supplies and paper are re-used wherever possible.

Issue	Action	Progress
Transport.	Promote sustainable transport. Make conscious choices over and above normal practice to reduce staff miles travelled.	 1) Vehicle hire policy has been amended to specify fuel efficient models wherever possible. 2) During a pilot month, 816 miles were saved. Two further months will be monitored during 2007.
Electricity, heating and lighting.	1) Aim to reduce energy use.	 All lighting has been checked to ensure that it is as energy efficient as possible. Board room lighting has been partitioned for smaller meetings. A 'Switch Off' policy has been implemented. Monthly analysis of electricity use is showing a 15% average reduction per month.
Publications.	Review paper stocks, production techniques and quantities produced.	 Paper stock is specified as recycled, chlorine free and recyclable. Quantities produced are closely monitored to avoid waste. Photo-degradable polywrap has been sourced for mailing newsletters. Electronic versions of publications are promoted wherever possible. Website downloads are monitored monthly and are increasing. For example, downloads of the National Forest Visitor Guide increased by 40% between 2005 – 2006 (41,467 copies to 58,341).
Water.	1) Reduce water usage.	1) Ideas on practical ways to reduce the use of water are being progressed with the landlord.

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The National Forest Company's Own Performance (continued)

Issue	Action	Progress
Catering.	 Use more local produce. Avoid over-catering. 	1) Catering suppliers at NFC organised conferences are requested to provide locally sourced food and water wherever possible. 2) Catering quantities are closely monitored to avoid waste.

Having embedded this way of thinking, National Forest Company staff are now working to mainstream these and other revised ways of working into their daily activities.

STRETCHING THE WEB

In its leadership role, the National Forest Company has also adopted the 'stretching the web' approach advocated by Defra, to explore the perceived sustainability of the Forest area with partner organisations. A range of issues relevant to the area have been selected and scored. As with the indicators in this report, some of these relate to the remit of the National Forest Company and others are the responsibility of partners. The aim over time is to improve the performance of the area by taking actions which help to stretch the web towards its outer limits. At the National Forest Forum in November 2006, over 130 people participated in a live stretching the web exercise which produced the following results:

Partners' perception of the sustainable development profile of the Forest area 2006.



4 Good 3 Above average 2 Below average 1 Poor

This exercise will be repeated periodically (e.g. at future Forest Forums) to test perceived directions of change in the sustainability of the Forest area. It will also be used to stimulate action with partner organisations to help improve more poorly performing aspects of the web. Some of these aspects are beyond the National Forest Company's control (e.g. transport, waste management), whilst others require continued joint action with partners.

UK Sustainable Development Strategy

Through creating The National Forest, the National Forest Company works towards the five principles of 'Securing the Future', the UK Sustainable Development Strategy 2005 – 2020. Whilst pursuing and recognising each of their critical contributions to sustainable development, the National Forest Company prioritises them as follows, given its core business:

1. LIVING WITHIN ENVIRONMENTAL LIMITS.

The National Forest is restoring a damaged environment to one that is a resilient, ecologically diverse landscape, helping to mitigate and adapt to climate change. The Company also exercises leadership in the attempt to live within environmental limits.

2. ACHIEVING A SUSTAINABLE ECONOMY.

The NFC is directly promoting the environmental economy through sustainable tourism and woodland based livelihoods.

3. ENSURING A STRONG, HEALTHY AND JUST SOCIETY.

The NFC works with others to achieve health, well-being and inclusion, through the new resource of The National Forest.

4. USING SOUND SCIENCE RESPONSIBLY.

The NFC uses the evidence base for its economic, social and environmental practice and provides a test bed for sound science.

5. PROMOTING GOOD GOVERNANCE.

The NFC works actively with leaders, stakeholder organisations and communities to involve them all in the Forest's creation.

National Forest Objectives

Contribution to UK Sustainable Development Indicators.

National Forest Objectives	Contribution to National Indicators	
Woodland creation and management	Bird populations (20) Greenhouse gas emissions (1) Environmental equality (60) River quality (30) Employment (40) Wellbeing (68) Active community participation (37) Economic output (32)	Land use (24) Biodiversity conservation (21) Farming & environmental stewardship (23) Sustainable developmen education (48) Satisfaction in local area (66) Investment (34) Energy supply (14)
Landscape enhancement	Bird populations (20) Environmental equality (60) River quality (30) Employment (40) Well being (68) Economic output (32)	Land use (24) Biodiversity conservation (21) Sustainable development education (48) Satisfaction in local area (66) Investment (34)
Biodiversity conservation and enhancement	Bird populations (20) River quality (30) Environmental equality (60) Wellbeing (68) Employment (40) Active community participation (37)	Biodiversity conservation (21) Satisfaction in local area (66) Land use (24) Farming & environmental stewardship (23) Sustainable developmen education (48) Investment (34)

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National Forest Objectives	Contribution to National Indicators	
Creating a new recreation and tourism resource	Social justice (59) Mobility (55) Environmental equality (60) Healthy life expectancy (50) Wellbeing (68) Economic output (32) Employment (40)	Satisfaction with local area (66) Land use (24) Accessibility (57) Investment (34)
Stimulating economic development (including the Forest-related economy)	Economic output (32) Employment (40)	Investment (34)
Rural diversification	Greenhouse gas emissions (1) Bird populations (20) Environmental equality (60) River quality (30) Wellbeing (68) Active community participation (37)	Biodiversity conservation (21) Farming & environmental stewardship (23) Land use (24) Satisfaction in local area (66)
Community involvement	Active community participation (37) Social justice (59) Healthy life expectancy (50) Wellbeing (68)	Satisfaction with local area (66) Sustainable development education (48)

KEY:

Orange - Framework Indicators. Green - Supporting Indicators.

(1) - National Indicator number.

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Paper information – Printed on Revive 100 Offset which has the following environmental credentials: 100% recycled fibre, TCF (totally Chlorine Free) fibre, totally recyclable and bio-degradable, NAPM recycled certification.





