The National Forest: An exemplar of Sustainable Development

1st Update: 2007-2010

This report presents an update of The National Forest's sustainable development progress. In 2007, the National Forest Company (NFC) defined and measured the National Forest's activity against 20 sustainable indicators[1]. This report updates on progress made since 2007 and on the overall progress since the Forest's inception in 1995 (subject to data availability). It is the NFC's intention to monitor the sustainable development of the Forest every 3-5 years.

Sustainable Development and The National Forest

The National Forest is a national exemplar of sustainable development, demonstrating how wide-ranging environmental, economic and social objectives can be achieved at a landscape-scale for present and future generations. The Forest area spans 200 square miles of the East and West Midlands. Its creation is enriching the landscape, biodiversity and local economy of the area and the lives of local residents (211,000) and visitors (currently 7.8m). It is also making a significant contribution to tackling climate change through the sequestration of carbon in the trees and soils of growing woodlands and by providing resilient habitat networks.

The creation of The National Forest has been underway since 1995 and, in that time, over 60km^2 of new woodlands have been created through the restoration of derelict and mineral worked land, farm diversification and development-related tree planting. In addition 1,750ha of other wildlife habitats have been created or brought into management.

Sustainable development has been at the heart of the Forest's creation since the publication of the first National Forest Strategy in 1994. In 2007, the NFC collated evidence against 20 sustainable development indicators which showed significant and consistent progress against a range of environmental, social and economic factors. These indicators were chosen to measure the Forest's contribution to national sustainable development indicators and the UK Sustainable Development Strategy, as well as measuring progress against the objectives of the National Forest Strategy 2004-14. In 2008, The National Forest won the inaugural Sustainable Development UK Award for the transformation of the Ashby Woulds coalfield landscape into a new woodland resource for leisure and tourism.

Sustainable Development progress 2007-2010

Since 2007 the Forest has made substantial, positive progress against 19 of its indicators with only one showing little or no change (see Table 1). The quality of the Forest environment continues to significantly improve; community enthusiasm for the Forest and interest in engaging with it continues to grow; and the local economy has remained relatively robust in the face of the economic recession, demonstrating an underlying resilience.

Environment

The Forest is a major demonstration of landscape-scale environmental change and habitat connectivity. Woodland cover has more than trebled from 6% of the Forest area in 1995 to 18.4% (6,230ha) in 2011 and a further 1,750ha of wildlife habitats have been created or brought into management. This is helping to reverse past habitat and species losses. Evidence of species recovery is demonstrated through increases in bird populations, a growing diversity of wildlife species at surveyed Forest sites and the return of iconic species such as otters to the Forest's major rivers. The Forest also continues to have a major impact upon diversifying the environmental quality of farmland, with 12.6% of the area now covered by National Forest or Higher Level agri-environment schemes. All this activity is helping the Forest adapt to and help mitigate the effects of climate change, with the Forest's woodlands now sequestering growing amounts of carbon dioxide from the atmosphere (66ktc).

Economy

The Forest has developed a strong and diverse economy, which has maintained its relative position despite the economic downturn. Whilst unemployment has risen by 2.2% since 2007 it remains below regional and national averages. There continues to be strong growth in tourism, leisure and the woodland economy, with tourism now worth £287m to the local economy. Since 1995 the Forest has also benefitted from £163.8m of investment in Forest-related projects and wider regeneration programmes, with £40.4m of this total added since 2006. In 2010 an independent study estimated the overall net public value of the Forest (public expenditure

analysed against positive public benefit) at £140m. The total benefits of the Forest will rise to an estimated £721m net public value when it is mature in 2100.

Whilst the overall economic evidence points to a generally healthy economic performance across the Forest, areas of economic disadvantage remain in parts of the former coalfield and Burton upon Trent.

Social

The Forest's community engagement activity is making a major contribution to 'Big Society'. Since 1995, 340,000 people have been involved in Forest-related projects and 186,000 children involved in environmental education. Around 16% of those involved come from socially excluded groups – a rise of 3% since 2007. Public perceptions surveys show high satisfaction levels with the Forest and increasing evidence of community pride and belonging. There is growing recognition that the Forest has greatly benefitted the local area in terms of public access, recreation and wildlife, making it a more attractive place to live in, work and visit. Evidence shows that 81% of the woodlands created have some form of public access and over two thirds of the Forest's population (200,000 people) live within 500m of an accessible woodland. The proportion of the Forest's population living in areas amongst the most deprived in England continues to decline and healthy life expectancy remains on a par with national averages.

TABLE 1 – NATIONAL FOREST SUSTAINABLE DEVELOPMENT INDICATORS – SUMMARY OF PROGRESS 2007-2010.

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

KEY TO INDICATORS:

Change in the indicator over time.

✓ Clear improvement ≈ Little or no change … Insufficient data for the Forest area

* Two symbols - varied progress against certain indicator aspects.

Data sources:

1) The National Forest: an exemplar of Sustainable Development - National Forest Company [2007] *www.nationalforest.org/document/research/sustainability_report.pdf*

Guide to The National Forest's Sustainable Development indicators

This guide should be read in conjunction with the 20 separately updated indicator reports.

Selection of the Indicators

In 2007, 20 indicators were selected from the suite of 68 national sustainable development indicators, with reference to local indicators also used by partner organisations. The set of 20 most closely relate to the particular circumstances of The National Forest. Two of the indicators are bespoke to the Forest area – Woodland Creation and Deprivation. Individually the indicators contribute towards meeting the objectives of 21 of the national set of sustainable development indicators.

The indicators were chosen to:

- Provide a range of environmental, economic and social indicators, which reflect the multi-purpose benefits of the Forest's creation.
- Include a mix of UK Framework and Supporting indicators.
- Monitor results against 10 of the 20 key national indicators which provide an overview of some of the important goals for sustainable development.
- Supply a variety of indicators which demonstrate contributions towards the UK Shared Priorities for Sustainable Development Action.
- Measure progress against key objectives of the Forest's creation, set out in The National Forest Strategy, 2004-2014.

Indicators were also selected for which data was easily available, reliable, regularly collected, easy to update and obtainable at reasonable or no cost.

Presentation of the Indicators

Individual indicator sheets show:

- Contextual or comparative data where relevant (eg: national 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.

KEY TO INDICATORS:

Change in the indicator over time:

- Clear improvement
- Little 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:

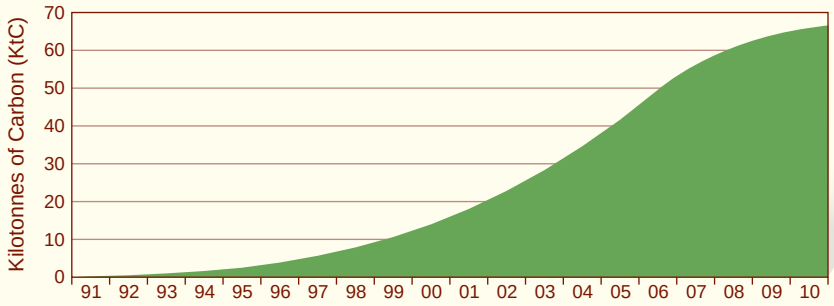
SCP	Sustainable consumption and production
CCE	Climate change and energy
NRP	National resource protection
CSC	Creating sustainable communities

1 Greenhouse Gas Emissions

Woods and trees in the UK currently lock up 12 million tonnes of CO_2 per year, which is equivalent to 2% of the actual CO_2 emitted[1]. The amount of carbon captured or sequestered by woodlands includes the carbon in the trees (both above- and below-ground biomass), the litter layer and the soil. The National Forest's specific contribution towards combating greenhouse gas emissions is through carbon sequestration. This is achieved by tree planting and promoting wood fuel as a source of renewable green energy. In addition, the Forest contributes to climate change adaptation by increasing overall landscape resilience, promoting shade and flood management and through education about the effects of climate change in its environmental programmes.

- Since 1991, 7.8 million trees have been planted[2].
- Over the period 1990–2010, it is estimated that 66 kilotonnes of carbon (ktC) were sequestered by The National Forest, an increase of 16ktC since 2006. This equates to a net removal of 241.8 million kg of CO_2 gas from the atmosphere; which is equivalent to the annual CO_2 emissions of 60,000 cars[3].

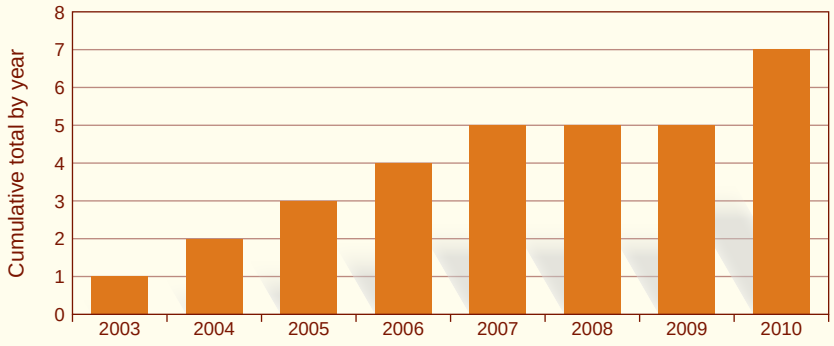
Sequestered Carbon 1991-2010



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.

- Based on the assumption that the NFC continues to plant 225ha of woodland per year, the Forest cover target of 33% will be achieved by 2044. It is estimated that, over the period 1990-2044, the carbon sequestered would equate to 0.4% of the UK's domestic climate change target of an 80% reduction in greenhouse gas emissions by 2050[3].
- The current value of carbon sequestered by the Forest was estimated to be £9m (1991-2010) and projected to be £187m by 2100 (1991-2100)[4].

Wood fuel installations 2003-2010



- In 2010, seven wood fuel heating systems are operating in the Forest. Of these, three have been installed since 2006, contributing 370kw of green energy[5].
- The National Forest Company also promotes the use of timber as a sustainable construction material as a means of 'locking up' sequestered carbon.

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 3-5 years.
3) Continue to promote the development of the woodland economy, including the use of wood fuel systems.

DATA SOURCES:

1) The Great Carbon Lock Up. The Woodland Trust [2010]. *www.woodlandtrust.org.uk/en/support-us/carbon/Pages/lock-it-up-2.aspx*
2) NFC annual monitoring [2010].
3) Updated estimates of carbon sequestration in The National Forest – Centre for Ecology & Hydrology [2010].
4) Initial Assessment of the Costs and Benefits of The National Forest – eftec [2010].
5) NFC estimates based upon current system outputs [2010].

2 Land Use

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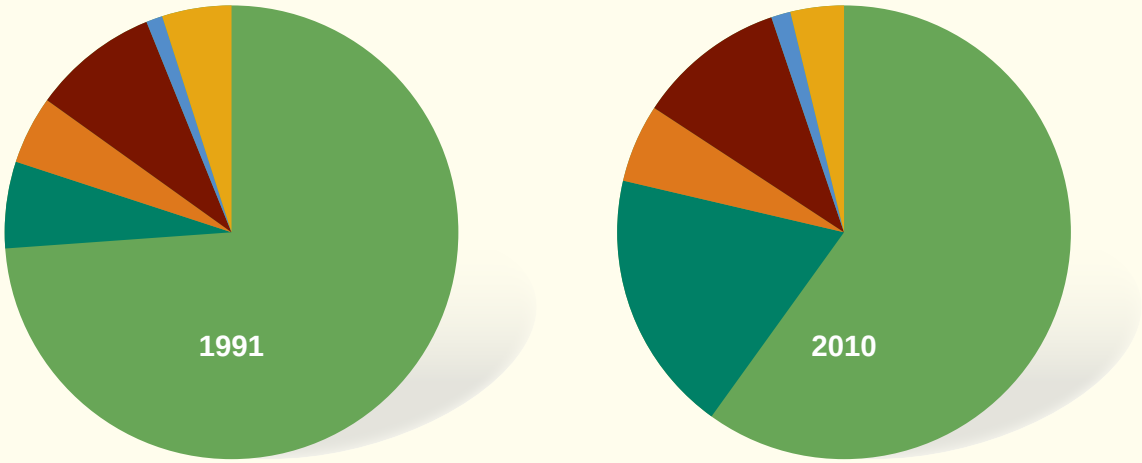
This contextual indicator shows change over time in the area's land use[1]. The data measures National Forest Strategy land use change in relation to woodland cover, biodiversity, agricultural diversification and mineral/derelict land restoration.

Land use change 1991 – 2010



- Agriculture 74% – 60.5%
- Woodland 6% – 18.4%
- Non-woodland habitats 5% – 5.6%
- Built area 9% – 10.1%
- Water 1% – 1.5%
- Mineral workings/derelict land 5% – 3.9%

- Land used for agriculture has reduced from 74% to 60. 5% between 1991–2010, while woodland cover has increased from 6% to 18.4%.[1] The National Forest Company's approach to agricultural land diversification can be found at *www.nationalforest.org/forest/faq*.
- The main changes over the period 2007–2010 are an increase in woodland cover (0.9%), a decrease in land used for agriculture (-1%) and a slight increase in non-woodland habitats (0.1%).
- Land use change has been tracked by monitoring progress against the National Forest Strategy objectives and through independent audits since 1994[2,3,4,5]. This data is reliant upon outside sources and figures for agriculture, water and built-up areas are indicative.

ACTION:

1) Continue to promote mechanisms to achieve the mix of land uses required to deliver the National Forest Strategy and landscape-scale change.
2) Monitor land use change annually.
3) Keep abreast of current policy thinking about landscape-scale habitat connectivity and delivery of ecosystem services in relation to land use change in the Forest.

DATA SOURCES:

1) NFC annual monitoring [2010].
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].
5) National Forest Strategy 2004-14, audit of progress – National Forest Company [2008].

NRP

CCE

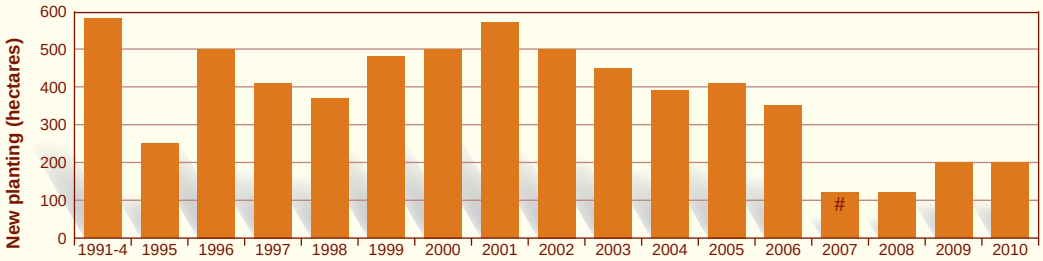
3 Woodland Creation

The National Forest Company's unique contribution to land use change is through multi-purpose woodland 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 2010 woodland cover had risen to 18.4%, with approximately 7.8 million trees planted[1].
- 6,229ha[1] of woodland creation has been achieved – through the National Forest Changing Landscapes Scheme and other grants to landowners, land acquisition*, restoration of mineral workings and derelict land and development-related tree planting.

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

National Forest planting 1991 – 2010



#The new Changing Landscapes Scheme was introduced in 2008/9 and new approaches continue to be developed in a challenging environment for further large-scale planting.

- Management of existing woodlands continues to be a high priority – for their biodiversity, landscape and recreation value and to stimulate the Forest's woodland economy. Of the woodlands which existed prior to the creation of The National Forest, 47% (1,415ha) were reported as being under management in 2010[2].

ACTION:

1) Maintain woodland creation and management activity to meet the objectives set out in the National Forest Strategy 2004-14 and Delivery Plan 2009-14.
2) Monitor activity annually.

DATA SOURCES:

1) NFC annual monitoring [2010].
2) NFC research [2006] and Forestry Commission woodland management monitoring data [2010].

4 Land Recycling

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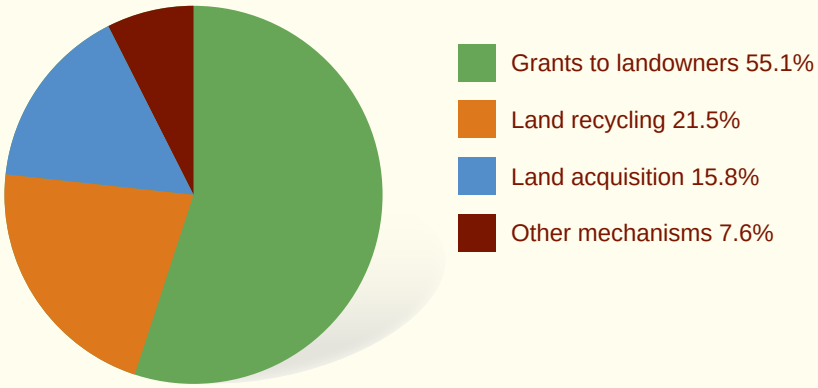
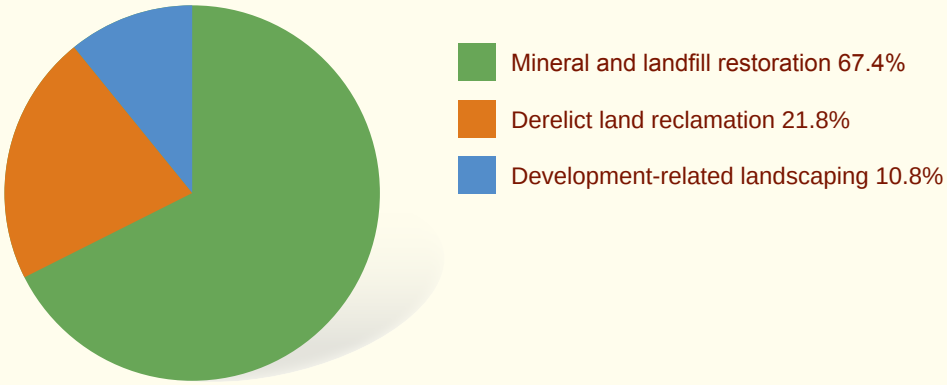
The National Forest Company promotes the restoration of brownfield land to woodland, biodiversity, recreation and tourism uses, to help achieve the Forest's creation. Derelict land reclamation, restoration of mineral workings and landfill sites and development-related landscaping all contribute to this.

- 1,336ha of Forest area has been created through land recycling since 1991, an increase of 131ha since 2006[1]. This represents 21.5% of the total Forest hectarage – the same proportion as reported in 2006.

Woodland creation 1991 – 2010: 6,229ha



Land Recycling 1991 – 2010: 1,336ha



- Around 2,000ha of active mineral workings, landfill sites and derelict land remain to be restored. This could add a further 3-4% of Forest-related uses to the overall Forest area[2].

ACTION:

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

DATA SOURCES:

1) NFC annual monitoring [2010].
2) National Forest Strategy, 2004 – 2014. National Forest Company [2004].

NRP
CCE
SCP

5 Biodiversity Conservation

Habitat creation
Species works

Habitat quality
Species status

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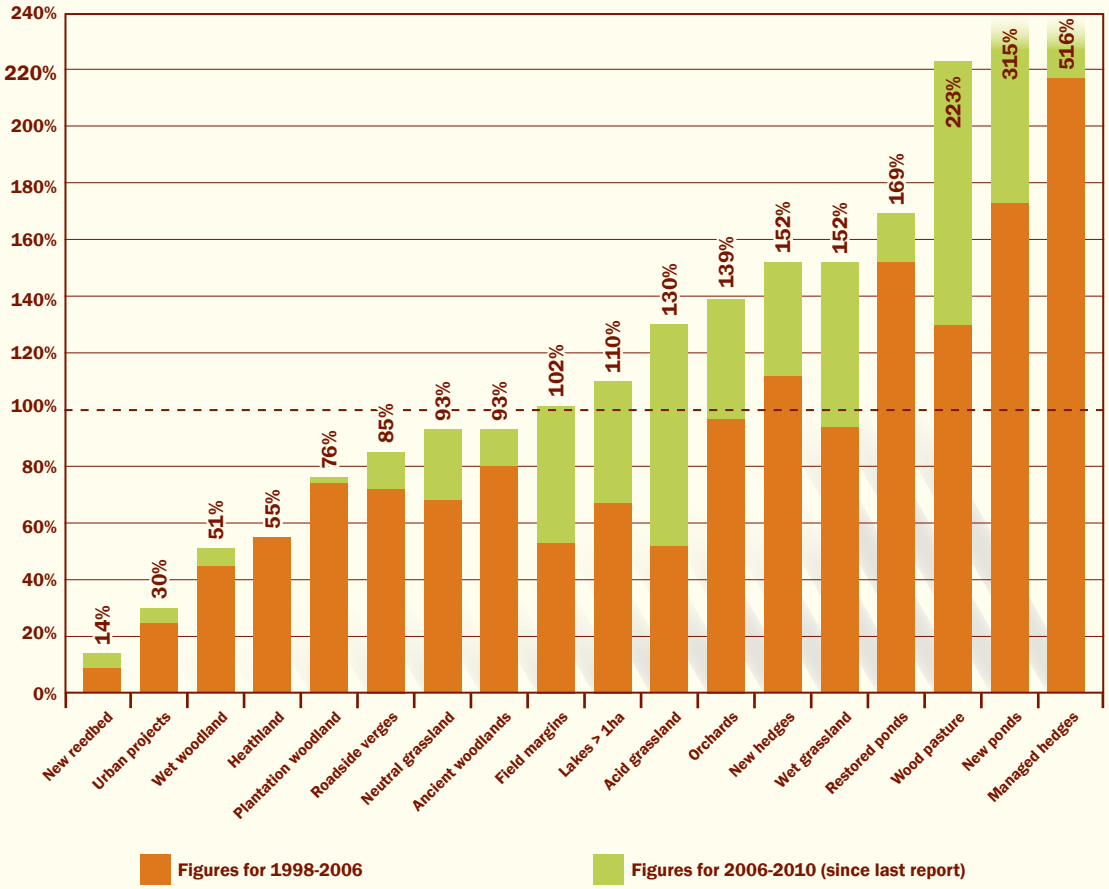
The National Forest is creating landscape-scale ecological change that will ultimately link together around 20,000ha of new and existing woodlands, hedgerows, meadows, heathland and wetlands. This is creating a more resilient landscape for wildlife to thrive and adapt to climate change. This indicator measures how this activity has met the National Forest Biodiversity Action Plan (BAP) 2004–2010 targets and how it contributes directly towards achieving the UK BAP.

HABITAT PROGRESS

- Since 1995, 1,750ha of habitats have been created or brought back into management (in addition to land that has been tree planted). This represents an increase of 170ha since 2006/7 [1,2].
- Since 1995, 91km of new hedgerows have been planted and 1031km of existing hedgerows have been brought back into management. This represents an increase of 9km and 581km respectively since 2006/7.[1]

National Forest BAP: progress towards targets 1998 – 2010



HABITAT QUALITY

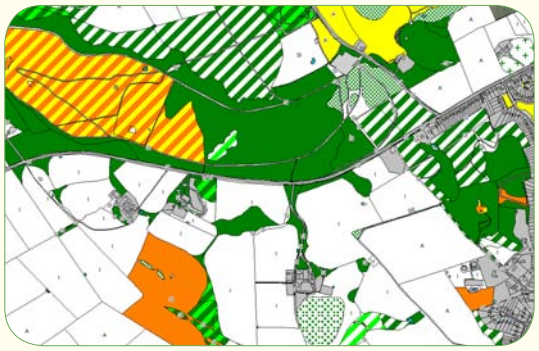
- The quality of habitats is just as important as the quantity, but there are few reliable and consistent datasets for habitat quality (within the Forest or nationwide). One measure is Natural England's condition data for Sites of Special Scientific Interest (SSSIs). In 2010, 63.1% (988ha) of SSSI units in the Forest were in favourable or unfavourable recovering condition[3]. This is significantly lower than the national average of 95.4%, but it is a poor indicator of wider habitat quality as SSSIs cover just 3% of the Forest area and it is skewed by the lack of improvement in two large sites.

NRP

- The National Forest Company also undertakes periodic ecological surveys at two newly-created Forest sites - Willesley Wood and Sence Valley Forest park. These show that local biodiversity interest has increased considerably between 1998 and 2005/6[4].

LANDSCAPE-SCALE HABITAT NETWORKS

- The NFC has developed computer modelling techniques to map the connectivity of habitats at a landscape-scale. This informs decisions about habitat creation and management and is helping to achieve the long-term aim of creating a robust network of habitats to allow wildlife species to thrive and adapt to climate change.



SPECIES PROGRESS

- Work continues to enhance habitats to benefit the nine priority species identified in the National Forest BAP. Otters have now returned to every major river in the Forest; waterbodies enhanced for ruddy darter dragonflies has increased by more than 10% since 2007; and nest box programmes continue to support barn owl, redstart and bat species[1]. (For full details see the National Forest BAP, 2011).

Redstart

Otter

✱ ACTION:

1) Continue to work with partners and landowners to meet National Forest BAP targets.
2) Work with partner organisations to develop joint habitat and species surveys.
3) Work with landowners to achieve connected ecological networks, at a landscape-scale, across the Forest.

DATA SOURCES:

1) NFC annual BAP monitoring [2010].
2) The National Forest Biodiversity Action Plan Audit – Middlemarch Environmental [1998].
3) Data from Natural England [2010].
4) Willesley Wood and Sence Valley Forest Park ecological surveys - Leicestershire Ecological Records Centre [1998 & 2007].

6 Bird Populations

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The National Forest is significantly improving and extending habitats for woodland and farmland birds (see Biodiversity Conservation indicator). Across the UK, bird populations are used as an indicator of the health of our environment. Monitoring key species that are attracted to the main habitats in The National Forest provides a useful indication of the status of bird populations across the Forest as a whole.

National and regional bird indicators 1994-2008[1]

- Woodland bird species in the East and West Midlands have shown increases since 1994, compared to a decrease across England; but farmland birds have decreased at a faster rate in the Midlands than national trends.

	All bird species	Woodland birds	Farmland birds
England	3% increase	6% decrease	11% decrease
East Midlands	7% increase	15% increase	17% decrease
West Midlands	2% decrease	1% increase	16% decrease

National Forest Breeding Bird Survey 2008[2]

- A Breeding Bird Survey (BBS) of The National Forest was conducted by the British Trust for Ornithology (BTO) in 2008. Covering 42 one kilometre squares (approximately 10% of the Forest area), it provided baseline data against which future trends and population change can be measured.
- Key findings were:
  - 107 different bird species were recorded.
  - The most abundant species were woodpigeon, blackbird, wren, chaffinch, robin and starling.
  - The Charnwood landscape area (which was particularly good for woodland and scrub species) recorded the most birds per survey sample.
  - The Mease Lowlands landscape area had the highest mean counts for farmland species.
  - 52 of the species recorded were listed as being of conservation concern (16 red list species and 36 amber list).
  - Red list species such as tree sparrow (which favours farmland and scrub habitats), willow tit (scrub/woodland edge), marsh tit (mature woodland) and grasshopper warbler (wetland and young plantation) were all recorded more abundantly in The National Forest than in the wider Midlands region.

Skylark: a National Forest farmland species.

Song thrush: a National Forest woodland species.

Photos: John Harding

NRP

National Forest Breeding Bird Survey 2010[3]

- The first follow-up survey was carried out in 2010 on a 25% sample of the original survey squares (ten 1km squares).
- Preliminary results show that, in the survey squares used in both the 2008 and 2010 surveys, 96 species were observed in both surveys. Of these, 38 species (40%) showed an increase in numbers recorded since 2008 and six species saw an increase of more than 100%.
- Six of the red-listed and seven of the amber-listed species observed in 2008 were recorded in greater numbers in 2010. This includes birds of farmland (skylark, starling, house sparrow, linnet and yellowhammer), young plantations (linnet and yellowhammer) and mature woodland (song thrush).
- Recorded populations of skylark showed an increase of 14% since 2008. This red-list farmland species has yet to show substantial recovery elsewhere in England[4].
- The BTO's full report is awaiting information from volunteer surveyors and is due for completion in 2011. This indicator will be updated to reflect new data and also provide a comparison with national and regional trends.

ACTION:

1) Continue to undertake habitat and species improvement works to meet National Forest BAP targets.
2) Commission a full re-survey of BBS every five years, plus periodic sample surveys.

DATA SOURCES:

1) Wild bird population indicators for the English Regions 1994-2008: *www.defra.gov.uk/evidence/statistics/environment/wildlife/research/download/wdbrds201004.pdf*
2) A breeding bird survey of The National Forest (English Midlands) - British Trust for Ornithology [2008].
3) Repeat Breeding Bird Survey: Interim report - British Trust for Ornithology [September 2010].
4) BTO statistics for birds of conservation concern – changes in criteria since last review: *www.bto.org/psob/#change_in_criteria*

7 Farming and Environmental Stewardship

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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 National Forest grant schemes for agricultural diversification.

AGRI-ENVIRONMENT SCHEMES

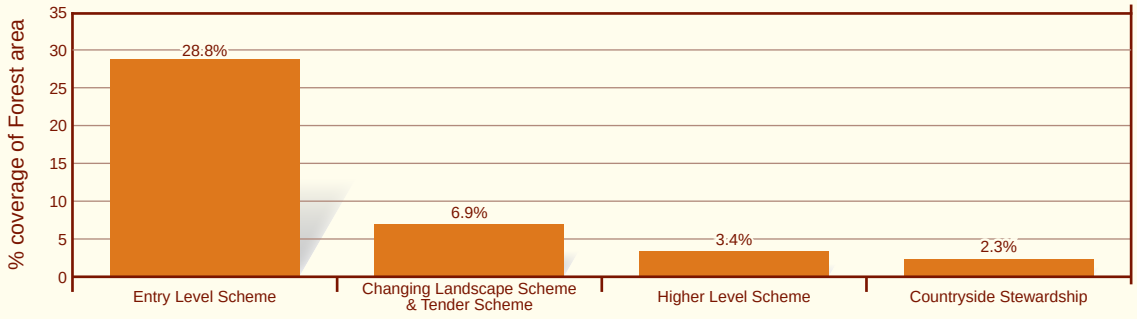
- Improvements in the format of data provided by Natural England have allowed statistics published in the 2007 Sustainable Development report to be revised, providing more accurate figures for the area of Entry Level (ELS) and Higher Level (HLS) Schemes in the Forest.
- Since 2005, 14,499ha of ELS* have been taken up[1], equivalent to 28.8% of the Forest area. This is lower than the current take-up across England (40.6%)[2],which is to be expected as woodland creation schemes predominate in The National Forest.
- Since 2007 the take-up of HLS* has increased, with significant new schemes at Calke Abbey and St. George's Park. The area covered by HLS is now 1,727ha[1] (3.4% of the Forest area). This is lower than the national average of 5.8% across England[2].
- In 2010, 1,138ha of land were under the Countryside Stewardship Scheme, covering 2.3% of the Forest area. In comparison, Countryside Stewardship and Environmentally Sensitive Area Schemes covered 5.4% of England[2].

** Figures include the Organic Entry Level Stewardship Scheme (OELS).*

NATIONAL FOREST GRANT SCHEMEs

- From 1995 to 2010 the National Forest Company and Forestry Commission have supported 204 farm-based Changing Landscapes Schemes (CLS) and former Tender Schemes (TS)[3]. These have diversified 3,487ha of farmland to Forest-related uses, covering 6.9% of the Forest area.
- 24 new schemes have been developed since 2006.

Land covered by agricultural diversification schemes 2010



ACTION:

1) Continue to work with landowners and partner organisations to achieve Forest-related agricultural diversification, including increased take-up of HLS.
2) Monitor activity annually.

DATA SOURCES:

1) Defra agri-environment scheme figures [2010].
2) Based on Natural England statistics for October 2010.
3) NFC annual monitoring [2010].

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8 River Quality

This contextual indicator measures the biological and chemical quality of rivers. Three of the sampled rivers fall largely within the Forest boundary (the Mease, Swarbourn 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. It will also help to improve riparian wildlife habitats.

In 2007, England gathered General Quality Assessment (GQA) data using a smaller monitoring network than in previous years. Since then, water quality has been classified under the new Water Framework Directive (WFD)[1]. Work is now underway to incorporate this new classification into national river quality indicators[2].

- As water quality is now classified under the WFD, it is not possible to directly compare new monitoring results for rivers against the GQA data (chemical and biological quality) gathered for the previous report.
- The WFD looks at the ecological health of stretches of rivers, as well as traditional chemical standards. Rivers are now classified according to their overall ecological status, as being high, good, moderate, poor or bad quality.

ECOLOGICAL QUALITY

- Over the period 2006 – 2008, using the new WFD measure, the ecological status of rivers in the Forest area was rated as follows:[3]

Ecological status of National Forest rivers, 2006 – 2008[3]

Water body	Overall Ecological classification
River Mease*	Moderate
River Swarbourn	Moderate
River Trent**	Poor
River Sence	Bad
Gilwiskaw Brook***	Poor

The following rivers are classified along two stretches within The National Forest:

* *The River Mease: i) Gilwiskaw Brook to Hooborough Brook and ii) Hooborough Brook to the River Trent.*

** *The River Trent: i) Moreton Brook to River Tame and ii) River Mease confluence to River Dove.*

*** *The Environment Agency recommends that the Gilwiskaw Brook is included in the analysis as it represents a significant part of the River Mease Special Area of Conservation (SAC).*

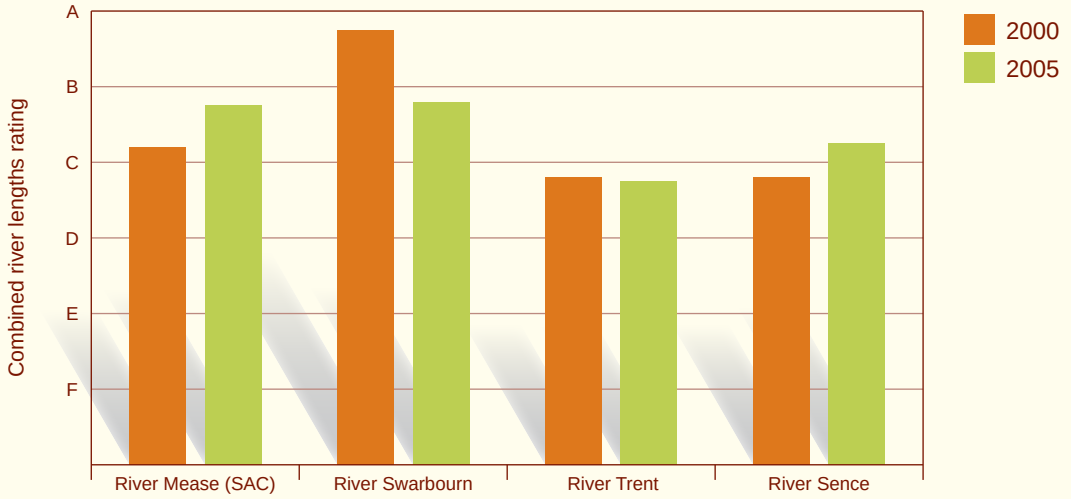
- It is difficult to compare 2005 GQA results with 208 WFD results, as while there has been an apparent deterioration in the Rivers Mease, Swarbourn, Trent and Sence, this is the result of changes to the grading system under the WFD[4].
- In 2006, sections of the River Mease and Gilwiskaw Brook (which were notified as a Site of Special Scientific Interest in 2000) were designated as a Special Area of Conservation for their populations of spined loach and bullhead fish, white clawed crayfish and otters. The River Mease is one of only a handful of water bodies in the UK where the spined loach currently exists.

BIOLOGICAL QUALITY

- In 2008, 72% of all English river lengths were recorded as being of good biological quality[2]. Rivers in the Midlands fell below this national average: 70% for the East Midlands[5] and 57% for the West Midlands[6]. However, it should be noted that in the East Midlands this represents a significant improvement in quality compared with figures for 1990, when just 43% of rivers were rated good. This is the highest regional increase in England.

- In 2005, using the GQA data, 55% of the river lengths along the Mease, Swarbourn, Trent and Sence in the Forest area were rated as having good biological quality[7].

*Biological Quality of rivers in The National Forest, 2000 – 2005[7]

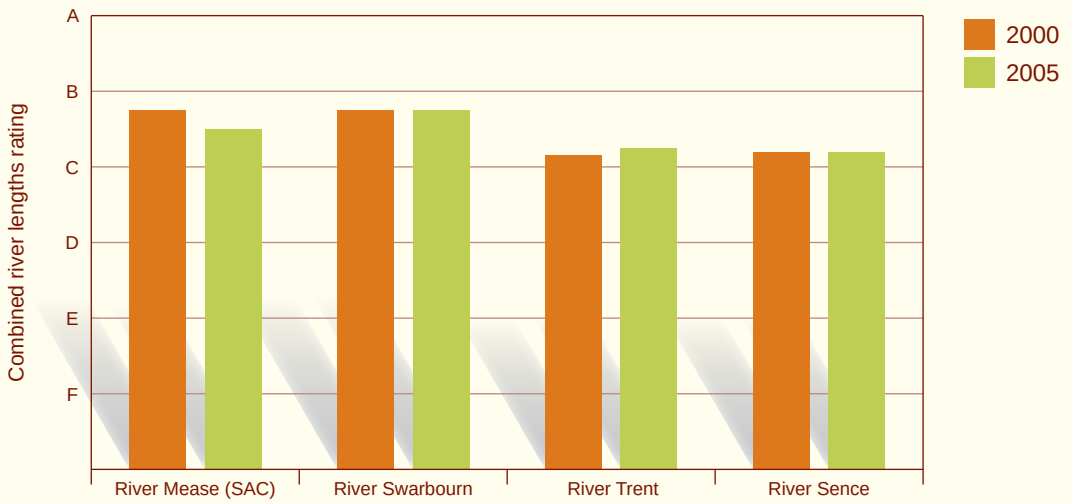


Using GQA data; from the SD report 2007. (EA recommend inserting the same diagram from the SD report 2007, as this was the last update using biological GQA data, and shows status before WFD).

CHEMICAL QUALITY

- In 2008, 79% of English river lengths were recorded as being of good chemical quality[2]. Once again, rivers in the Midlands fell below this national average: East Midlands 77%[5] and West Midlands 73%[6]. But, as with biological quality, the proportion of river lengths in the East Midlands classed as having good chemical quality showed the greatest improvement in England, increasing by 43 percentage points since 1990.
- In 2005, using the GQA data, 67% of the river lengths along the Mease, Swarbourn, Trent and Sence in the Forest area were of good chemical quality[7].

Chemical Quality of rivers in The National Forest, 2000 – 2005[7]



ACTION:

1) Work with the Environment Agency (EA) and landowners to achieve sustainable land management along river corridors and enhance riparian habitats.
2) Monitor National Forest river quality fully in 2015, when the EA meet Water Framework Directive objectives for first River Basin Management Plans.

DATA SOURCES:

1) Details of the Water Framework Directive are available from the Environment Agency at: *www.environment-agency.gov.uk/research/planning/33106.aspx*
2) From Defra website: *www.defra.gov.uk/sustainable/government/progress/national/30.htm*
3) Humber Basin Water Framework Directive from: *http://wfdconsultation.environment-agency.gov.uk/wfdcms/en/humber/Intro.aspx*
4) Environment Agency pers. comm. [2010].
5) East Midlands factsheet from Defra website: *www.defra.gov.uk/sustainable/government/progress/regional/documents/east_midlands_factsheet.pdf*
6) West Midlands factsheet from Defra website: *www.defra.gov.uk/sustainable/government/progress/regional/documents/west_midlands_factsheet.pdf*
7) Environment Agency Monitoring data [2006].

9 Employment

A contextual indicator of the area's employment. Employment structure continues to change, reflecting the decline of coal mining and a vastly improved environment that is helping to attract new investment. Jobs have grown in construction, transport/storage/ distribution, real estate, education and tourism[1]. However, the effects of the economic downturn are evident in more recent datasets.

Employment Rates by District

- Employment data is only available for whole District/Borough Council areas. This makes analysis of rates within The National Forest difficult to determine, as only parts of these administrative areas are within the Forest.
- Employment rates across all six districts (see below) have fallen since 2006, with the exception of North West Leicestershire and Lichfield. This is broadly comparable with regional and national averages, suggesting that these falls are linked to macro-economic trends rather than issues specific to The National Forest[1,2].

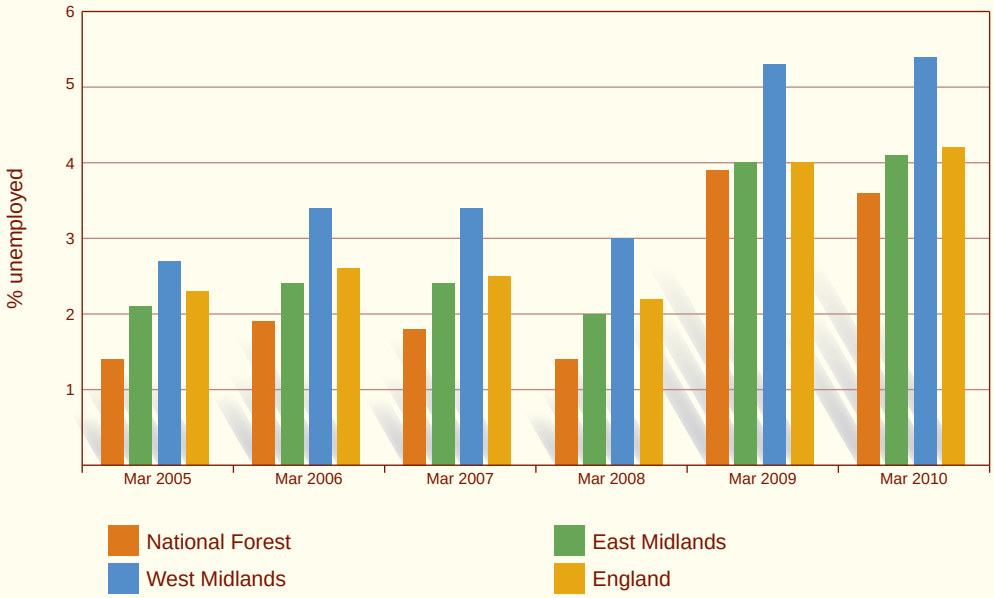
District/Borough	2005/6	2008/9	Change
Charnwood	81.1%	78.1%	-3.0
East Staffordshire	78.6%	76.7%	-1.9
Hinckley & Bosworth	81.7%	78.1%	-3.6
Lichfield	76.8%	84.9%	+8.1
North West Leicestershire	81.0%	81.7%	+0.7
South Derbyshire	82.7%	77.8%	-4.9
England	74.3%	73.4%	-0.9
East Midlands	76.2%	75.2%	-1.0
West Midlands	72.7%	70.5%	-2.2

- Despite the decrease in employment rates, the Forest Districts continue to exceed national and regional averages. This suggests that the Forest area is holding its own and maintaining its position relative to wider trends[1].

Claimant Count Unemployment

- Claimant count unemployment for all districts across the Forest was at 3.6% in March 2010 – a rise of 2.2% from 2005 to 2010[1,3]. This rate is below the West Midlands (5.4%), East Midlands (4.1%) and the national average (4.2%). These figures highlight the impact of the economic downturn and show that the Forest has developed into a more robust and diverse economy, maintaining its relative position despite the recession.

Claimant Count Unemployment 2005-10



ACTION:

1) Monitor employment levels and changing characteristics every 3-5 years.

DATA SOURCES:

1) Much More Than Trees 3: The socio-economic impact of The National Forest - DC Research for the National Forest Company [2010].

2) ONS Annual Population Survey accessed via NOMIS – April [2010].

3) DC Research analysis of local authority district and Lower Super Output level data from ONS Crown Copyright Reserved, accessed via NOMIS April [2010].

10 Economic Growth

The economy of the Forest area continues to perform well, with economic activity rates outperforming regional and national averages. There continues to be particularly strong growth in the unique National Forest contributions of tourism, leisure and the woodland economy. The impact of the recession is notable in more recent datasets, but economic activity and employment rates (see indicator 9) suggest the area is holding its own and maintaining its position relative to wider trends.

BUSINESS GROWTH

- Between 2004 and 2007 all the Forest districts experienced positive growth, with the stock of VAT registered businesses in South Derbyshire (11.7%) and North West Leicestershire (11.4%) significantly outperforming East Midlands (3%), West Midlands (6%) and England averages (7.4%)[1]. Only Charnwood (4.9%) experienced business growth at lower than those averages.
- New business formation (VAT registrations) was particularly high in North West Leicestershire (19.4%) with only East Staffordshire (-2.9%) showing a fall[1].

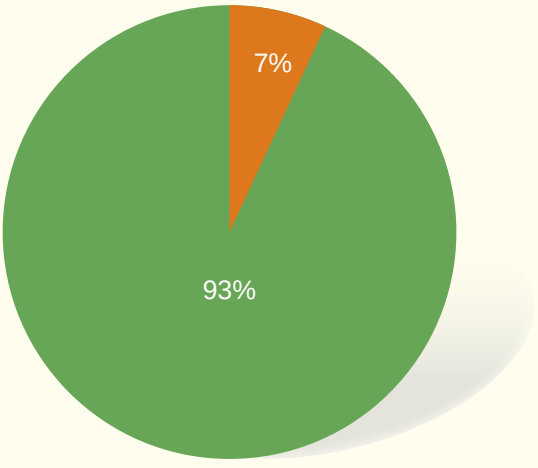
PUBLIC VALUE OF THE NATIONAL FOREST

- The overall net public value of the Forest is currently estimated at £140m. The total benefits of the Forest will rise significantly to an estimated £721m net public value when it is mature in 2100[2].

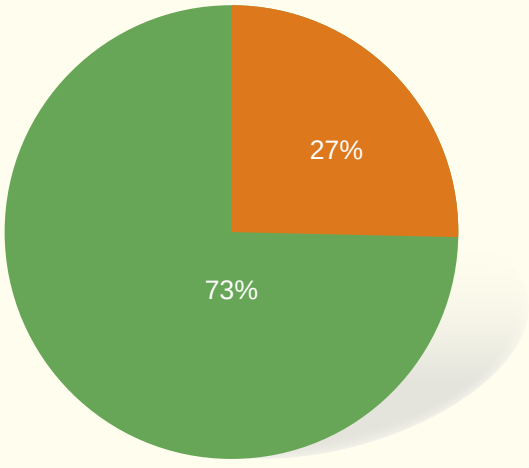
TOURISM AND LEISURE[3]

- Tourism supports 4,368 jobs (2009), a rise of 6.4% compared with 2005.
- Visitor spending has grown from £249m (2005) to £286.4 million in 2009, a rise of 15%. The split of spending between day and overnight visitors remains similar.
- The National Forest attracted 7.8m visitors in 2009, an increase of 6.1% from 2005.
- The split of day visitors (93%) and overnight staying visitors (7%) remains the same as 2005. Visitor accommodation bed spaces have however increased from 3,114 in 2005 to 3,854 in 2009.

Proportion of visitors by category and spending



Visitors by category [2009]



Visitor spending by category [2009]

Day visitors Overnight stays

WOODLAND ECONOMY

- 227 jobs have been created/safeguarded between 1995–2010 in forestry, contracting and woodland related businesses[4].
- In addition, 166 jobs have been created through new Forest-related tourism initiatives at Conkers Discovery Centre, Rosliston Forestry Centre, the National Memorial Arboretum, the National Forest Youth Hostel and the Camping and Caravan Club[1,4].

ACTION:

1) Continue to develop and promote sustainable tourism and the woodland economy.
2) Continue to monitor the volume and value of tourism and growth of the woodland economy.

DATA SOURCES:

1) Much More Than Trees 3: The socio-economic impact of The National Forest - DC Research [2010].
2) Initial Assessment of the costs and benefits of The National Forest – Eftec [2010].
3) The National Forest STEAM report – Global Tourism Solutions UK Ltd [2008].
4) National Forest Company Socio-Economic Monitoring Report [2010].

11 Investment

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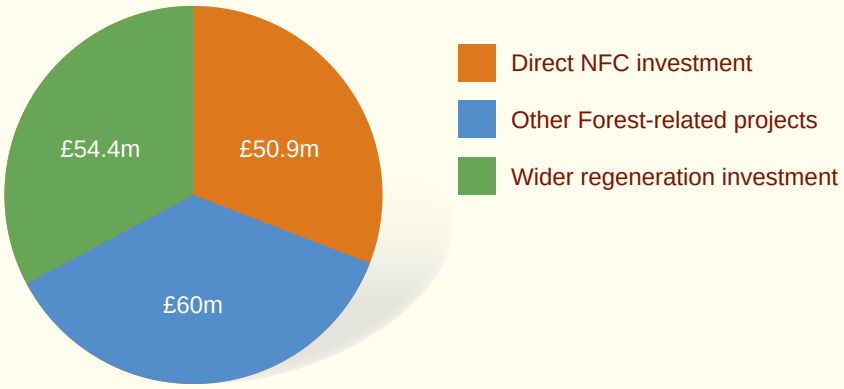
The National Forest Company (NFC) and partner organisations contribute directly to the local economy by investing in the continued development of the Forest. This includes woodland planting and management, recreation and tourism infrastructure, biodiversity enhancement, woodland economy development, rural diversification and urban and coalfield regeneration.

- Between 2006 and 2010 £40.4m was invested in Forest-related projects and programmes in the area[1].
- In total £163.8m has been invested in Forest-related projects and wider regeneration programmes since 1995[1,2]. Of this amount:
  - The NFC has invested a total of £50.9m, which includes funding through Forest creation grant schemes and land acquisition[3].
  - Partner organisations have invested a further £60m in Forest-related projects, including £18.8m in the Conkers Discovery Centre and £11.5m in the National Memorial Arboretum[4,5].
  - The area has also secured £54.4m[2] in coalfield, urban and rural regeneration programmes. This has delivered wide ranging community benefits, with funding through the Lottery, RECHAR, regional economic and other public sources.

Forest-related and regeneration investment 1995 - 2010



ACTION:

1) Work with partners to continue to secure public, private and charitable sector investment in the Forest.

2) Monitor Forest-related investment in the area every 3-5 years.

DATA SOURCES:

1) Much More Than Trees 3: The socio-economic impact of The National Forest – DC Research [2010].

2) Much More Than Trees 2 – Staffordshire University [2004], supplemented by NFC data up to 2006.

3) NFC annual monitoring [2010].

4) Heart of the National Forest Foundation [2010].

5) National Memorial Arboretum [2010].

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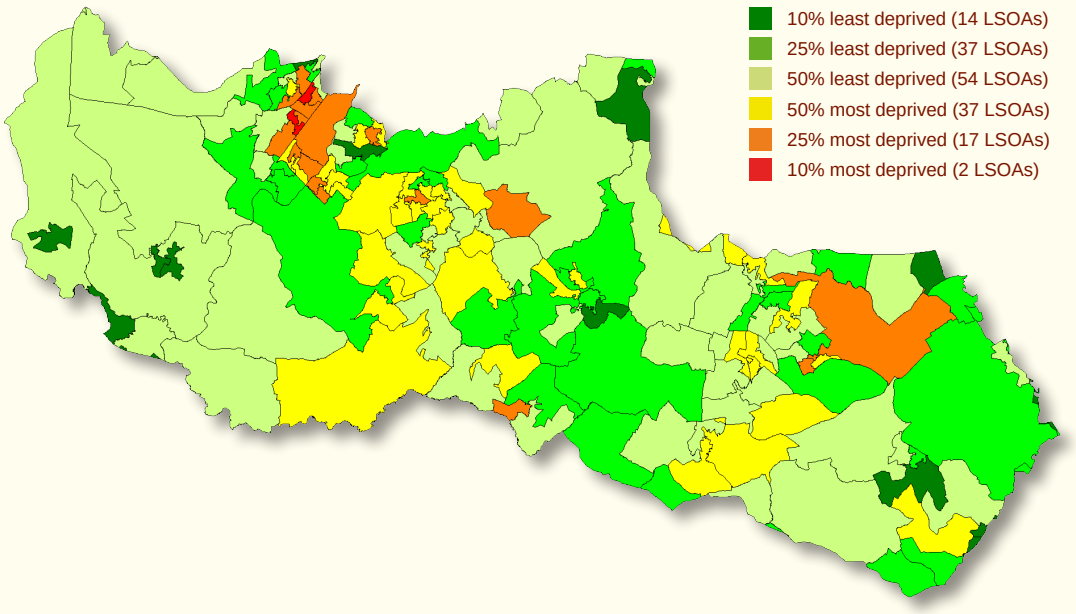
12 Deprivation

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

- The Index of Multiple Deprivation (IMD) for 2007 shows that the Forest has two Lower Super Output Areas (LSOAs) in the 10% most deprived in England, with a further 17 in the 25% most deprived. This compares with three in the 10% most deprived LSOAs in the 2004 IMD and an additional 18 in the 25% most deprived[1,2].
- Overall, seven LSOAs have improved their ranking between 2004 and 2007[2].
- Based on the National Forest Company's analysis of LSOA population data for 2007, it is estimated that 13.9% of the Forest's population (29,700 residents) live in the 25% most deprived LSOAs in England. Of these, 2,970 (1.4%) live in the 10% most deprived LSOAs[3].
- Deprivation continues to be concentrated in Burton upon Trent, Swadlincote and Coalville, highlighting areas of long-term structural hardship.

Index of Multiple Deprivation 2007



EDUCATION AND SKILLS

- In 2009, the percentage of pupils gaining five or more GCSE (or equivalent) qualifications at grades A* – C, across the six Forest Districts, was generally below the regional and England 70% average[4]. However, Hinckley and Bosworth (71.6%) and Lichfield (70.4%) performed above the England, East Midlands (68.9%) and West Midlands (70.1%)[4].

- Over the period 2005–10, GCSE performance has improved considerably across all six Forest districts[4]:

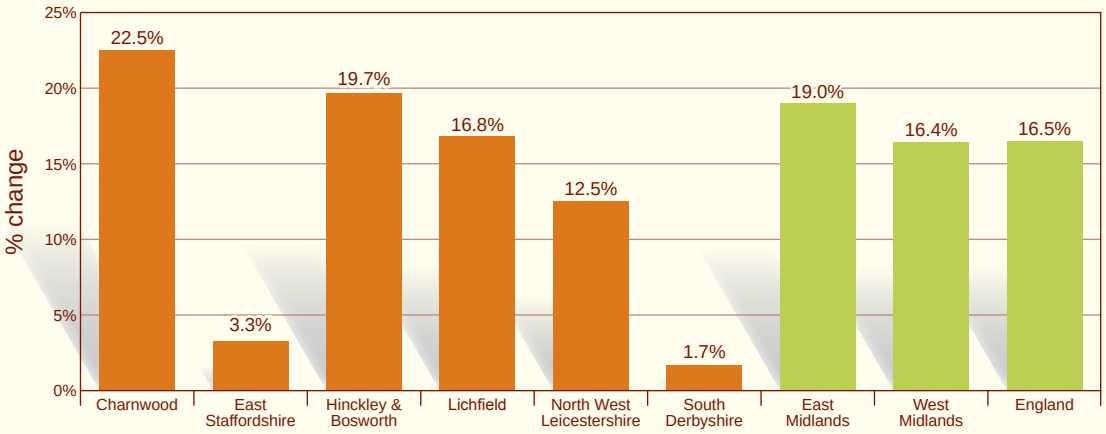
Forest district	2005	2010	Change
Charnwood	52.6%	64.6%	12
East Staffordshire	57.0%	67.6%	10.6
Hinckley & Bosworth	54.0%	71.6%	17.6
Lichfield	54.1%	70.4%	16.3
North West Leicestershire	59.7%	62.2%	2.5
South Derbyshire	53.3%	66.1%	12.8

- Adult qualifications/skills remain low in parts of Burton upon Trent and many former coalfield settlements. Eight SOAs are in the 10% most deprived in England, with 32 others in the worst 25% (2007). The number in the worst 25% has increased from 18 in 2004.

INCOME

- In 2009, workplace weekly earnings across the Forest's six Districts ranged from £418 in East Staffordshire to £501 in Charnwood. This is in line with East and West Midlands regional averages (£456), but overall, is slightly below the national average (£495)[6].
- Between 2004 to 2009, workplace earnings in Charnwood and Hinckley & Bosworth grew at a faster rate (22.5% and 19.7% respectively) than regional (East (19%) and West (16.4%) Midlands) and national averages (16.5%). However, growth in South Derbyshire (1.7%) and East Staffordshire (3.3%) has been well below those averages[6].

Change in average weekly pay 2004-10[6]



ACTION:

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

DATA SOURCES:

1) Multiple indices of deprivation – Office of National Statistics [2007].
2) Much More Than Trees 2 – Staffordshire University (2004).
3) National Forest Company analysis of LSOA population data for 2007 obtained from Office of National Statistics [2010]
4) Department for Education (DfE) statistics: *www.education.gov.uk/inyourarea/index.shtml* [2010].
5) NOMIS – Official Labour Market Statistics [2010].
6) Much More Than Trees 3: The Socio-economic impact of The National Forest – DC Research [2010].

13 Life Expectancy and Health

Life Expectancy

Healthy Living Initiatives

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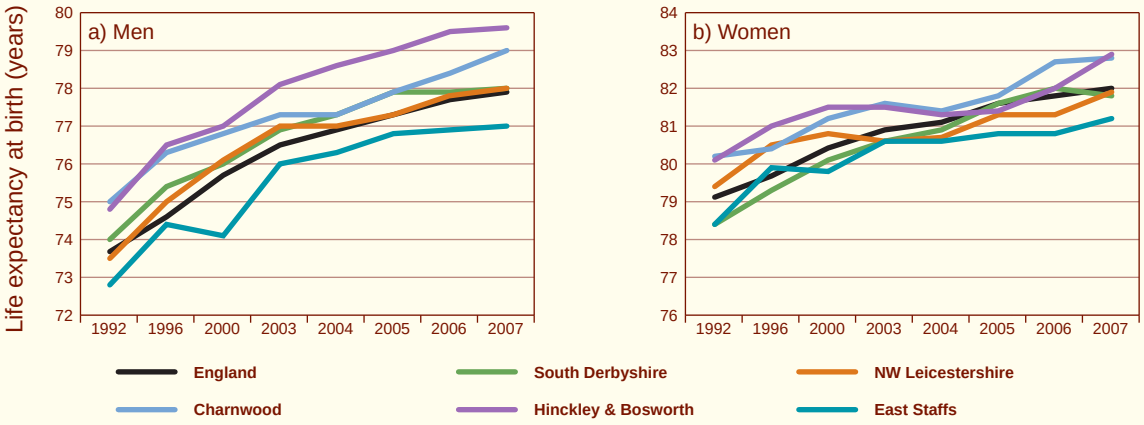
The National Forest is helping to create a healthier place for people to live in, work and spend their leisure time. The decline in coal mining, a vastly improved environment and an increase in healthy living initiatives are all contributing to this. This indicator includes changing life expectancy,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

LIFE EXPECTANCY

- Male life expectancy in the Forest Districts (2006-08) is around 78 years, a rise of between 1 and 2 years since 2002-4[1].
- Female life expectancy shows a similar rise over the same time period, with life expectancy being around 82 years[1].
- Both male and female life expectancy in the Forest is in line with regional and national trends[1,2,3,4].

Life Expectancy – Forest Districts and England



HEALTHY LIFE EXPECTANCY

- Data for healthy life expectancy (HLE) has not changed since the last Sustainable Development report (2007). In 2001, HLE for men across the Forest area 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)[5].

HEALTHY LIVING

- Since 2001, 53,240 people have taken part in healthy living activities at Rosliston Forestry Centre. This represents an increase of 44,650 people since 2007[6].
- Between 2007 and 2010, a further 1780 people were involved in healthy walking activities run by East Staffordshire Borough Council[7].

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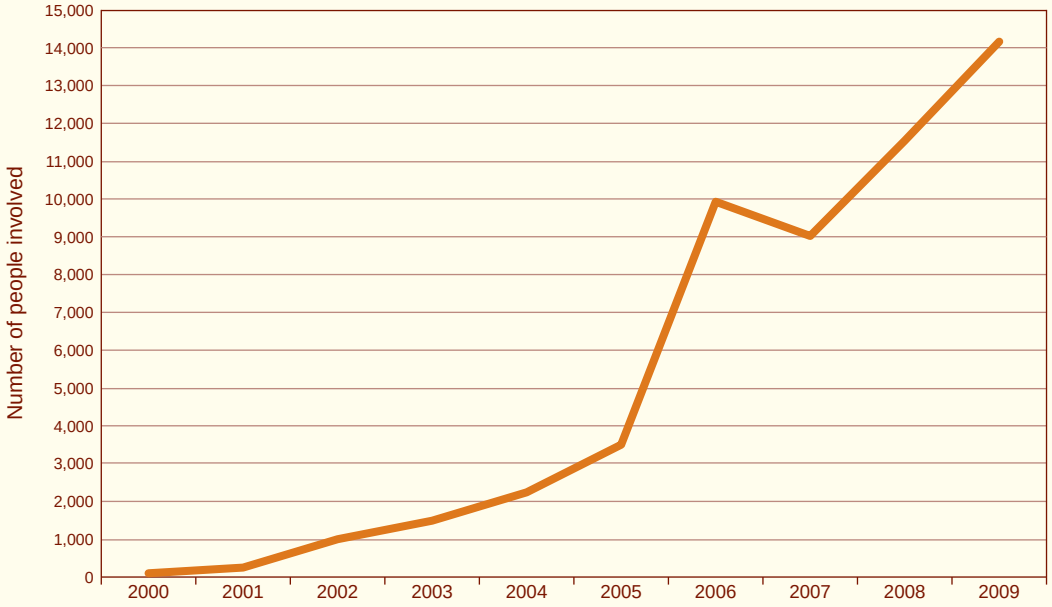
Healthy living initiatives at Rosliston Forestry Centre



- Around 2,500 people per year take part in practical conservation projects run by the British Trust for Conservation Volunteers (BTCV), local authorities and community groups - helping to increase physical activity, mental wellbeing and fitness[6].
- In 2009 around 200 adults with mental health problems took part in visual art, photography and poetry projects inspired by The National Forest; and in 2010, 300 people participated in the first National Forest 10k run[6].

ACTION:

1) Maintain the current range of healthy living initiatives and seek to expand these activities through partner organisations.

2) Monitor activity annually.

DATA SOURCES:

1) Much More Than Trees 3: The socio-economic impact of The National Forest - DC Research [2010].

2) East Midlands Regional Factsheet: *www.defra.gov.uk/sustainable/government/progress/regional/documents/east_midlands_factsheet.pdf*

3) West Midlands Regional Factsheet: *www.defra.gov.uk/sustainable/government/progress/regional/documents/west_midlands_factsheet.pdf*

4) Life expectancy at birth and at age 65 by local areas in the United Kingdom, 2007–09. ONS Statistical Bulletin: *www.statistics.gov.uk/pdfdir/liex1010.pdf*

5) Life expectancy and healthy life expectancy at birth by local authority, England & Wales, 2001. Office for National Statistics [2010].

6) NFC annual monitoring [2010].

7) East Staffordshire Borough Council monitoring [2010].

14 Active Community Participation

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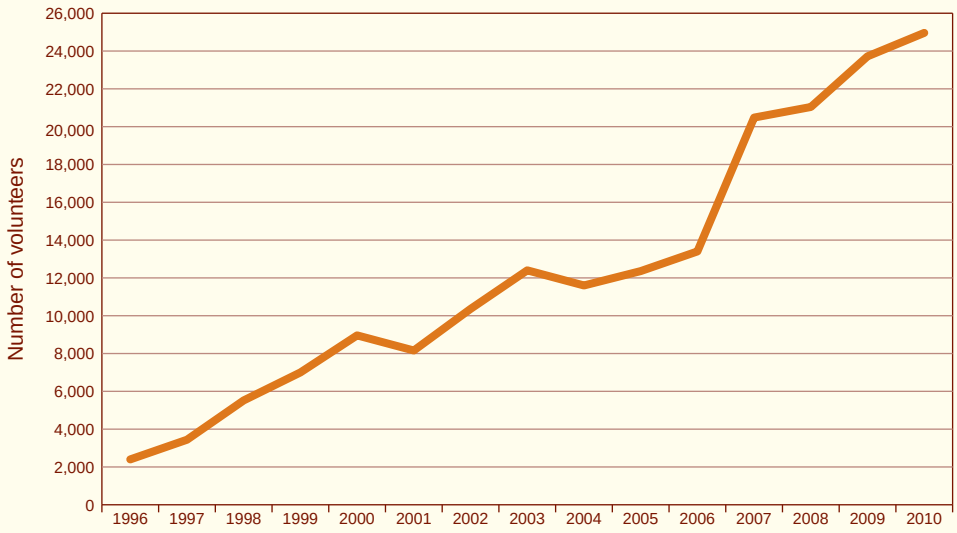
Community participation in creating and managing The National Forest is a key objective to ensure long-term ownership of the Forest by local communities and to raise awareness of it regionally and nationally. This indicator measures volunteering by adults: for schools activity refer to the Sustainable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

- Volunteer involvement in Forest-related activities has grown significantly from 2,400 people in 1996 to 24,960 in 2010. In total, 185,750 people have been involved in Forest-related activities between 1996 and 2010[1].
- Community engagement programmes include tree planting, conservation volunteering, recreation and health activities, environmental education, local heritage and community arts projects. Many of these activities increase social inclusion.

Volunteer involvement in The National Forest



- Community perceptions research[2] and citizens panel data[3], show significant levels of awareness of the impact of The National Forest's creation, with residents becoming more aware of the growing Forest in the landscape and making the connections with new public access, recreation and tourism facilities.

ACTION:

1) Maintain volunteer involvement in the Forest's creation and management.
2) Promote leadership within the voluntary and community sectors to expand volunteering opportunities.

DATA SOURCES:

1) NFC annual monitoring [2010].
2) Community Perceptions of The National Forest - Alison Millward Associates [2010].
3) East Staffordshire, South Derbyshire and Charnwood Citizens Panels data for the National Forest Company [2008].

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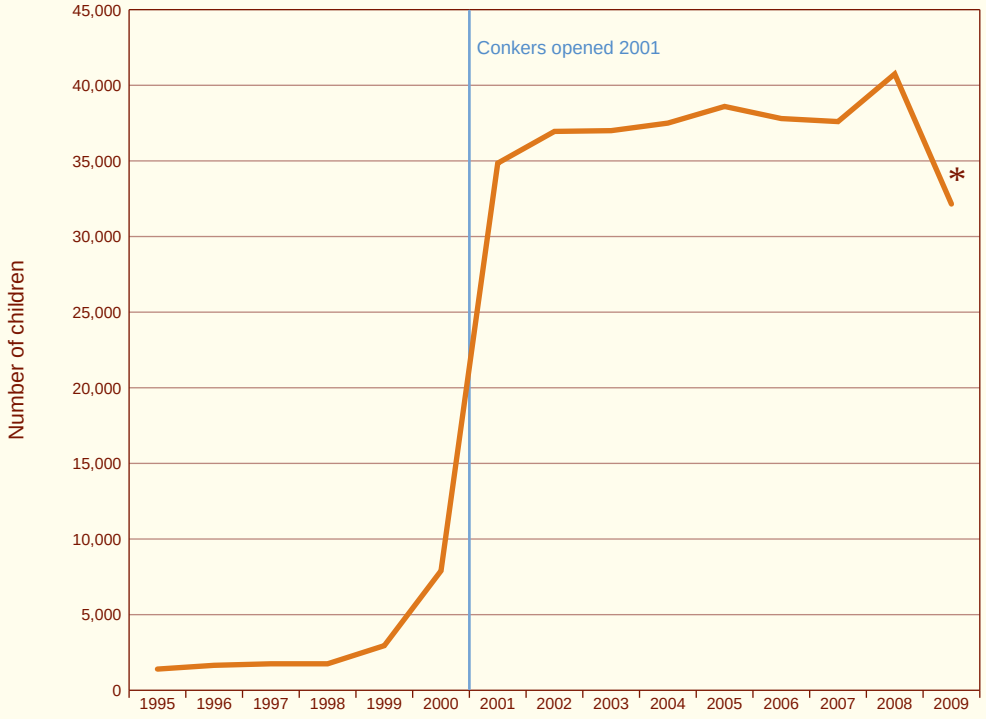
15 Sustainable Development Education

The National Forest Company promotes 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 2010 over 341,000 children experienced Forest-related environmental education visits to Conkers Discovery Centre, Rosliston Forestry Centre and other educational centres in the Forest area[1]. Since 2007, visits have increased by 110,500.
- Following the opening of Conkers and expansion of activities at Rosliston, these centres have involved over 30,000 children each year since 2001, peaking at 40,700 children in 2008/09[1].

Educational visits to Rosliston & Conkers



** The reduction in numbers in 2009 is considered to be a reflection of the effects of the economic downturn and the threat of swine flu. Visits to a wider range of education centres continue to increase.*

- From 2000 to 2010, 683 schools have been involved in growing trees from seed, the Tree for All scheme, community tree planting, sculpture, music and art projects. This represents an increase of 311 new schools since 2006/7[1].
- Additional environmental education activities are also run by partner organisations.
  - Between 2004 and 2010 134,300 children were involved in activities run by Severn Trent Water at their Cropston reservoir centre[2]; and over the same period, 11,100 children experienced activities at Snibston Discovery Park (Leicester County Council)[3].
  - Between 2007 and 2009, 52040 children were also involved in educational visits to Calke Abbey (National Trust)[4].

LIFELONG LEARNING FOR ADULTS

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

- From 2003 to 2010, 1,135 people have taken part in practical conservation training courses run by the British Trust for Conservation Volunteers (BTCV)[2]. Since January 2010, the BTCV also runs two NVQ Level 1 and 2 courses, hosting 16 participants[1].
- From 2002 to 2010, more than 320 people were trained as volunteer health walks leaders at Rosliston Forestry Centre. This represents an increase of over 120 people since 2006[1].
- Between 2000 and 2010, at least 58,500 adults also took part in environmental education sessions, courses and training activities at Conkers, Rosliston Forestry Centre and other centres[2]. Many of these were accompanying school visits.
- Between 2004 and 2010, 26,440 adults were involved in environmental education courses run by Severn Trent Water (at Cropston reservoir)[2]; and over the same period, 7,260 adults participated in events run by Snibston Discovery Park[3].

ACTION:

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

2) Monitor activity annually.

DATA SOURCES:

1) 1) NFC annual monitoring [2010

2) 2) Severn Trent Water annual monitoring.

3) 3) Snibston Discovery Park annual monitoring.

4) 4) National Trust annual monitoring.

16 Access and Mobility

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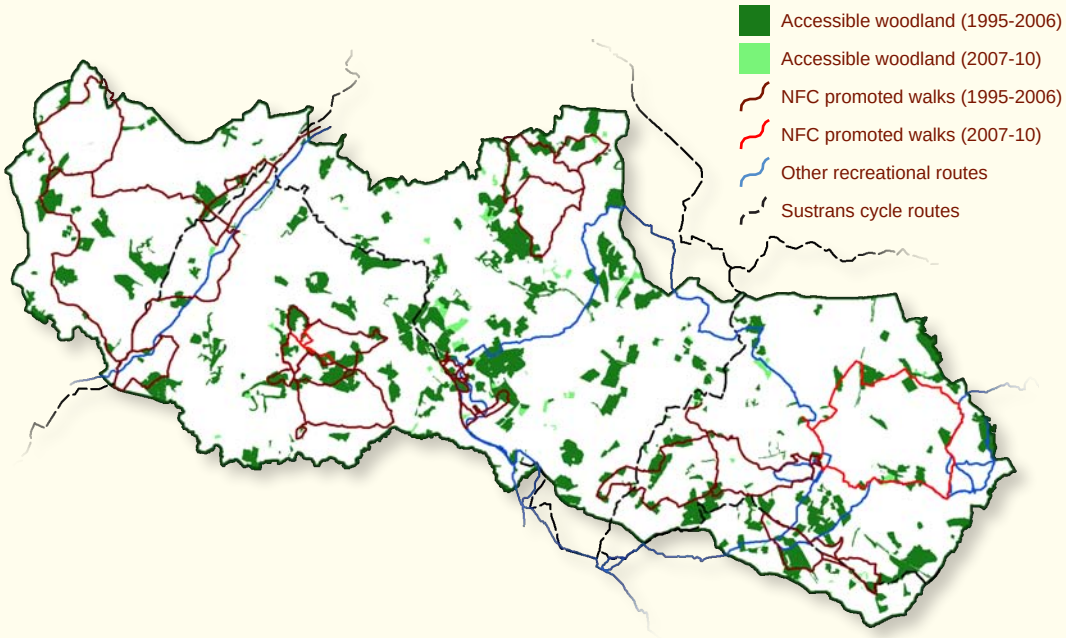
A high priority is to create a welcoming and accessible recreation resource for local residents (200,000 people) and visitors to the area (10 million people are within one hour's travel). This indicator measures accessibility to green space and mobility to recreation and visitor attractions. (See also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

- Of all new woodlands created between 1990 and 2010, 81% (4,738ha out of 6,230ha) have some form of public access and a further 6% (391ha) have access planned[1]. These percentages are in line with the 2007 baseline.
- From 1995 to 2010, 559km 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. Since 2007, 70km of new routes have been created including the Conkers Circuit and nine geological walks in Charnwood Forest[1].
- The overall net public value of The National Forest recreational resource is currently estimated at £186 million[2].

Accessible woodlands and recreational routes 2010



- Accessible woodlands are promoted on the National Forest Ordnance Survey map (Explorer 245) and on the National Forest Company's website. The website also promotes over 60 walks, more than 40 horse riding sites and 8 all abilities sites[1].
- 183 accessible woodlands (with a total area of 4,777ha) are within 500m of a bus route[3].

ACTION:

1) Continue to create new recreational access and maintain existing access to the Forest area.
2) Continue to promote public access opportunities to residents and visitors.
3) Monitor activity annually.

DATA SOURCES:

1) NFC annual monitoring [2010].
2) Initial assessment of the costs and benefits of The National Forest – Eftec [2010]
3) NFC research [2010], *based upon general measures for bus service accessibility promoted by Arriva buses, Leicestershire County Council and Staffordshire County Council.*

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17 Environmental Equality

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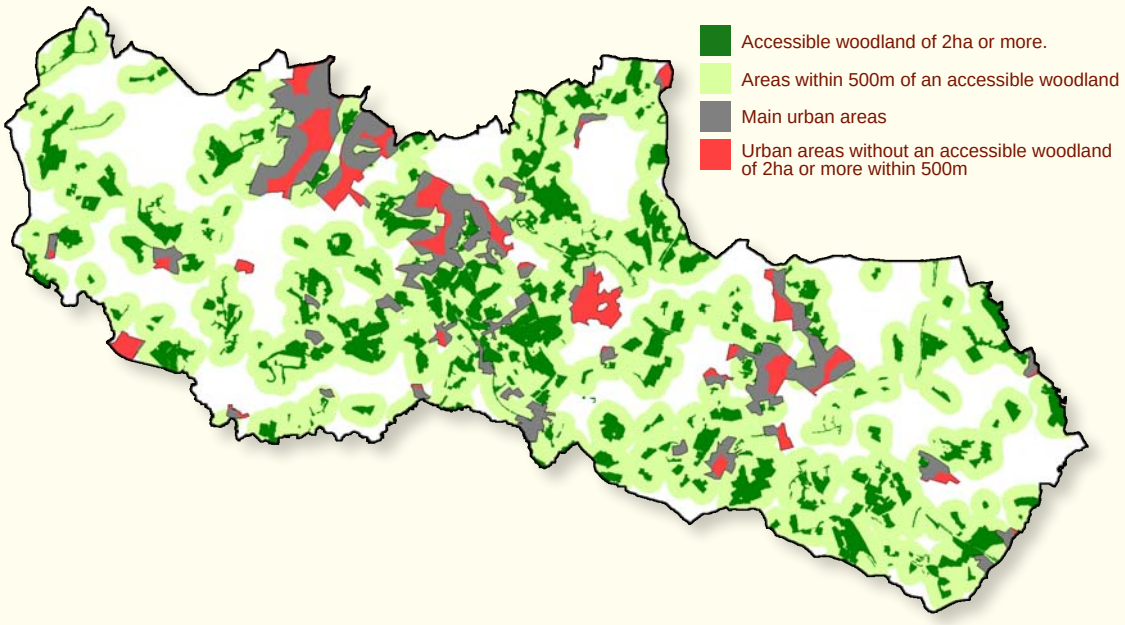
The National Forest is contributing directly to environmental equality through creating new accessible green space close to where people live. This provides health and well-being benefits through increased physical activity, adds to recreation and biodiversity opportunities and improves quality of life.

- Using the Woodland Trust's Woodland Access Standards[1], in 2010 approximately 66.3% of The National Forest's 200,000 residents live within 500m of an accessible woodland of 2ha or more in size[2]; an increase of 3 percentage points since 2007. This compares with 14.5% of the population for England (10.2% in 2004)[1].
- All of the Forest's population live within 4km of an accessible woodland of at least 20ha[2], compared with 63% for England (55.2% in 2004)[1].

Proximity to accessible woodland 2010[2]



- The NFC is currently collating information from local authorities on accessible urban greenspace for possible future comparison with Natural England's standards[3]. The data is currently not in a common format and is assessed differently by individual local authorities.

ACTION:

1) Create new accessible green space through the Forest's creation.

2) Monitor green space standards every 3-5 years.

DATA SOURCES:

1) The Woodland Trust [2010] Space for People: Targeting action for woodland access. From: *www.woodlandtrust.org.uk/publications*

2) NFC research applying the Woodland Trust's woodland access standards – Woodland Trust [2010].

3) Natural England Standards for Accessible Natural Greenspace [2010]. From: *www.naturalengland.org.uk*

18 Social Justice (Inclusion)

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So

The National Forest Company (NFC) promotes social inclusion to enable disadvantaged, minority, ethnic and disability groups to be involved in the Forest's creation and to enjoy the area's many recreation and visitor attractions.

- The National Forest's creation is contributing to social justice by involving[1]:
  - **Unemployed people** – in midweek conservation projects and NVQ skills training courses run by the British Trust for Conservation Volunteers.
  - **Inner city and urban communities** – through free trees schemes; environmental education visits; Tree for All schools work (run with the Woodland Trust, Forestry Commission and other partners); and the NFC's Grow a Tree from Seed and Plant a Tree schemes.
  - **Black and minority ethnic (BME) communities** – 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[2]. The NFC also works increasingly with such communities from surrounding cities, in particular Leicester, which has a 52% BME population.
  - **People with disabilities** – through arts projects; healthy walking; and creation of 8 all abilities Forest trails.
  - **Single parent families** – involvement in healthy walking.
  - **Schools in areas of rural deprivation** – through the Forest Songs project (run with Children's Music Workshop and, more recently, Sinfonia ViVA).
- In 2010 around 25,000 people participated in Forest activities and over 41,000 children and adults attended environmental education sessions. Much of this work aims to engage hard to reach groups. In 2007, it was estimated that 13% of those taking part were from socially excluded groups; this has risen to over 16% in 2010[3].

ACTION:

1) Continue to work with partners to involve socially excluded groups in the Forest's creation.
2) Work with partner organisations to more effectively measure and monitor social inclusion.

DATA SOURCES:

1) Much More Than Trees 3: The socio-economic impact of The National Forest - DC Research for the NFC [2010].
2) Much More Than Trees 2 – Staffordshire University [2004].
3) NFC monitoring [2010].

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19 Satisfaction in Local Area

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 also provided through contextual regional and local authority data.

CONTEXTUAL DATA

- In 2008/9 satisfaction with the characteristics of the local area for people living in the East[1] and West Midlands[2] (88% and 86% respectively) was in line with the England average (87%).
- Surveys undertaken in South Derbyshire in 2008/9 found that 84% of respondents were either very or fairly satisfied with their local area as a place to live, compared to 74% in 2006[3]. When asked about the open spaces they most frequently used, 82.5% were either very or fairly satisfied with tree planted and grassed areas and 64% with schemes to attract wildlife[4]. 63% of respondents were also very or fairly satisfied with urban parks and open spaces[3], which is slightly below the average for the East Midlands (66%) and England (69%). However, the number of respondents using parks and open spaces has increased from 81% to 89% since 2006[3].
- In East Staffordshire, 68% of respondents to a 2010 survey said that they were fairly or very satisfied with the District's parks and open spaces[5]. More than a third identified access to nature (34%) and parks and open spaces (35%) as being the most important factors in what makes a good place to live[5].
- In North West Leicestershire in 2010, 82.2% of survey respondents were either very or fairly satisfied with their local area. Overall, this represents an increase of 10 percentage points since 2006/7[6,7].

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:

- **Community Perceptions research:** In 2008, 200 local residents were surveyed to seek their views on how the Forest has changed the area in which they live and its impact upon their daily lives. 84% rated the standard of Forest sites as good or very good. There is recognition that the Forest has greatly benefitted the local area, making it a more attractive place to live; creating more places to visit and things to do; creating better places for walking; increasing local wildlife; and improving facilities for children[8].
- **Citizen's Panel surveys:** In 2008, 1291 people were asked National Forest questions through local authority Citizens Panels[9] (which cover wider areas than just the Forest). This showed high satisfaction levels with the Forest:

Do you think that The National Forest has improved the local environment?

Panel	No of responses	Yes*	No*
South Derbyshire	459	85.2%	10.2%
East Staffordshire	430	82.8%	8.3%
Charnwood	106	91.5%	7.5%
Hinckley & Bosworth**	296	68.2%	31.8%

** Percentages do not add up to 100% due to non-replies.*

*** Only a small portion of Hinckley & Bosworth falls within the Forest area.*

In what ways has The National Forest improved the local environment?

	South Derbyshire	East Staffordshire	Charnwood	Hinckley & Bosworth*
Expanding woodland landscape	81.7%	68.3%	78.3%	21.0%
New places for walking	74.8%	63.4%	74.5%	20.6%
New recreation/tourist attractions	55.3%	48.1%	53.8%	12.3%
More local wildlife	68.4%	53.2%	65.1%	16.2%
New green space near housing	44.3%	42.7%	60.4%	14.9%

Note: Percentages do not add up to 100% due to non-replies or more than one option being selected.
** Only a small proportion of Hinkley & Bosworth falls within the Forest area.*

- **Visitor Surveys:** The National Forest Visitor Survey (2007) measured the impact of gateway installations at five tourism attractions on visitors' perceptions and awareness of The National Forest[10,11]. Overall enjoyment and satisfaction levels at the attractions were particularly high at 91%.
- In 2008, visitor surveys were undertaken at Willesley Wood[12], a 42ha local community woodland owned by the Woodland Trust. 89% of respondents were local residents who had high satisfaction levels, supported by the number of regular repeat visits, the high likelihood to recommend the woodland to friends/family and the positive comments regarding the site.
- **Public comments:** Satisfaction with the Forest is also demonstrated by an increasing number of unsolicited comments – following community tree planting events, Plant a Tree and Business Benefits tree planting events and talks to local groups[13].
- **Community involvement:** Sample questionnaires from conservation volunteers, healthy walking participants and schools following environmental education visits also show positive responses to the Forest's creation[13].

ACTION:

1) Continue to monitor visitors and local community satisfaction with Forest creation.
2) Work with local authorities and other organisations to develop joint public satisfaction surveys.

DATA SOURCES:

1) East Midlands Regional Factsheet: *www.defra.gov.uk/sustainable/government/progress/regional/documents/east_midlands_factsheet.pdf*
2) West Midlands Regional Factsheet: *www.defra.gov.uk/sustainable/government/progress/regional/documents/west_midlands_factsheet.pdf*
3) South Derbyshire District Council Place Survey 2008/9.
4) South Derbyshire District Council Citizen's Panel [2008].
5) East Staffordshire Borough Council Citizen's panel survey [2010], questions taken from the Place Survey 2008/9.
6) North West Leicestershire District Council Place Tracking Survey [2010].
7) North West Leicestershire District Council General Survey [2006/7].
8) Community Perceptions of The National Forest [2008]. Alison Millward Associates.
9) National Forest Company commissioned Citizens Panel survey results for East Staffordshire, South Derbyshire, North West Leicestershire and Hinckley & Bosworth [2008].
10) National Forest Visitor Survey Report, Pre-Installation Stage, Phase One [2007]. QA Research.
11) National Forest Visitor Survey Report, Post-Installation Stage, Phase Two [2007]. QA Research.
12) Visitor Survey at Willesley Wood [2009]. QA Research.
13) National Forest Company annual monitoring [2010]

20 Wellbeing

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So

Wellbeing is a broad concept with a diversity of definitions. The National Indicator describes it as a "positive physical, social and mental state" requiring that basic needs are met; individuals have a sense of purpose, feel able to achieve important personal goals and participate in society. Nationally, wellbeing is integral to 12 sustainable development indicators[1], as numerous factors influence an individual's sense of wellbeing. Aspects of the national wellbeing indicator that are especially relevant to The National Forest relate to strong and inclusive communities, good health and a healthy and attractive environment.

- 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.
- Evidence of a growing sense of wellbeing and an improving quality of life in the Forest area are demonstrated through the National Forest's Employment (9), Deprivation (12), Life Expectancy and Health (13), Active Community Participation (14), Access and Mobility (16), Environmental Equality (17), Social Justice (18) and Satisfaction in Local Area (19) indicators.
- It is not possible to directly compare the National Forest's experience with the national picture as the methodologies and datasets used are different. However, the overall evidence from the Forest area does compare favourably with the national picture provided by the 2010 Omnibus Survey on Public attitudes and behaviours' towards the environment in England[2]
- The Coalition Government has stated its intention to develop a more meaningful national indicator of wellbeing. The National Forest Company will seek to align its future measurement of wellbeing with the new standard as it emerges.

ACTION:

1) Continue to support the wellbeing of residents and visitors to The National Forest through the delivery of actions under relevant Sustainable Development indicators.

DATA SOURCES:

1) Wellbeing National Indicator: *www.defra.gov.uk/sustainable/government/progress/national/68.htm*

2) 2010 Omnibus Survey on Public attitudes and behaviours towards the environment. An overview of wellbeing in England, from Defra statisticians: *sd.defra.gov.uk/2010/07/wellbeing-statistics/*

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