

A Strategy for England's Trees, Woods and Forests



defra

Department for Environment
Food and Rural Affairs

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Our Woodland Resource

Woodland covers almost 9% of England's land area, just over 1 million hectares with around 1.3 billion trees – about two-thirds of these are broadleaves and the rest are conifers.

England was once largely tree covered, but as long as 1,000 years ago man's activities had reduced the forest to only about 15% of the land area. Today one-third of England's woodland area is ancient woodland or plantations on ancient woodland sites, while veteran trees provide another important link with our woodland past.

'Woodlands enhance people's lives, health and well-being in all sorts of ways – with birdsong, seasonal colour, giving dimension to the view in low-lying landscapes and providing opportunities for exercise and recreation.'

Our woodland diversity is the legacy of traditional woodland management, not just for timber production but also coppicing, charcoal making, grazing and management for game. Today we harvest only around a quarter of annual growth of timber from our native woodland and only 60% from our conifer forests each year. English grown timber and woodland management in England is associated with businesses estimated to contribute £2.1 billion to GDP and employing 64,000 people.¹ Woodland based businesses such as recreation and tourism are equivalent to around 16% of this activity.

Roughly three-quarters of our woodlands and forests (by area) are privately owned and mostly broadleaved; a similar proportion of the total number are quite small, less than 2 hectares, but these account for only about 6% of the total woodland area.² About a quarter of our woodlands (by area) are on farms. The Forestry Commission manages many of our publicly owned woodlands – mainly large, mature conifer plantations. Local authorities and non-governmental organisations also own significant areas of woodland, much of it of particular

conservation, landscape or recreational value, and local authorities also manage and own the majority of green spaces within built-up areas and the trees in parks and streets.

Trees outside woodlands are important too – there are about 89 million of them in fields, hedgerows, orchards, gardens, urban parks and streets, rural parklands and wood pastures. In 2000 England had around 558,150 kilometres³ of woody boundaries, including hedgerows, shelter belts and lines of trees, providing habitats for wildlife, character to the landscape and cultural links to our past.

Veteran trees are particularly common in England compared to most other European countries and add greatly to the historic and cultural value of old parks and Royal Forests.

Woodlands enhance people's lives, health and well-being in all sorts of ways – with birdsong, seasonal colour, giving dimension to the view in low-lying landscapes and providing opportunities for exercise and recreation. They offer people an escape from urban streets and a link with historical times.



David Hoffman / Alamy

Although half the population of England lives within 4km of a woodland, more than 60% of people say they want more trees where they live. This may partly reflect the diversity in the extent of woodland cover in different parts of England, from 22% in Surrey to 3% in Lincolnshire.

¹ Source: England Forest Industries Partnership (2006) *Woodland and Forest Sector in England: A Mapping Study* carried out by Jakko Poyry.

² Source: Forestry Commission (2001) *National Inventory of Woodland and Trees England* (reference date 1998).

³ Source: Defra and NERC (2000) *Countryside Survey*.

Minister's Foreword

Trees and woodlands, in the right place, make a big difference to the quality of people's lives, improving the places in which they live and work and giving a sense of identity to areas where new housing is being developed.



Communities and individuals must be able to get involved in planning and caring for their local woodlands and trees, as well as enjoying access to them. In the nine years since the Government published *A New Focus for England's Woodlands* we have gone a long way towards realising that vision of woodlands which improve the environment and people's lives. New woodlands have been planted, others brought into management, and major government projects for green infrastructure have regenerated landscapes around our towns and cities, for people to enjoy. One of England's largest conservation projects, the restoration of our native woodlands, is well underway in both Forestry Commission and private woods. We have a firm foundation on which to build a strategy able to meet the new opportunities and challenges facing our woodlands.

Climate change is the biggest of those challenges. Our trees and their associated soils make a valuable contribution to reducing carbon emissions. The relatively long lifespan of trees means that we must plan and act now if our woodlands are to be adaptable to future growing conditions. Native woodland plants and animals need a network of wooded habitats along which they can move as the climate of their present habitats change, and we can expect 'new natives' moving in from the continent. Woodlands will have a new role as rainfall patterns change, protecting farmland soils from erosion, rivers from pollution and helping to reduce the impact of floodwater on our towns and cities. In urban areas shade from trees can also help to cool both people and buildings.

It will be a significant step for those in forestry to start thinking on this larger scale, beyond the woodland edge, about the wider effects of tree planting and management and the potential benefits for resource protection and other land uses in the surrounding area. The sector has not had an easy time in recent years, with low timber prices making it difficult for those who want to manage their woods to do so profitably. Earlier this year I launched the Forestry Commission's *A Woodfuel Strategy for England* which should help stimulate an important new market. This is only one of a number of opportunities for woodlands to meet the growing need for sustainable products and services which will help the country reduce its carbon footprint.

This *Strategy for England's Trees, Woods and Forests* shows how we can meet the opportunities and challenges of making our trees and woodlands productive, healthy and attractive in the years to come. Making it happen will require strong partnerships, some of them new. It will mean private woodland owners, businesses, social enterprises, community groups, central and local Government and the public, working together for the benefit of us all.



Barry Gardiner

Parliamentary Under-Secretary, Department for Environment, Food and Rural Affairs

Framework of

Aims: what is to be done

- provide, in England, a resource of trees, woods and forests in places where they can contribute most in terms of environmental, economic and social benefits now and for future generations
- ensure that existing and newly-planted trees, woods and forests are resilient to the impacts of climate change and also contribute to the way in which biodiversity and natural resources adjust to a changing climate
- protect and enhance the environmental resources of water, soil, air, biodiversity and landscapes (both woodland and non-woodland), and the cultural and amenity values of trees and woodland
- increase the contribution that trees, woods and forests make to the quality of life for those living in, working in or visiting England
- improve the competitiveness of woodland businesses and promote the development of new or improved markets for sustainable woodland products and ecosystem services where this will deliver identifiable public benefits, nationally or locally, including the reduction of carbon emissions



Isobel Cameron / Forestry Commission

the Strategy

Principles:

how it will be done

- long-term sustainable management of trees, woods and forests
- the right tree in the right place
- effective use of public investment
- synergy with other Government policies



The Tree Council

Themes:

where the action will be

Communities and Places

- cohesive and engaged communities
- green infrastructure
- sense of place

Land and Natural Environment

- biodiversity
- natural resources
- resilience to the changing climate
- cultural heritage

Working Woodlands

- competitiveness
- skills and innovation
- providing public goods
- woodfuel and timber products reducing CO₂ emissions



Paul Glendell / Natural England





1. Introduction

Why do we need a new strategy now?

1. The 1998 Strategy *A New Focus for England's Woodlands* successfully guided English forestry through a period of national change, with the Regional Forestry Frameworks providing a focus for action locally. We can now build on the significant achievements made since 1998. These include the widespread adoption of sustainable forest management, new recreation and access opportunities, better management of ancient and native woodlands, popular initiatives in The National Forest and Community Forests, and land regeneration providing green infrastructure for new urban development.
2. In addition, since the last forestry strategy was published, Government's aims for trees and woodlands have broadened, priorities have changed and there are new challenges and opportunities to be faced. England's trees, woods and forests have a major role to play in helping us to cope with life in a changing climate.
3. Our new Strategy identifies national priorities and builds on Government policies – about the quality of people's lives, the quality of the places in which people live and work, and the sustainable use of our resources.
4. We have set clear principles and a strategic direction. We recognise that our own Government policies and delivery systems, and also those of the private, voluntary and community sectors, need to be adaptable to achieve these aims because there will be changes during the lifetime of trees now living. It will be very important to monitor implementation of the Strategy and to keep it under review.

5. The 10-15 year timescale of this Strategy is set within a longer term vision of what we want England's trees, woods and forests to look like and to deliver in the second half of this century.

Who will use the Strategy?

6. The Strategy will contribute to the delivery of the broad Government agenda on environment, energy, land use planning, housing, communities and health. It has been developed and influenced through consultation with policy makers and stakeholders, and it will be accompanied by a shorter term delivery plan. For the Regional Forestry Frameworks it provides national policy direction, to be incorporated in an appropriate way alongside their regional priorities.
7. Throughout the Strategy we have set out our new policies and identified opportunities for action. There is a stake in delivery right across Government and we will work in partnership with many others – woodland owners, processors, contractors, local authorities, community and non-governmental organisations – plus other sectors that use woodland resources in their widest sense, such as tourism and leisure, construction, health and education. We hope that both private, voluntary and community sector organisations will also form new partnerships to take the Strategy forward – a good example is the England Forest Industries Partnership, set up with the aim of increasing the competitiveness of the timber industry in England.

8. A **delivery plan** to implement this Strategy will be produced by the Forestry Commission and Natural England in partnership with other key organisations. The delivery plan will co-ordinate the priorities in this Strategy with the Government's spending priorities and with the priorities of the Regional Forestry Frameworks.

What are the Government's aims and priorities for this Strategy?

9. The UK is internationally committed to sustainable forest management⁴ and, although our forests cover only a small area in global terms, we are seen as an important player in international forestry discussions. The UK forestry sector has a good story to tell, having taken the lead in implementing forest certification and working with industry to develop standards. We are equally proud of our long record of helping to shape international forestry policy and of co-operating with developing countries on forestry issues.

10. We recognise the important role of trees, woods and forests in implementing other key international commitments including the Convention on Biological Diversity, the UN Framework Convention on Climate Change and its Kyoto Protocol, and the EU Habitats and Species Directives and Water Framework Directive.

11. We have identified **five aims** for Government intervention in trees, woods and forests at an England level, to deliver identifiable public benefits, nationally or locally, to:

- provide, in England, a resource of trees, woods and forests in places where they can contribute most in terms of environmental, economic and social benefits now and for future generations
- ensure that existing and newly-planted trees, woods and forests are resilient to the impacts of climate change and also contribute to the way in which biodiversity and natural resources adjust to a changing climate
- protect and enhance the environmental resources of water, soil, air, biodiversity and landscapes (both woodland and non-woodland), and the cultural and amenity values of trees and woodland
- increase the contribution that trees, woods and forests make to the quality of life for those living in, working in or visiting England
- improve the competitiveness of woodland businesses and promote the development of new or improved markets for sustainable woodland products and ecosystem services⁵ where this will deliver identifiable public benefits, nationally or locally, including the reduction of carbon emissions.

12. We have based the implementation of these aims on **four principles**:

- long-term sustainable management of trees, woods and forests
- the right tree in the right place
- effective use of public investment
- synergy with other Government policies.

13. We present the Government's priorities and identify opportunities for action under **three themes**:

- communities and places
- land and natural environment
- working woodlands.

Of course the distinction on the ground between these three themes will be less clear and they will often overlap, because sustainable management of trees, woods and forests can provide multiple benefits on the same site – for example community use, woodland habitats, resource protection, jobs and raw materials.

14. Finally we explain how we intend to work alongside our partners to deliver the new Strategy.



Woodlandpictures / David Lund

4 The Government adopted the Statement of Forest Principles at the 1992 Rio Earth Summit and agreed to the Resolutions of the Ministerial Conferences on the Protection of Forests in Europe, including that on implementing sustainable forest management: *'The stewardship and use of forests and forest lands in a way, and at a rate, that maintains their biodiversity, productivity, regeneration capacity, vitality and their potential to fulfil, now and in the future, relevant ecological, economic and social functions, at local, national, and global levels, and that does not cause damage to other ecosystems'*. RESOLUTION H1 General Guidelines for the Sustainable Management of Forests in Europe, Helsinki (Finland), Second Ministerial Conference on the Protection of Forests in Europe (1993).

5 The goods and benefits provided by the natural environment to people. These can be defined in different ways, but include things such as natural processes of climate regulation and crop pollination by insects, and resources for basic survival such as productive soils and fresh water. These services are often considered as free goods, which has led to unsustainable exploitation in over 60% of the world's ecosystems, according to the Millennium Ecosystem Assessment: *Ecosystems and Human Well-Being* (2005).

2. Our Vision of England's Trees, Woods and Forests

It is 2050, and England's trees, woods and forests are helping us to cope with the continuing challenge of climate change and are also valued because many more people now enjoy using them. Trees are not just an important part of England's history, but an essential feature of a modern, sustainable society, which has significantly reduced carbon emissions.

15. Many more people are engaged in the sustainable management of trees, woods and forests – from individual trees in city streets to veteran oaks in rural parkland, from woodland within the green infrastructure of urban areas to ancient woodlands in deep countryside – the benefits are as diverse as the trees and woodlands themselves. Trees offer shade in our towns and cities, woodlands and forests provide a sustainable source of energy and construction materials, and are also the base for specialist recreation activities meeting the demand for holidays closer to home – some of these markets hardly existed in 2007.

16. The success of approaches like The National Forest and Community Forests has inspired others to use trees and woods to improve the places where people live. Woodlands within easy reach are used for educational, social and community purposes, including play opportunities and healthy activities for children and young people. The networks of urban walking and cycling routes are made more attractive by trees, which offer shelter, shade and separation from traffic.

17. The effects of climate change are now clearly apparent. A coherent network of trees, woodland and other semi-natural habitats is helping wildlife to adjust, as well as providing ecosystem services such as the management of water and soils.

18. The vast majority of ancient or native woods are improving in terms of their quality for wildlife and the most valuable woodland habitats are in a resilient condition, buffered where appropriate by strategically placed planting.

19. Woodland creation and management is guided by considering the potential benefits and impacts at the scale of whole landscapes. Both new woodlands and the neglected woodlands that have been brought back into management have species mixtures better able to cope with the changing climate.

20. These benefits have been achieved by a flexible and creative woodland sector that takes full advantage of new opportunities. Government has led by example by clearly defining the outcomes required for people, places and products, by procuring sustainable timber and wood-based products, and by managing its own estate sustainably. Local and regional supply chains are strong, with effective co-operation between producers, processors and manufacturers, and most private woodlands are now capable of producing for a range of markets.

3. Principles Underlying the Strategy

Long-term sustainable management of trees, woods and forests

21. This means:

- taking action now while ensuring that implementation is adaptable to new circumstances, such as the changing climate;
- understanding and dealing with diversity, both in the physical characteristics of woodlands and the motivations of owners and users, and responding to this with new partnerships across the public, private and voluntary sectors.

The right tree in the right place

22. This means:

- whether managing existing trees, woods and forests or planting new ones, targeting specific locations where there is an identified need which is not met by existing resources;
- choosing trees, sites and management that will give the best chance of delivering a range of benefits both now and as the climate changes;
- factoring trees and woodlands into development proposals at an early stage.

Effective use of public investment

23. This means:

- focussing Government investment in trees, woods and forests where the market does not provide the range and quality of public benefits identified by this Strategy, Regional Forestry Frameworks and Green Infrastructure Strategies;
- ensuring that the benefits provided by public investment in trees, woods and forests are shared by all sections of the community and offer comparative 'value for money';
- working to the strengths of the private sector, non-governmental organisations and public landowners, and choosing the most appropriate delivery mechanisms and partners.

Synergy with other Government policies

24. This means:

- promoting the potential of this Strategy to contribute to Government policies, and its synergy with regional and local policies, particularly Regional Forestry Frameworks and Regional Development Agencies' delivery of Regional Economic Strategies;
- making sure that forestry policy is founded on a robust and comprehensive evidence base, which also guides delivery.



4. Communities and Places

Objectives

25. To improve the local environment, the quality of people's lives and their appreciation of trees and woodlands by:

- involving local people in planning, managing and using local woodlands and the trees in streets and green spaces, to help achieve more cohesive communities and to show how individuals can contribute to environmental sustainability;
- making it easier for people to use and enjoy woodlands particularly in ways that benefit their physical and mental health, learning and personal development;
- creating liveable neighbourhoods, towns and cities by using trees and woodlands as part of the green infrastructure which frames and connects urban and rural areas, improves the quality of a place, and regenerates brownfield and derelict land;
- using trees and woodlands to help minimise the impacts of climate change in built-up areas.

Cohesive communities and everyday life

26. Trees, woodlands and associated green space near where people live and work can provide a wide range of benefits for all sections of the community, and will be appreciated not just for their physical characteristics but for the feelings they inspire, lifting spirits and improving neighbourhoods. Adult learning and rehabilitation programmes, conservation work and other volunteering can make trees and woodlands accessible to groups who might otherwise not encounter them. In 2005 the Active Woods campaign ran 1,000 events and activities ranging from organised runs and walks to more relaxing activities such as Tai Chi and yoga.

Bringing people of different generations, cultures, backgrounds and religions together like this for a common purpose can improve their relationships and understanding of one another. When communities become involved in decision making and management they are more likely to feel 'ownership' of their trees and woodlands and to use them responsibly.

27. Community use can take many different forms, from informal arrangements for occasional access by organised groups to formal provision for large numbers of people, or commercial recreation provision (for example: orienteering, paint-balling, mountain biking, motor sports, pony trekking, survival courses). It has been estimated that some 33 million people in England make over 2.5 billion visits each year to urban green spaces, and that 46% of people in urban areas use green spaces more than once a week. Trees, woodlands and associated green space offer a variety of outdoor opportunities for young people and children to have fun and to learn, and there are now more than 100 Forest Schools in England.⁶ Opportunities for adventurous play are important for young people's health and, in an increasingly risk averse society, are a useful way of teaching them about risk.

⁶ Forest Schools provide an alternative teaching environment that is complementary to the traditional indoor classroom, or school grounds, and provide an opportunity for active learning in a woodland environment.

Policies

28. To achieve these objectives for cohesive communities and everyday life our policies are to:

- help people to engage with the ownership, design, management, maintenance and use of their local trees and woodlands as part of their vision for their own neighbourhood (especially those groups and individuals who are difficult to reach or not currently involved);⁷
- promote and support the role of trees and woodlands as a catalyst for community capacity building, bringing together different members of the community through formal and informal activities;

⁷ *The Quirk Review*, commissioned by the Secretary of State for Communities and Local Government, explored ways of empowering communities through the management or ownership of public buildings and land. Its key recommendations broadly support this Strategy's policy of empowering people through the ownership, design, management, maintenance and use of their local trees and woodlands as part of their vision for their own neighbourhood.

⁸ For example, through the encouragement of the *Learning Outside the Classroom* manifesto and the fieldwork opportunities within the National Curriculum, and through initiatives such as Growing Schools, Forest Schools and the Forest Education Initiative.

⁹ See paragraph 8.

¹⁰ A Local Strategic Partnership (LSP) is a single body that brings together at a local level the different parts of the public sector as well as the business, community and voluntary sectors so that different initiatives and services support each other and work together. This might involve, for example, health service providers, Regional Parks Forums, local access forums and other local and regional delivery bodies.

¹¹ A Local Area Agreement (LAA) is a three-year agreement that sets out the priorities for a local area agreed between central Government and a local area, represented by the local authority and Local Strategic Partnership. The Agreement is made up of outcomes, indicators and targets aimed at delivering a better quality of life for people through improving performance on a range of national and local priorities. Although still early days, LAAs are already bringing health inequalities and public health into the forefront of local community planning.

- support healthy living policies by encouraging people to use woodlands (in public, private, and voluntary and community sector ownership) for physical activities ranging from recreation and play to organised sport and conservation volunteering; the priority will be to provide high quality access near where people live, integrated with other statutory and permissive access where appropriate;
- provide, for everyone who could benefit, information about the accessibility and public use of local woodlands;
- support the use of trees and woodland as a resource for lifelong learning, including implementing policies on teaching and learning outside the classroom;⁸
- pursue opportunities to increase public recognition, enjoyment and understanding of the historic, archaeological and cultural value of trees and forests, particularly of our ancient woodlands and veteran trees.

Opportunities for action

29. To implement these policies we need to develop existing working partnerships and establish new ones. The delivery plan⁹ will co-ordinate this strategy with the Regional Forestry Frameworks and with Government spending priorities, and we expect a wide range of organisations and partnerships from the public, private, and voluntary and community sectors to be involved in the delivery process. These are just a few examples of the many opportunities there will be for action:

- encouraging Local Strategic Partnerships¹⁰ to consider using the tree and woodland resource to deliver Local Area Agreements¹¹ and their other objectives – for example conservation volunteering and healthy walking initiatives to deliver well-being objectives; and play, recreation and sports initiatives to deliver policies on reducing childhood obesity;

Community volunteers for woodland management

Former coalfield communities in Nottinghamshire are taking responsibility for their local greenspace, having their say in how the sites are used and learning new skills as they get involved in practical, scientific and educational work. The Sherwood Forest Community Rangers Project is so successful it has been used as a model by partnerships of local authorities and landowners in South Yorkshire and elsewhere.

When seven coalfields closed in the 1980s, over 2,000 acres of looming spoil heaps were transformed into community woodlands, with 30 miles of footpaths and tracks, car parking, benches and spectacular views across the surrounding countryside.

The Sherwood Forest Community Rangers Project seeks to actively involve people in managing this new green space.

The Project team began by consulting the 12 nearby communities, to find out what they wanted. The result was a wide-ranging programme of volunteer training, wardening, conservation tasks, arts projects, site management, guided walks, and innovative projects such as 'Shadow Rangers'. Friends groups allow local people to influence site management decisions. Two Area Landowner Groups help adjacent landowners work with communities in tackling site management problems.

More than 1,000 volunteer days were recorded in the past year – including Biodiversity Action Plan targeted conservation projects. Nineteen volunteers gained placements on the Shadow Rangers mentoring scheme and seven of them now work in the environment sector.

Near right: Staff of E-ON UK enjoying a corporate team-building day thinning pine trees.

Roscoe Martin, an enthusiastic volunteer for the Community Rangers.

An equipment loan scheme helps volunteers to self-lead outdoor activities. Over 15 schools within walking distance of sites are involved in ongoing outdoor projects, and Skillforce run regular work sessions for young people struggling with the curriculum. Last year the Project also supported more than 30 young people through the Nottinghamshire Youth Offending Service 'Work in the Community' scheme.

Feedback from local communities suggests the Project has helped them to gain confidence in taking responsibility for their local green spaces.



- local planning authorities to consider woodland when undertaking assessments of the existing and future needs of local communities for open spaces, and when auditing existing provision so that they can plan to meet deficiencies;¹² it is estimated that only 10% of the population have access to a woodland of more than 2 hectares within 500 metres of their home;¹³
- continuing activity and innovation within the 12 Community Forests and The National Forest;
- integrating woodland access with Environmental Stewardship delivery of access to farmland and supporting farm educational opportunities provided through Environmental Stewardship;
- providing advice, training and other support for communities planning to create, manage, maintain and use their own trees and woodlands, building on the experience and strengths of existing volunteer networks (e.g. there are 250 groups in the Woodland Trust's Community Woodland Network and 10,000 volunteers acting as Tree Wardens);
- making use of the £30 million Community Assets Fund which will offer support in the form of capital grants to partnerships between community-led voluntary organisations and local authorities.

Green infrastructure and a sense of place

30. Green infrastructure is a network of green spaces in and around towns, and between urban and rural areas. It may include open spaces, parks, water bodies and nature reserves as well as street trees and woodlands, and will be in the hands of a number of different public and private owners. Trees and woodlands – from a country park to an urban street – are a very important element of green infrastructure for several reasons.

Their height provides a visual and physical feature which can be used to either separate or link areas designated for different uses, and the trees bring seasonal change and diversity to the built-up landscape. Trees and woodland provide an attractive setting for new and existing housing and business development, helping to create a sense of place and to implement the Cleaner, Safer, Greener Communities Programme,¹⁴ regenerate brownfield land and provide a screen for transport corridors. There are, of course, particular challenges associated with trees in the built environment, such as vandalism, which make it important to consider trees in the early stages of planning and designing new developments, and to take account of species selection, planting techniques and ongoing management needs. Despite this, a large majority of trees in urban areas are in good condition and are considered to make an important contribution to the local environment.¹⁵

¹² The Government's national policies on open space provision are set out in *Planning Policy Guidance note 17: Open Space, Sport and Recreation*.

¹³ The Woodland Trust (2004) *Space for People: Targeting Action for Woodland Access*.

¹⁴ The CLG *Sustainable Communities Plan* and the Home Office *Together – Tackling Anti-social Behaviour Action Plan* contribute to six key priorities of the *Cleaner, Safer, Greener Communities Programme*: creating attractive and welcoming parks, play areas and public spaces; improving the physical fabric and infrastructure of places; making places cleaner and maintaining them better; making places safer and tackling anti-social behaviour; engaging and empowering local people and communities; catering for children and young people and tackling inequalities.

¹⁵ Communities and Local Government (2007) *Trees in Towns II* reports on a recent national survey of England's urban trees and their management. It provides a detailed assessment of: urban trees, including their number, species, condition, age and level of management; the local authority resources and policies to manage the tree resource; and case studies promoting good practice.

Case Study 2

Tackling health and social deprivation in a rural area

A local partnership with a modest budget is tackling the challenges faced by socially disadvantaged rural communities and getting results. Based in an area of rural Herefordshire and South Shropshire where 19% of the rural population live in poverty, and earnings are at least 12% below the West Midlands average, the Wye Woods Project uses the resources of local woodlands to address issues of ill health, social exclusion, unemployment, and barriers to economic growth.

The Project's Health Development Worker organised events and activities including 'walking for health' (with trained volunteers as regular walk leaders), coppicing and coppice craft workshops, buggy walking and games, building benches, exercise classes and conservation days. These were publicised in the community and, to target more inactive people, a referral system in which community workers sign-posted individuals towards the Project. Success stories include a man in his thirties, unemployed for eight years, who found an enthusiasm for outdoor work, gained two qualifications and secured a part-time job; and a 75-year-old widow, living in a rural village, who reported feeling more active and less lonely after socialising with the group.

Project funding of £49,000 comes from the Forestry Commission, two Primary Care Trusts (PCT) and the Probation Service and, in the words of Dr Frances Howie, Associate Director of Health Improvement, Herefordshire PCT, "We have demonstrated how different agencies have an important contribution to make in health improvement."

Below left: A guided walking group

Below: All ability trail in Mortimer Forest used by the project for guided walks



Kate Lawes



Forestry Commission



31. Trees and woodlands already provide ecosystem services such as shade for buildings and people, assistance with urban cooling and water management, filtering air pollution, 'corridors' for wildlife and a source of renewable energy materials. They have an important role in helping built-up areas to cope with the effects of climate change, and trees and woodlands can also contribute to sustainable urban travel if they are used to improve the quality of walking and cycling routes – the proportion of journeys people make on foot or cycling declined from 32% to 26% between 1989-91 and 2004, and the proportion of children walking or cycling to school fell from 58% to 47% over a similar period.¹⁶

Policies

32. To achieve these objectives for green infrastructure and a sense of place our policies are to:

- encourage an early and integrated approach to tree and woodland planting and management in and around our towns and cities to provide a high quality, sustainable resource which reflects local needs and landscape character, and is responsive to change;
- improve the delivery of the Sustainable Communities Plan by giving trees and woodlands a role in contributing to an increase in the scale and connectivity of green infrastructure in priority areas for housing growth or renewal e.g. Growth Areas¹⁷ and New Growth Points;
- integrate trees, woodland and associated green space into local growth, regeneration and brownfield restoration,¹⁸ as a cost-effective and sustainable contribution to local environmental quality;
- promote the ecosystem services that trees and woodlands provide in the built environment and plan for their future role in supporting the delivery of *Making Space for Water*¹⁹ and the use of woodlands (together with other land management changes) as a contribution to: reducing flood risk; improving air quality; providing wildlife corridors; and minimising the impacts of climate change.

¹⁶ Sustainable development indicators 55 and 56, Defra (2006) *Sustainable Development Indicators in your Pocket*.

¹⁷ *The Sustainable Communities Plan* (ODPM 2003) has identified four housing growth areas where an additional 200,000 homes are required above existing planned targets to 2016 to tackle housing supply across the wider south east of England – Thames Gateway, Ashford, Milton Keynes/South Midlands and London/Stansted/Cambridge/Peterborough Growth Areas.

¹⁸ Guided by the principles of the *National Brownfield Strategy*.

¹⁹ Government's *Making Space for Water* (Defra 2005) is a 20-year strategy advocating an holistic approach to flood and coastal erosion risk management and other societal objectives such as sustainable land management, water quality, biodiversity and development planning.

Safer woodlands for people to use

The people of Murdishaw near Runcorn did not want to use woodland paths which link housing areas, schools, shops and community facilities, because they felt the dense, dark woodland wasn't a safe place to travel through, especially at night. The woodland was neglected and uninviting – in short, it was a barrier rather than a link within the community.

The landowner, Liverpool Housing Trust, sought advice from Groundwork Mersey Valley who secured funding for the project (from the local authority, a Home Office scheme and private trusts) and helped to set up a project partners' group, including the Murdishaw Community Forum. This group ran a series of events to give local people a chance to discuss the future of the woodland, and conducted a survey of attitudes and opinions about the site. Having established broadly what local people wanted, the physical work began.

The woods were thinned and some trees removed to make the area appear less threatening and dark, then existing pathways were improved and cycle routes constructed. A brand new access path was built, and lighting and signs were installed. Local people now use links through the woodland on a daily basis, and a survey shortly after completion of the project revealed that almost 80% of the participants judged the woods to feel safer than before the work.

Below left: Improved greenway through the woodland.

Below: Celebrating the opening of the woodland improvements.



Groundwork Mersey Valley



Opportunities for action

33. To implement these policies we need to develop existing working partnerships and establish new ones. The delivery plan will co-ordinate this Strategy with the Regional Forestry Frameworks and with Government spending priorities, and we expect a wide range of organisations from the public, private, and voluntary and community sectors to be involved in the delivery process. These are just a few examples of the many opportunities there will be for action:

- the policies and priorities of this Strategy, and those of the Regional Forestry Frameworks, can integrate with policy on green space management, local growth, regeneration and community strategies and programmes e.g. the work of the Land Restoration Trust;
- encouraging the wider use of innovative approaches to spatial mapping of tree and woodland resources against local need e.g. the Forestry Commission's Public Benefits Recording System²⁰ used for siting and designing new woodlands;
- engaging with regional and local planning processes to ensure recognition within regional spatial strategies and local development frameworks of all the ecosystem services provided by green

infrastructure, and the important role within that infrastructure of trees in built-up areas including those along streets, highways and other transport routes;

- promoting the use of the Green Flag Award Scheme.²¹



Isobel Cameron / Forestry Commission

²⁰ The Public Benefit Recording System provides a policy and decision-making framework for investing public moneys in the creation of new soft end uses on derelict, underused and neglected land; it is a tool to identify those sites on which regeneration projects can make the greatest contribution to social, economic and environmental issues in their locality.

²¹ The Green Flag Award Scheme is an annual peer reviewed voluntary award scheme that recognises high standards of management and maintenance of publicly accessible green spaces in England and Wales. There are eight core assessment criteria: a welcoming place; a healthy, safe and secure place; a clean and well-maintained place; sustainability; attention to conservation and heritage; community involvement; marketing; and management.

Green infrastructure for a growing population

The 20-year vision of sustainable development for the city of Cambridge and its surrounding market towns and villages includes 47,500 new homes and £2.82 billion spent on infrastructure to support this development.

Such rapid growth will be a challenge for a mainly rural county, but an award-winning Green Infrastructure Strategy will ensure that alongside this growth, an excellent network of green spaces is created across Cambridgeshire for all to enjoy. Setting an example that other local authorities could follow, the Strategy cost £70,000 to prepare, and was commissioned by Cambridgeshire Horizons working closely with the county council and other stakeholders.²²

The Strategy identifies three different elements of green spaces to be created – Green Corridors, Major Green Infrastructure Sites and Landscape-wide Wider Area Initiatives – and has already helped partners receive £4 million of CLG Growth Area Funding. A Green Infrastructure Development Officer, funded by Cambridgeshire Horizons and Natural England and hosted by the county council, will work with partners and developers to implement the Strategy.



²² Cambridgeshire Horizons is a non-profit making company set up by the Cambridgeshire local authorities to drive forward the development of new communities and infrastructure in the Cambridge Sub-region, in accordance with the approved Structure Plan. The steering group for the Green Infrastructure Strategy project included Cambridgeshire Horizons, Cambridgeshire County Council, the Woodland Trust, Cambridge Preservation Society, the Wildlife Trust, Natural England, Peterborough City Environment Trust, National Trust, Forestry Commission, Environment Agency, English Heritage, South Cambridgeshire District Council, Huntingdonshire District Council, East Cambridgeshire District Council, Fenland District Council, Cambridge City Council, Royal Society for the Protection of Birds, Government Office for the East of England.

Above: Map showing the location for the major initiatives in the Green Infrastructure Strategy Plan.



5. Land and Natural Environment

Objectives

34. To create, expand and maintain a network of sustainably managed trees, woods and forests that are resilient to climate change and make a full contribution to:

- protecting and enhancing our woodland habitats and associated species and facilitating their resilience and adaptation to climate change;
- safeguarding, enhancing and celebrating the characteristic elements of rural and urban landscapes and their cultural and historic values;
- maximising the full range of ecosystem services provided by trees, woods and forests, including the protection of soil and water resources now and in the future, as needs change.

35. Woodland habitats, and ancient woodlands in particular, are among our richest terrestrial habitats and the highest levels of biodiversity are often found in woodlands that are actively and sensitively managed. Woodlands contribute to local landscape character and are often of cultural, historical and archaeological significance – for example beechwoods in the Chilterns, limewoods in Lincolnshire, sweet chestnut coppice in Kent, and the ancient oaks of Sherwood.²³ It is estimated that ancient semi-natural woodland in continuous existence for at least 400 years now covers 200,000 hectares and there are a further 140,000 hectares of ancient woodland that were converted to plantation, often with non-native species.²⁴

36. The challenge will be to maintain and enhance biodiversity where it is already good, and to improve biodiversity and habitat quality where necessary, especially in woods that are currently neglected. By March 2007, a total of 84% of the Sites of Special Scientific Interest (SSSIs) with woodland habitats were in favourable condition, but further improvement will be needed to meet the Government's 95% target.²⁵ Some wildlife, particularly invasive and non-native species, will need to be managed to prevent the deterioration of our native woodland communities. In other cases it may be necessary to remove existing plantations and naturally colonised scrub, for the purpose of recreating or maintaining valuable open habitats such as heath and bog. Managing trees for biodiversity is important not just within woodlands, but also in the wider countryside (particularly parklands, hedgerows and wood pasture), in built-up areas, and wherever there are veteran trees.

²³ England has ten of the woodland habitat types protected under the European Habitats Directive, with six priority woodland habitats identified by the UK Biodiversity Action Plan (lowland beech and yew woodland; lowland mixed deciduous woodland; lowland wood pasture and parkland; upland mixed ashwoods; upland oakwood; and wet woodland), together with 63 priority associated species, including dormouse, spotted flycatcher, pearl-bordered fritillary butterfly and Barbastelle and Bechstein's bats

²⁴ Defra/Forestry Commission (2005) *Keepers of Time a Statement of Policy for England's Ancient and Native Woodland*

²⁵ Defra (2006) *Working with the grain of nature – taking it forward: Volume II Measuring progress on the England Biodiversity Strategy: 2006 assessment.*

37. In future, the management of trees, woods and forests will have to take into account the effect of climate change on the trees themselves – for example, water shortages in hotter, drier summers and threats from pests and diseases that may flourish in a more favourable climate. We can also expect to see changes in the natural range of the wild plants and animals, which will in time alter the character of our English woodlands. When managers are choosing trees for restocking or new planting they will need to consider how best to use the available genetic resources (of both species and seed origin) to address the opportunities and threats of climate change.

38. Protecting water from diffuse pollution by soils and nutrients in run-off from farmland is an important function of woodland, and intercepting pollution before it reaches water will be a key element of the land management changes needed to meet the Water Framework Directive targets. In future small-scale woodland planting, integrated into the landscape, will have a role to play in reducing the impact of diffuse pollution from agriculture. Woodland also has the potential to soak up water in heavy downpours, swelling groundwater supplies, reducing the amount of water in our rivers during peak flows and helping to combat soil erosion on farmland. Strategically planted and managed tree belts can intercept air pollutants and potentially protect sensitive habitats from diffuse sources of emissions such as agriculture and transport.

39. Growing trees have the capacity to sequester carbon²⁶ and existing woodlands contain a significant carbon stock. Also certain management activities, such as excessive soil disturbance from harvesting, can release stored carbon back into the atmosphere. With the growing challenge of mitigating climate change, carbon management should be a consideration in all woodland management decisions. However, it is still the case that carbon uptake associated with new woodland creation can only make a limited additional contribution to countering greenhouse gas emissions in a country such as England, where land availability is limited. Young, fast growing species sequester carbon fastest, but these are not necessarily the trees which bring the greatest public benefits for wildlife, amenity and access. We conclude, therefore that carbon sequestration should be considered as an important benefit of woodland management and creation, rather than as one of the principal drivers of our Strategy.

40. Many of the ecosystem services we seek from trees, woods and forests in the future will require us to look outwards from individual woodland sites and think about the impact they will have on surrounding land uses and resources (and the effect of these on the woodland too). This is called, for want of a better term, the 'landscape-scale' approach, but it is not just about visual impact, it is about groundwater and flood management, shelter, air pollution, soil conservation, adaptation of woodland ecosystems, and providing green spaces in and around built-up areas.

²⁶ Carbon sequestration is the uptake and storage of carbon. Trees and other plants absorb carbon dioxide, release the oxygen and store the carbon.

Restoring a network of ancient limewoods

Lincolnshire has one of the largest concentrations of woodlands characterised by small-leaved lime surviving anywhere in the British landscape. Within the same area the remains of seven medieval abbeys and priories can be found. It is suggested that the woods date back to prehistoric times but few people have been aware of their wildlife and history, and opportunities to enjoy the woodlands have been limited. All this is changing with a multi-partner landscape-scale project working across ownership boundaries in an area of 60 square miles to the east of Lincoln.

Designated collectively as the Bardney Limewoods National Nature Reserve, the woods are very important for biodiversity but their position within a largely arable landscape means that woodland plants and animals have few opportunities to expand their range.

With help from the Lincolnshire Limewoods Project enthusiastic local farmers and landowners have planted more than 20km of new hedgerows and 100 hectares of new woodland to extend and join up existing woodlands. Within the ancient woods coppice management and the creation of open glades and rides is helping butterflies like the brown hairstreak, white admiral, and speckled wood.

Plants such as wood anemone, woodruff and yellow archangel are flourishing, dormice have been successfully introduced, and the Forestry Commission is restoring a further 500 hectares of plantations to native woodland habitats. People have new opportunities to enjoy these fascinating woodlands with a new surfaced trail, 20km of improved access routes, school visits and public events.

Below: Brown hairstreak.

Right: Common spotted orchids.



Peter Smith



L Fleuty / Lincolnshire Limewoods Projects

It will mean setting priorities for planting and management to take advantage of opportunities (or to address threats) over an area bigger than individual ownership units. The landscape-scale approach is most useful where there is a need for a ‘critical mass’ of woodland planting and management within an area, or where the functional relationships of woodlands (to each other and to resources) is important – for example in Joint Character Areas,²⁷ water catchments, and town and cityscapes.

41. Much of our woodland resource is currently under-managed and incapable, in its present state, of delivering the full benefits we want for people, places, wildlife and the environment – for example much of the annual growth available for harvesting in English woodlands is currently not harvested. To achieve the aims of this Strategy it will be essential to bring much of this under-managed woodland resource back into sustainable long-term management.

Policies

42. Many existing policies in this area have been revised since the 1998 Forestry Strategy and will continue to apply,²⁸ including those for woodland habitats and species, for ancient woodlands and veteran trees, and for the management of grey squirrels and deer. In addition, our policy for creating, expanding and maintaining the network of sustainably managed trees, woods and forests will be to:

- seek a landscape-scale approach to tree planting, woodland creation and management, which takes account of the interaction between trees, woodlands and other land uses, and delivers the benefits of the wider ecosystem services which strategically placed woodland can provide;
- seek a greater role for trees, hedgerows and woodland within more extensive agricultural management systems;
- review the effectiveness of woodland and green space networks in combating the effects of climate change and increase their resilience to further change, for example by aiming for less fragmentation and more diversity at the landscape scale, in terms of habitat structure, species composition and genetics;
- address the causes of woodland decline and promote the protection of trees, woods and forests from invasive species, diseases and other damage e.g. from atmospheric pollution;
- ensure that trees and woodlands are planted and managed (both now and as our climate changes) to protect soil and water resources from erosion and from chemical, physical and biological degradation, in line with the objectives of the EU Water Framework Directive and the proposed EU Soil Framework Directive;
- improve public understanding of the role of woodland products and ecosystem services in dealing with climate change and safeguarding biodiversity;
- develop a clear rationale to guide removal of inappropriate plantations and woodland for the purpose of restoring key BAP habitats (e.g. lowland heathland and upland bog), where the benefits of doing so outweigh the environmental and social costs;
- ensure that planting and management of trees, woods and forests takes account of local landscape attributes, for example as brought together through the Joint Character Areas in England, and contributes to the delivery of the requirements of the European Landscape Convention.

²⁷ ‘Joint Character Area’ has a specific meaning in England, referring to the areas defined and agreed between the Countryside Commission/Agency and English Nature and used as the spatial framework for reporting on change in England’s countryside. Joint Character Areas are being advocated as one of the key frameworks for spatial analysis.

²⁸ Existing policies include: *UK BAP Action Plans for woodland habitats and priority species*; *Keepers of Time*; *Grey Squirrels and England’s Woodlands*; and *The Sustainable Management of Wild Deer Populations in England*.

Woodland partnership at a landscape scale

The Neroche Scheme is a £3 million Landscape Partnership Scheme led by the Forestry Commission and supported by the Heritage Lottery Fund (HLF) and a range of local organisations. It covers 10,000 hectares of the Blackdown Hills AONB on the Somerset/Devon border, characterised by livestock farming and a large Forestry Commission estate, punctuated by small villages and isolated farmsteads. The landscape has a rich natural and cultural heritage, which the Scheme sets out to celebrate and enhance.

Following a locally agreed Forest Design Plan, 280 hectares of conifers are being cleared in favour of a landscape-scale interconnected network of wet heath, wood pasture, broadleaved regeneration and restored coppice. The new open habitats will be grazed by a herd of English Longhorn cattle, acquired by the Neroche Partnership using HLF funds, and managed by a local farmer.

Investment in the built and cultural heritage is improving visitor management at Castle Neroche Iron Age hill fort, and supporting parish projects to research and celebrate local history. Public access is being enhanced through long distance circular trails offering 40km of off-road bridleways with links into settlements.

The arts are being used to create a light-touch approach to interpreting the landscape, through ephemeral sculpture, music and storytelling, and the use of mobile digital technology to allow users to carry heritage information with them into the landscape.

An apprenticeship scheme is employing young staff on an National Vocational Qualification based programme of training in the forest. Neroche is also supporting the Blackdown Hills Forest School to provide outdoor learning opportunities for local schools.

An active partnership board and a local stakeholder group has been the key to engaging the local community in this ambitious project, which has 23 linked projects running until 2010.

Below: Early stage of wood pasture restoration.



Forestry Commission



Opportunities for action

43. Delivery mechanisms are mostly already in place but there is a significant need to develop a landscape-scale approach and to undertake research, particularly on the effects of and adaptation to climate change. The delivery plan will co-ordinate this Strategy with the Regional Forestry Frameworks and with Government spending priorities, and we expect a wide range of organisations and partnerships from the public, private and voluntary sectors to be involved in the delivery process. These are just a few examples of the many opportunities there will be for action:

- making fuller use of opportunities offered by cross-compliance²⁹ and agri-environment schemes to allow appropriate natural regeneration of trees on farmland, adding to the existing resource of 291,700 hectares of farm woodland in England;³⁰
- improving the integration of farmland and woodland support policies, including those for energy crops, and continuing to refine Environmental Stewardship policies and objectives for individual trees, wood pastures and small woodlands in the agricultural landscape;
- ensuring that woodland owners and managers have good access to the latest research-based information and to advise on sustainable woodland management and products;
- working with developers and planners to implement guidance on biodiversity conservation in a manner that safeguards our ancient woods, native woodland and veteran trees;³¹
- taking account of the potential of woodland to deliver Water Framework Directive requirements when selecting land management options for catchment management plans e.g. potential contribution of floodplain woodland to flood risk management.³²

²⁹ Good Agricultural and Environmental Condition requirements applying to the Single Payment Scheme for farmers and to some Rural Development Programme for England (RDPE) payments, including Environmental Stewardship.

³⁰ Forestry Commission (2006) *Forestry Statistics 2006 – Woodland Areas and Planting*, Table 1.9, data for 2005.

³¹ Current guidance is in *Planning Policy Statement 9: Biodiversity and Geological Conservation*.

³² Innovation Project SLD2316, Restoring Floodplain Woodland for Flood Alleviation, funded by the Flood and Coastal Erosion Risk Management Innovation Fund (see www.defra.gov.uk/environ/fcd/policy/strategy/sd7/sld2316.htm)

³³ www.chilternsaonb.org/caring/stwp_sites.asp

Case Study 7

Cultural heritage of our trees and woodlands

John Morris / Chiltern Woodlands Project



The Special Trees and Woods Project is recording the special trees and woodlands of the Chilterns Natural Area – special because they are old, rare, recognised as local landmarks, or are associated with local folklore or recent history (the Chilterns used to support a wide range of woodland industries including chair-making). The work is being carried out by a team of volunteers trained to gather information from site visits, old maps, estate records, aerial photographs and, most importantly, from local people themselves. Volunteers are able to digitally record interviews with people talking about their memories of Chiltern woodlands. The volunteers also survey and record woodland archaeology – man-made features like boundary banks, trackways, marker stones, saw pits and charcoal platforms that are evidence of how trees and woods have long provided us with fuel, timber, building materials, fodder and food. Records are summarised on an interactive map where visitors to the website can read the story, see the photos and hear memories about special trees and woods of the Chilterns.³³ This new three and a half year project started in 2006 and is managed by the registered charity the Chiltern Woodlands Project and is funded by the Heritage Lottery Fund and Chilterns Conservation Board.

Above: An ancient beech pollard at Burnham Beeches, Buckinghamshire.

Case Study 8

The role of woodland in managing flood risk

Climate change is likely to increase flood risk, and a 'whole catchment' approach to flood alleviation will be needed. Most of our floodplain woodlands were long ago cleared for farming and development, so we have little evidence of the extent to which floodplain woodland can slow down and store floodwater before it reaches vulnerable areas downstream. It is thought that woodland may have a significant role in flood management because it creates more of a barrier to flows than other vegetation. This theory will be put to the test in a demonstration project involving local landowners along the River Laver, upstream from Ripon in North Yorkshire. Computer models of water flow and topography will be used to plan new woodlands – location, shape, size, species mix, structure and establishment methods – which will be planted where land is made available by local owners. The English Woodland Grant Scheme and project funds will cover establishment costs, and instruments will be installed to record the effect on water flow. If this demonstration shows that floodplain woodland can make a significant contribution to reducing flood risk the data gathered will help to refine computer models so that we can plan where best to create new floodplain woodlands. A bonus will be the contribution of this project towards the Biodiversity Action Plan target of creating 2,200 hectares of wet woodland in England by 2010.



6. Working Woodlands

Objectives

44. The Government's objectives for this Strategy can only be delivered by a healthy woodland and forestry sector with viable businesses actively engaged in sustainable management and processing at national, regional, sub-regional and local level. This will require:

- the whole sector to have the expertise and capacity to ensure that sustainable management of woodlands delivers public benefits alongside business profitability. To achieve this, partnership programmes will involve the forestry, arboricultural, silvicultural, recreation, timber processing industries and related business sectors;
- innovation to develop new markets and modernise supply chains and infrastructure;
- Government resources targeted at the provision of public goods and at developing the capacity of the sector to adapt to future needs and diversify, creating a flexible industry run by well-trained people;
- substituting wood products for fossil fuels and other materials, as a contribution to UK targets for reducing greenhouse gas emissions.

45. This is a significant challenge for a sector with a long production cycle already facing the loss of traditional markets, and with a significant proportion of woodlands under-managed. The sector will use its own leadership and organisations to explore the full range of economic opportunities available to woodland owners and processors, including those which flow from the recently published woodfuel strategy.³⁴ It will be necessary to consider how best to increase penetration of traditional markets and to research new and innovative presentation of timber and woodland outputs, for example into evolving green or niche markets for high quality timber, technologically improved products, leisure and tourism. The sector's greatest strength often lies in its green credentials and the contribution it can make to the recovery of economically lagging rural areas.³⁵ These assets should also be harnessed to promote new business opportunities.

³⁴ Forestry Commission (2007) *A Woodfuel Strategy for England*.

³⁵ E.g. Forestry Commission, South West of England Regional Development Agency and Land Use Consultants. The *South West England Woodland and Forestry Strategic Economic Study* calculated the total economic benefits from forestry in the South West to be £550 – £575 million including timber production (£17 million), timber processing (£134 million), induced effects (£50 million), tourism, recreation and other economic benefits (£300 – £375 million). There are 2,570 full-time job equivalents in forestry production and primary processing, and in excess of 1,200 companies use forestry and woodland products and resources, generating a further 14,000 jobs.

Investing in state-of-the-art timber processing

Two very different family run businesses, one in Northumberland, the other on the edge of the New Forest, have demonstrated their confidence in the forestry sector with multi-million pound investments in timber processing equipment.

Near Hexham in Northumberland, just a few miles from England's biggest forest at Kielder, the EGGER Group is investing £100 million to replace an out-dated chipboard plant with one of the most technologically advanced 'continuous production' chipboard lines in Europe, plus new silos, chipping machines and a 50MW biomass boiler to provide sustainable heating for the plant. EGGER will process 150,000 tonnes of round timber every year, underpinning the sector's harvesting and transport infrastructure in the region. The plant will provide an end use for 200,000 tonnes of recycled material from various sources, including local authorities, reducing the need for landfill. It is intended that complementary businesses will cluster around the new plant, supplying EGGER with raw materials, such as sawmill residues, or adding value to chipboard by manufacturing furniture components for example.

On the edge of the New Forest the Giddings family established their first sawmill at Bartley in the 1890s, and their mill has been a vital part of the area's rural economy ever since. The fifth generation of this family business has just invested £9.2 million in rebuilding the sawmill and installing a Soderhamn Eriksson sawline, the first to incorporate three-dimensional scanning throughout the sawline, which means that the mill can maximise the value from each log and improve their service to customers. RF Giddings is the only large softwood sawmill processing predominantly pine species in central southern England, converting 100,000 tonnes of round timber from southern England's forests each year into sawn timber for the construction, fencing and packaging industries, and supporting an estimated 400 jobs up and down the supply chain.



EGGER UK Ltd

Left: View of EGGER chipboard factory; production started May 2007.



Below: Giddings – 3D Log scanner – maximising the value from each log

RF Giddings & Co. Limited

46. Sensitive and sustainable management of England's woodlands can contribute to meeting the UK targets for reducing greenhouse gas emissions, by replacing fossil fuels with woodfuel as a source of heat and energy, and by substituting timber for materials that have higher CO₂ emissions associated with their production, for example those used in house building.³⁶ English woodlands that are not currently managed could be a significant source of woodfuel in the future if they were brought back into management, and it is estimated that they could provide a long-term sustainable supply of bioenergy sufficient to meet the energy needs of 270,000 homes.³⁷ This substitution for fossil fuels and other materials, either directly or indirectly, means that our existing woodlands have the capacity to make a much greater contribution to greenhouse gas reduction targets than can be achieved simply through carbon sequestration by woodlands.

47. The Government's role will be to stimulate and add value to private investment through facilitating partnerships, capacity building and knowledge transfer. It will offer a wide range of business support, including grants and other funding, business and investment advice, some funding for diversification activities, support for training, support for joining up supply chains and where appropriate public sector purchasing. Government support must demonstrate value for money in terms of outcome, only supporting commercial forestry where public benefit will follow. The Regional Development Agencies will have a specific role in support for business across all sectors and in delivering the Regional Economic Strategies. It will also be necessary to address the problems of sustainable management and harvesting faced by owners of small woodlands or farm woodlands, who may not have the necessary expertise and equipment or be able to offer regular supplies in the quantities needed by processors.

Policies

48. Achieving a healthy woodland and forestry sector able to deliver economic output alongside public environmental and social benefits means that Government support will be directed towards policies to:

- promote public understanding of the need for active woodland management, and the benefits it can bring;
- ensure that a wide range of appropriate business and financial advice and support is available to existing and new woodland based enterprises, including social enterprises;
- support investment and innovation in the woodland and arboriculture supply chains to enhance business efficiency and flexibility, encourage integration and improve competitiveness;
- support skills development and knowledge transfer for traditional forestry, new business opportunities, green space planning and management, and arboriculture;

³⁶ In one study, it was estimated that by using timber and wood products wherever possible in the construction of a typical three bedroom detached house, the embodied energy (or 'carbon footprint') of the building materials could be reduced by 88%, compared with conventional practice in England (Source: Forestry Commission pers.comm).

³⁷ This is sufficient to reduce fossil fuel derived CO₂ emissions by 400 ktC per annum – equivalent to 3.6 million barrels of oil.

Case Study 10

Converting a farm into a woodland business

Many farmers diversify their business by planting small areas of woodland but Grascott Farm in Devon did more – seven years ago the owner converted the whole of this 90 hectare mixed farm to sustainable modern timber production. There were already 12 hectares of established broadleaved woodland, and the rest of the farm has been planted with Douglas Fir, supported by funding from the South West Forest Challenge Scheme. A woodchip fired boiler – one of the earliest in the UK – was installed to heat the farmhouse and a holiday cottage. The owner, Mr Whatmore, has now built up a consultancy business in all aspects of woodfuel installation from initial site appraisal through to fuel production and training. The business is now entering into long-term supply contracts for woodchip fuel, purchasing and processing timber from other sources in addition to using the poor quality timber produced from routine management of their own forest. Over the last 18 months fuel supply has increased from 200-300 tonnes annually to approximately 2,500 tonnes in the current year.

Case Study 11

Innovative modern building using local timber

Clad in locally grown silver-grey oak, the undulating leaf-shaped roof seems to float above the 2,000 square metre Savill Garden Visitor Centre in Windsor Great Park. This is the UK's largest gridshell – a technique which creates a three-dimensional structure from a two-dimensional lattice work. The base layer of the three-domed roof is a 1m grid constructed from 20 linear km of larch from sustainable forests on the Windsor estate. Above this larch grid the aluminium roof system serves as a waterproof shell and supports the oak rain screen. Expertise from Green Oak Carpentry and English Woodlands Timber ensured that the 350m³ of European larch and 150m³ of English oak timber from the Windsor forest estate were harvested

and sawn to the highest specifications, before being manipulated and locked into a shape.

This award-winning new Visitor Centre is a tribute to modern design, traditional craftsmanship and good silviculture, and it shows what can be achieved when the forester, the sawmiller and the end user work closely together from the inception of a project.



The Royal Landscape / Warwick Sweeney

Left: Eaves overhang detail – showing the underside of the gridshell roof.



Opportunities for action

49. Achieving an economically healthy sector will require a pro-active response by the industry, with the support of Government where appropriate. The delivery plan will co-ordinate this Strategy with the Regional Forestry Frameworks and with Government spending priorities, and we expect a wide range of organisations and partnerships from the public, private, and voluntary and community sectors to be involved in the delivery process. These are just a few examples of the many opportunities there will be for action:

- support innovation and entrepreneurship in developing new products and market opportunities;
- work with public and private sector partners to develop a sustainable woodfuel industry with a focus on utilisation of material in currently under-managed woodlands; promote investment in innovation, co-operation, processing and marketing of wood fuel;
- work with Lantra³⁸ to ensure that forestry and woodland businesses have the opportunity to influence the supply and delivery of training which is demand-led and reflects industry requirements;
- review the regulatory and grant-making framework to see if it is efficient and fit for purpose to deliver this Strategy;
- review, update and disseminate advice and information on silvicultural and timber processing best practice for the production of quality timber and other woodland products, and for dealing with the impacts of climate change on trees, woods and forests.
- helping to promote industry-led initiatives such as ConFor's *Naturally Wood* strategy, the England Forest Industries Partnership, and *Wood for Good*;
- encouraging sector-wide activities to promote the green credentials of woodland business, including the marketing of UKWAS certified products and stimulating the wider management of private woodland to the UK Forestry Standard (144,000 hectares of non-Forestry Commission woodland are currently certified);³⁹
- encouraging other businesses and sectors to promote woodlands as places for specialist recreation, health and education activities and tourism, with accurate marketing and information about the facilities;
- promoting the use of woodlands as a source of sustainable energy and encouraging the use of wood-based materials in place of energy-intensive manufacturing and construction materials;
- exploring the potential for woodland-based social enterprises.

³⁸ The Sector Skills Council for the Environmental and Land-based Sector.

³⁹ Forestry Commission (2006) *Forestry Statistics 2006 UK Grown Timber and Wood Products*; Table 2.10, data for March 2006.



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7. Delivering the Strategy

50. Delivering this Strategy and its vision will require a regional and local interpretation of national priorities to apply those most suitable to the locality's needs and resources and to co-ordinate them with the regional priorities of the Regional Forestry Frameworks. Decision-making should be based on an assessment of local needs and local resources, and should use the landscape-scale approach where appropriate. Actions by Government will include:

- leadership and advocacy
- research
- advice, information and guidance
- partnership development
- public procurement
- funding
- direct Government action on management of the public woodland estate by the Forestry Commission in association with local authorities and others.

51. The **delivery plan** to implement this Strategy will co-ordinate the priorities in this Strategy with the Government's spending priorities and with the priorities of the Regional Forestry Frameworks. It will be produced by the Forestry Commission and Natural England in partnership with other key organisations; supporting the alignment of Forestry Commission programmes with those of Natural England and other Government agencies to ensure that action on trees, woodlands and forests is effective and that landowners receive co-ordinated advice and support.

52. The **Forestry Commission** is the Government's primary instrument for advocacy, expertise, regulation and direct action on trees, woods and forests. It plays an especially important role as a repository of skills and a source of innovation. Its role as a centre of expertise is important throughout the country, but especially for:

- **key growth locations** – where there is a pressing need to develop green infrastructure, including trees and woodlands, in partnership with other public and voluntary bodies;
- **regeneration areas** – in and around major towns and cities where The National Forest and the Community Forests have shown how environmental regeneration and business development based on trees and woodland has a role in improving social and economic well-being;
- **landscape-scale management** – the public forest estate can help land managers from public, private, and voluntary and community sectors to contribute to establishing woodland planting and management regimes, over wide tracts of both rural and urban land, which will deliver a range of ecosystem services.

53. It is clear that many different Government departments and agencies have an interest in the benefits of this Strategy and its delivery, as do local authorities, non-governmental organisations and many private sector organisations. The delivery plan will indicate where major contributions are sought from others, and where benefits are likely to accrue to their priority activities.



54. Much of the important decision-making is at the regional level. We look to the **Regional Forestry Framework delivery partnerships** to continue to provide leadership, working within the framework provided by this Strategy. This will involve regional partners and the regional delivery of the Rural Development Programme for England (RDPE). **The Regional Assemblies** can contribute to their sustainable development role through regional green space infrastructure strategies.

55. The **Regional Spatial Strategies** and the **Regional Economic Strategies** will be key documents in identifying where and how each region's woodland resource can best be utilised. In their role of supporting the competitiveness of the forestry sector and improving the standard of living in their region, we look to the **Regional Development Agencies** to identify both where timber, wood and wood fibre production and processing can contribute directly to regional economic growth, and where support for capacity building is needed, particularly in developing the business skills of small and medium size enterprises and micro-businesses in the woodland sector.

Also to consider the role trees and woodlands, as a means of enhancing the environmental and social capital of an area, play in enhancing economic growth.

56. We also recommend the policy framework and priorities of this Strategy to **local authorities** when they consider decisions on development control, economic planning and sustainable community strategies and in managing their own trees, woodlands and greenspace. The tools and mechanisms for delivery are already in place through the development planning and control system, Green Space Strategies, Sustainable Community Strategies and Local Area Agreements but success will depend on effective partnership working at a sub-regional and local level. The increasing inclusion of local communities in the planning, planting and management of woodlands will be important, both through involvement in decision-making and active participation in ownership and management.

57. The **private sector**, as owners and managers of a major part of our woodland resources, delivers important public benefits and should be involved in delivery partnerships.

58. Most successful partnerships in this sector include **non-governmental organisations**. They manage key parts of the woodland resource and bring unique organisational skills, especially in engaging local communities. We hope this national framework will help them to contribute even more effectively.

How will we measure the impact of the Strategy?

59. Implementing this Strategy and the Regional Forestry Frameworks will lead to greater activity in the woodland sector, both in the use of trees and woodlands and their products as well as in the creation and management of woodlands. Equally important will be an increased appreciation and understanding of our trees and woodlands and the part that they play in all our lives.

60. To help us to evaluate the impact of the Strategy and decide how to act, we want a range of indicators of the present state, and trends over time of trees, woods and forests in terms of their extent, condition, management, use and their contribution to quality of life. As far as possible, we will use outcome indicators relevant to our long-term objectives (e.g. reversing the decline of woodland birds by 2020, measured annually using the Woodland Bird Index) rather than trends in inputs (e.g. amount of investment) and outputs (e.g. hectares planted). However all three have a role to play in monitoring the Strategy.

61. It is not surprising that the wider scope and new focus of Government policies for trees, woods and forests is not always reflected in existing indicators and data, nor that some indicators fit our new policies better than others. At this stage we have identified the following sources of data for the main themes of the Strategy, recognising that part of the role of the delivery plan will be to develop an effective set of indicators.

Cohesive communities and everyday life

62. We want to find a measure of the benefit people get from using woodlands for healthy activity. Also of their involvement in planning, managing and using local woodlands and trees in streets and green spaces. Currently, available data falls into two groups – woodland visits and the involvement of volunteers.

The most consistent source of data on people's access to and use of woodland is the biennial, household-based *Public Opinion of Forestry Survey*, which gives demographic and regional data for England. To complement this the next *England Leisure Visits Survey*, planned for 2008, could provide a baseline for the Strategy but its usefulness will depend on the consistency of survey design and delivery in subsequent years.

63. There are no systematic surveys of woodland volunteers but we will gain useful insight from information collected regularly by the Woodland Trust on the size of its teams of woodland volunteers (wardens, speakers, photographers and others doing specific tasks) and on the numbers of *Nature's Calendar* volunteers who each year record data on spring indicators, including 11 species of trees. The Tree Council will also make available their biennial data on the total number of volunteer Tree Wardens active in both woodlands and urban areas. Clearly there will be some overlap between these three data sets.



Forestry Commission



Green infrastructure and a sense of place

64. There appear to be no existing data to monitor trends in the extent and location of woodlands within the green infrastructure framing and connecting urban areas. This is a crucially important policy area and we need a suitable indicator for it. We have considered datasets maintained by the Woodland Trust, Communities and Local Government and others, and there could be scope to develop these, taking account of local and regional monitoring. This will be a high priority for the delivery plan.

Land and natural environment

65. We have a wider choice of existing indicators to measure trends in characteristic woodland wildlife and habitats. We propose to use the annual assessment of *the proportion of woodland Sites of Special Scientific Interest (SSSIs) in favourable condition*⁴⁰ and the *woodland bird indicator*, updated every two years, which monitors populations of 33 bird species associated with woodland.⁴¹ Other possibilities include the index showing *trends in all plants and ancient woodland indicator plants* for a sample of broadleaved woodlands.⁴² This is less frequently measured than the first two, but there may be scope to develop it.

66. To assess the impact of climate change on woodland wildlife we will consider developing a variant of an existing indicator that shows the relationship between average summer temperatures and the abundance of 151 climate sensitive species (butterflies, moths and beetles).⁴³ One of the seven terrestrial Environmental Change Network sites in England is entirely woodland (Alice Holt) and five of the others have some woodland or coppice.

Working woodlands

67. We need an indicator of the proportion of woodland in active management, and another to monitor how much of this is sustainably managed. The Forestry Commission is developing an indicator of *woodland under management*, covering woodland that has benefited from the English Woodland Grant Scheme (EWGS) (and earlier) grants, subject to felling licences, and owned or managed by the Forestry Commission. (In addition, there will be other woodland supported by Environmental Stewardship payments.) At present there are two equivalent standards of sustainable woodland management – the UK Woodland Assurance Standard (UKWAS) and the UK Standard of the Forest Stewardship Council (FSC).

⁴⁰ England Biodiversity Strategy Indicator F2: *Condition of woodland SSSIs in England.*

⁴¹ England Biodiversity Strategy Indicator F1a: *Populations of woodland birds in England.*

⁴² England Biodiversity Strategy Indicator F4: *Trends in woodland plant diversity in England.*

⁴³ England Biodiversity Strategy Indicator C1: *Changes in abundance of climate sensitive species at Environment Change Network sites in England.*

Woodfuel for London

The woodfuel supply chain is being joined up across the capital by London Energy Partnership, an independent partnership of public, private and voluntary and community sector organisations.

The Greater London Authority requires large new developments to include 10% on-site renewable energy generation, and biomass is often the preferred choice – as in the King’s Cross Central Development. London’s demand for woodfuel has already outstripped supply, but the award-winning Croydon Treestation is showing how London could develop its own supplies of woodfuel, and deal with a disposal problem too. The Treestation is capable of generating up to 10,000t/year of high quality woodchip from the waste material, or arboricultural arisings, produced by managing the borough’s street and park trees.

London Energy Partnership is helping other boroughs find sites for treestations, using GIS mapping to identify heat demand and sources of arboricultural waste, and matching these up to minimise transport costs. The Partnership has published a toolkit for planners, developers and consultants to help them integrate renewable energy into new developments – and reduce costs by designing it in from the start. As London Energy Partnership explains “Developers used to connecting up to a gas pipeline don’t always think about delivery and storage of woodfuel.”

Below: Processing arboricultural arisings.



Andy Aitchison

The Forestry Commission records each year *the area of woodland certified* to these two standards,⁴⁴ but this underestimates the total area of sustainably managed woodland because some small woodlands, or those which do not produce timber, may not be certified.

68. To monitor the viability of the business sector all we have at present is the Forestry Commission's *Survey of Business Health in the Forestry and Wood Industries*, which identified indicators of business health in 2004, by industry sub-sector and business size. The survey will be repeated in 2007 but the major drawback of this data is that it does not distinguish between home-grown and imported timber. The Forestry Commission will explore how best to overcome this, and develop an indicator more closely aligned with the objectives of the Strategy.

69. Data on the creation of new woodland and the management of existing woodland with support from the RDPE will be collected by the Forestry Commission. All RDPE funding will be targeted to give maximum public benefit, following the principles in this Strategy. The delivery plan will give further information on the contribution we expect RDPE funded work to make to this Strategy over the seven years of the programme.



Paul Glendell / Natural England



⁴⁴ UK Indicator of Sustainable Forestry A6: area of sustainably managed woodland.

