

the value of

rees

in our changing region



The **Strategic Framework**
for Trees, Woods and Forests in
Yorkshire and The Humber Region

July 2005

Foreword



CALDERDALE MBC

Late nineteenth century plantation at Ogden Water, Calderdale

I am delighted to introduce this Regional Forestry Strategy for Yorkshire and The Humber. This document and its companion Action Plan are the culmination of 18 months hard work by a wide range of individuals and organisations, all of whom have the future interests of our trees and woodlands at heart and understand the wider value they have in society. I would like to thank everyone who contributed their time and effort in doing so.

Trees and woodlands are important to all of us in so many ways. They help shape our landscape, clean our air, provide havens for wildlife and places to relax and have fun. They also provide us with a valuable timber resource and are vitally important in underpinning the future sustainable development of our region.

Not surprisingly therefore this document covers a broad range of issues, many of which excite strong public interest. The public consultation that took place last year resulted in one of the largest responses to any recent consultation exercise in the region. This not only confirms that trees and woodlands are fundamentally important to many people, it also means that the priorities identified in this strategy really do represent a broad regional consensus about what needs to be done.

This strategy is very much your strategy. It represents your vision for the future of the region's trees and woodlands. If a shorter version of this vision is needed, I suggest it is more than adequately captured in the very apt title of this document –

'The Value of Trees in our Changing Region'.

There is a lot of very good work already being done across the region in managing and protecting our vital tree and woodland resource, much of it unfortunately unsung and unappreciated by many of those who visit or live in the region. This strategy seeks to build on a firm foundation. When implemented, it will result in a much better understanding by everyone about just how important our trees and woodlands are to all of us.



Felicity Everiss

Felicity Everiss REGIONAL DIRECTOR,
 GOVERNMENT OFFICE FOR
 YORKSHIRE AND THE HUMBER, JULY 2005

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GLEN GORNER



SHEFFIELD CITY COUNCIL, GABY SPINKS



GLEN GORNER



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Executive Summary

‘The Value of Trees in Our Changing Region’

provides a Strategic Framework for the future management of trees and woodlands in Yorkshire and The Humber region. It marries national priorities with local aspirations and identifies where a regional approach can add value. Above all, it demonstrates how we can help secure a more sustainable future for our region by maximising the benefits that trees and woodlands offer.

The document outlines the national and international policy context within which tree and woodland issues have to be considered. These major policy agendas are reflected in the thematic approach adopted and the strategic aims that the framework defines. The objectives within each theme reflect the priority issues identified in the developing regional agenda and the desired outcomes that flow from these indicate how trees and woodlands can help contribute to the delivery of many of these regional priorities.

Headline Facts – Woodland Cover

- Our region contains over 90,000 hectares of woodland and over 2 million individual trees
- Average woodland cover stands at 5.8%, and ranges from 13.6% in Ryedale to 0.3% in Hull
- The European average is over 30%, and the figure for England currently stands at 8.4%

NORTH YORK MOORS NATIONAL PARK

Key Issues

The Strategic Framework highlights the relatively low woodland cover across the region and the limited knowledge we have about that tree and woodland resource. The importance of building our understanding is emphasised, and the wider educational opportunities offered by woodlands as both a valuable environment for learning and a setting for personal development are stressed.

Potential timber production within the region is increasing but currently most of this is exported outside the region for processing. The fluctuating price of timber has served to increase the volume of wood and wood products coming in through the Humber ports but, again, most of this is also then transported out of the region for processing.

Woodland based leisure and recreation is becoming increasingly important, and woodland management for this and other non-timber-related objectives has started

to open up new woodland-based employment opportunities. Tourism is an important economic driver in many rural areas and the role of woodlands in supporting the growth of this sector is of increasing importance in areas like the region's three National Parks and four Areas of Outstanding Natural Beauty.

Headline Facts – Economic Issues

- Timber production in the region stands at 270,000m³ a year and has the potential to increase to 340,000m³ a year
- In 2001/02 the forestry sector supported approximately 320 businesses and over 1840 jobs
- The non-market benefits of our trees and woodlands are estimated to contribute over £80m a year to the region's economy

FORESTRY COMMISSION

The importance of an attractive woodland setting is mirrored in the more urban and industrial areas of the region where there is increasing recognition that a well-treed, attractive environment is imperative if the region is to compete successfully for inward investment.

The importance of a healthy natural environment is now widely accepted but the document calls attention to the region's mixed progress in delivering the woodland related targets of the England Biodiversity Strategy. While woodland bird populations are increasing nearly a quarter of woodland Sites of Special Scientific Interest are in unfavourable condition and we continue to suffer losses of our irreplaceable Ancient Trees and Woodlands.

Headline Facts – Environmental Issues

- 27% of the region is designated for its national or international landscape or wildlife value
- Over a quarter of our woodlands are designated as Ancient Woodlands, but that percentage rises to over 50% in parts of West and South Yorkshire
- By 2080 summer temperatures are predicted to increase by 4°C, summer rainfall to decrease by 60%, and winter rainfall to increase by 30%. This rate of change poses a serious threat to our trees and woodlands, and to the wildlife that depends on them

COUNTRYSIDE AGENCY, SIMON WARNER

Trees and woodlands are a vital component of the wider landscape scale biodiversity of the region but our ancient and semi-natural woodlands are often relatively small and isolated. Our climate is changing and there is an urgent need to improve the functioning of the region's woodland habitat networks and make them more resilient for the future.

Trees and woodlands also offer potential benefits in helping to reduce flood risk across the region by reducing rainfall run-off in the upper catchments, and helping to slow the passage of flood peaks as they move downstream. Trees can also help reduce the region's net greenhouse gas emissions through carbon sequestration, the substitution of woodfuel for other non-renewable energy sources, and the greater use of timber as a sustainable material.

The document stresses the health benefits to people of a well-treed local environment. Trees and woodlands near to where people live and work can help reduce stress by providing contact with nature, and woodlands have been shown to be excellent venues for helping people to increase levels of physical activity to address problems like obesity. Trees also provide significant air-conditioning benefits by reducing pollution, providing shade in summer and shelter in winter, as well as helping to regulate humidity levels.

Headline Facts – Social Issues

- Our region is near the bottom in many of the national league tables for issues like obesity and life expectancy
- The incidence of circulatory disease in Hull, Barnsley and Rotherham is 60% higher than in Ryedale
- Increasing physical activity is key to addressing these health inequalities and more accessible woods are part of the solution

COUNTRYSIDE AGENCY, JOHN MORRISON

These and other non-market benefits from the region's tree and woodland resource are estimated to be worth more than £80million per year to the region's economy. However, in the past, much of the investment and management activity that helped provide these wider benefits was underpinned by income from sales of timber. The recent decline in timber prices has undermined the financial viability of many of the region's established forestry businesses. This has serious implications for the region's ability to continue to sustainably manage the tree and woodland resource and maximise their value in the future.

Priorities for Action

The development of the Strategic Framework has been guided by a Steering Group and informed by an enthusiastic Regional Woodland Forum that drew representatives from across the region. It has also been subject to a detailed public consultation exercise that resulted in one of the largest responses to any regional policy. The resulting document can therefore claim real authority for the priorities it advocates.

These include the need to:

- improve knowledge and understanding about the value of trees and woodlands amongst the region's policy makers and decision takers;
- improve skills and business expertise within the forestry sector;
- increase woodland creation in the reclamation of derelict and underused land;
- protect and improve woodland Sites of Special Scientific Interest and Ancient Woodlands;
- increase accessible woodland near to where people live;
- increase the use of wood in sustainable construction and as a source of renewable energy;
- increase tree and woodland planting to help reduce flood risk.

Taking the Process Forward

The Strategic Framework advocates an inclusive, co-ordinated and partnership approach to the delivery of its aims and objectives. It defines a common agenda that will contribute to many of the emerging regional policies in areas like the economy, spatial planning and sustainable communities.

The Strategic Framework is intended to have a lifespan of 15 years, but will be reviewed every five years to ensure it remains relevant. Progress will be monitored on an annual basis and the Action Plan will be re-assessed periodically to ensure that all the desired outcomes are being addressed.

No one plants a tree and expects to gain the full benefit in their own lifetime. The planting of a tree is an altruistic act and represents an investment in the future for our children and grandchildren. That philosophy underpins the whole Sustainable Development agenda. The Strategic Framework for Trees, Woods and Forests sets out an agenda for action that will secure a sustainable future for generations to come.

Introduction

The Scope of the Strategy

The Regional Forestry Strategy consists of two parts.

- **Part 1 - Strategic Framework.**

This document identifies the important issues that we need to address and establishes the aims, objectives and prioritised outcomes for the future management of the region's trees and woodlands;

- **Part 2 – Action Plan.**

The accompanying Action Plan sets out the proposed actions designed to deliver the aims, objectives and outcomes defined in the Strategic Framework.

The overall strategy is about trees, woods, forests and their management, including forestry, silviculture and arboriculture. It describes the wealth of benefits that the region's trees and woods already bring us, and it explains how these will be increased in the future.

Why a Regional Strategy?

It is recognised that trees and woodlands offer many social and environmental benefits in addition to the timber and other forest products that traditionally underpinned the management of many of our woods and forests. Recent changes in economic circumstances have affected the viability of forestry in this country, and particularly in this region. In order to maximise the social and environmental benefits from our trees and woodlands, we need to retain a viable forestry sector in the region and this strategy maps out how this issue will be addressed.

The England Forestry Strategy is the national strategy. It has a clear national perspective that cannot always reflect regional circumstances. On the other hand there are many district tree and woodland plans that often tend to be action orientated and focussed on issues of local importance. As more emphasis is given to regional decision making, there is a need for a regional forestry strategy that marries national objectives with local aspirations. In particular this strategy seeks to identify what the important issues and opportunities are for our region's trees and woodlands so that policies such as the Regional Spatial Strategy and Regional Economic Strategy adequately reflect and benefit from them.

The time is right to set out exactly what we want from our trees and woods, and how we are going to achieve it. In order to maximise the broad range of benefits we need to protect and enhance the tree and woodland

resource and ensure that it is managed in a way that contributes positively to the sustainable development of the region. Trees and woods have a key role to play in the future of our region and this strategy sets out priorities for their management through to the year 2020.

The Development Process

The development of this strategy has been guided by a Regional Steering Group, and informed by a Regional Woodland Forum composed of a wide range of interests and stakeholders from across the region. A large number of issues came out of the deliberations of these two bodies and resulted in a consultation draft strategy being published in July 2004. Over 170 responses were received during that public consultation exercise. This final strategy, therefore, reflects a very broad consensus view about what the priorities are for the future management of our region's trees and woodlands.

Throughout the development process the emerging Strategic Framework has been subject to an on-going sustainability appraisal process using the Regional Sustainable Development Framework. The final draft version was subject to an external Sustainability Appraisal undertaken by Entec UK. That formal appraisal has been used to inform the Steering Group's decisions about the final structure and content of this published document.

The consultation draft strategy and supporting documents, the Sustainability Appraisal and the Steering Group's considered response to it are all published on the Regional Forestry Strategy webpages, hosted on the Government Office website (<http://www.goyh.gov.uk>)

This strategy is a regional document. It focuses on tree and woodland issues of regional significance and, in particular, on issues that the region itself can address. There are however national and international policy agendas that this strategy needs to consider, as well as existing local and sub-regional priorities that the strategy needs to embrace. The strategy demonstrates the positive contribution that trees and woods can make to the developing regional agenda and in so doing identifies where a Regional Forestry Strategy can add value to other policy areas.

Policy Background

England Forestry Strategy

'England Forestry Strategy: A New Focus for England's Woodlands – Strategic Priorities and Programmes' (Forestry Commission, 1998) is the Government's forestry policy for England.

This England Forestry Strategy sets out two main aims:

- the sustainable management of our existing woods and forests;
- the continued steady expansion of our woodland area to provide more benefits for society and our environment.

It also established the following four key programmes.

Forestry for Rural Development – this covers forestry's role in the rural economy, including direct economic activity in the management of the woodlands themselves, but also economic activity upstream of the forestry industry, and downstream in terms of the products and services that forests can and do provide.

Forestry for Economic Regeneration – woodlands can play a positive role in strategic land use planning, including the restoration of derelict and despoiled land, and as a positive land use setting for urban development and inward investment.

Forestry for Recreation, Access and Tourism – the importance of woodlands for informal recreation and access as well as more formal physical activity is now widely recognised. Recreational access has also developed into a significant component of the tourism industry nationally.

Forestry for Environment and Conservation – the value of woodlands for nature conservation has long been recognised, but they are also fundamental components of the character of the wider environment and are important for representing and sustaining elements of the cultural heritage of the country.

These aims and programme areas recognise the long-term nature of forestry and reflect the wide-ranging benefits that woodlands can offer. Regional Forestry Strategies are intended to be a regional expression of the national strategy, designed to interpret the aims and programmes in a regional context. They are also intended to take account of the way national policy has evolved since the publication of the England Forestry Strategy, including the recent development of a national policy for the future of our Ancient Woodlands.



DAN LEWIS

Ancient oak trees at dawn. It is important that we build our knowledge about the region's Ancient Trees so that we can prioritise future actions to protect and enhance this vital resource

Policy Background

International

There are three global policy agendas that have an influence on the future of the region's trees and woodlands.

Sustainable Forestry – this was defined at the 1993 Ministerial Conference on the Protection of Forests in Europe as being:

"the stewardship and use of forests and forest land 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 does not cause damage to other ecosystems."

This strategy sets out to establish a framework to meet the current aspirations and needs of the people of the region. In doing so we have to ensure that we do not compromise the ability of future generations to meet their needs. From work being carried out under the climate change agenda we know that significant changes are predicted to occur within the next few decades. As such it is incumbent on our generation not just to try to preserve our existing trees and woodlands as they are, but to try to make the resource more resilient to enable future generations to cope with the challenges they are likely to face.

Climate Change – this country signed up to the United Nations Framework on Climate Change at the Rio Earth Summit in 1992. We are also a signatory to the Kyoto Protocol and a number of measures, such as the Climate Change Levy and the United Kingdom Emissions Trading Scheme, have been put in place to try to address the growing threat from increasing concentrations of greenhouse gases in the atmosphere.

Our region is a net exporter of energy because of the concentration of power generation based on the former coalfield areas. It is also particularly vulnerable to some of the consequences of climate change, notably coastal inundation from rising sea levels, and increased risk of flooding from higher winter rainfall. Trees and woodlands can make a valuable contribution to help the region counter these threats, and that contribution is recognised within the region's Climate Change Action Plan.

Biodiversity – the 1992 Rio Earth Summit also saw the signing of the International Convention on Biodiversity. This resulted in the Government launching the 'UK Biodiversity Action Plan' in 1994, and publishing 'Working with the Grain of Nature: a biodiversity strategy for England' in 2003.

Our region has a number of obligations under these two documents that are reflected in this strategy. Indeed, our region has an important role to play in the delivery of a number of the Government's targets in this policy area.

In addition to these three international agendas, European policy is also likely to have an impact on decisions about tree and woodland planting and management. Reform of the Common Agricultural Policy and revision of the Rural Development Regulation will have a significant influence in rural areas, and the Water Framework Directive and the Strategic Environmental Assessment Directive will ensure that land management decisions consider the likely impacts at a landscape scale.

National

In addition to established national forestry policy and the obligations arising out of this country's international commitments, there are a number of other national policies that have implications for the way our region's trees and woodlands are managed.

Sustainable Communities – this is the Government's national communities' action plan and focuses on tackling problems where people live. Trees and woodlands make a considerable contribution in helping both to create a sense of place and provide a safe and healthy environment. This community focussed agenda is being taken forward through initiatives such as the Neighbourhood Renewal and the Northern Way Growth Strategy for the future development of the three regions in the North of England. There is also an overlap with the health agenda in that both focus on similar areas of deprivation within the region. Focussed woodland creation and management in such areas offers the opportunity to make a positive contribution towards addressing the problems of deprivation, exclusion and health inequalities.

Health – since 1999 the way health issues are addressed nationally has changed. There has been an increase in emphasis on the prevention of ill-health as well as a move towards the individual taking greater responsibility for how their own lifestyle affects their health.

There has also been a realisation that, despite an overall improvement in national health statistics, there are marked inequalities between regions in terms of life expectancy and incidence of disease. There are also marked health inequalities within our region with some areas having significantly worse health statistics than others.

Trees and woods have a role to play in this developing health agenda. Accessible woodlands provide excellent opportunities for physical activity, and trees and woodlands can have a positive effect on people's general well-being.

Public Funding for Public Benefit – the Government is increasingly focussing resources on the delivery of outcome-based targets in policy areas of highest priority. As public funding will be invested in programmes arising out of the aims and objectives of this strategy, they will need to deliver significant public benefits to all sectors of society, particularly those from deprived areas or deprived communities.

Regional

There has been a progressive move by Government towards a more regional approach to the delivery of national policy. Regional Government Offices were set up in 1994, and Regional Development Agencies and Regional Chambers (now Assemblies) in 1999.

Advancing Together – this is the vision and overall strategic framework for the region that underpins all other regional policy development. It provides an over-arching perspective and defines the shared vision as being:

"Yorkshire and Humber will be a recognisably world class and international region where economic, environmental and social wellbeing of all our region and its people advances rapidly and sustainably."

The vision promoted by Advancing Together will be achieved through co-ordinated actions under six strategic objectives:

- an advanced economy;
- excellent infrastructure;
- high quality environments;
- educated and skilled people;
- first class quality of life;
- good governance and civic participation.

In order to ensure that future development within the region is sustainable, a comprehensive sustainability appraisal process is described in the Regional Sustainable Development Framework. The development of this strategy has been subject to that sustainability appraisal process throughout its development.

Regional Economic Strategy – this is the statutory economic framework for the sustainable development of the region and has a clear focus on business success, wealth creation, jobs and skills. Environmental and landscape quality are positive economic assets for the region, and there are clear links between the Regional Forestry Strategy and the overall regional economic agenda in the areas of urban and rural renaissance, biomass and renewable energy, tourism, and sustainable forestry.

Regional Spatial Strategy – this replaces Regional Planning Guidance and is concerned with the way land is used at the regional scale. It deals with the spatial dimensions of economic development and renaissance, social issues, and the environmental assets of the region. The development of the Regional Spatial Strategy has been informed by the Regional Forestry Strategy and will, in turn, influence the generation of Local Development Frameworks.

Regional Housing Strategy – this provides the regional framework for the delivery of the Government's Sustainable Communities agenda. The Regional Forestry Strategy argues the case that trees and woodlands should form an integral component of the environment where people live and work, whether this is achieved through new development, housing market renewal or urban renaissance projects.

The proposed scale of the new housing development advocated in the housing strategy offers a real opportunity to promote timber as a sustainable building material. Care needs to be taken however to ensure that the value and benefits provided by existing trees and woodlands are recognised and not damaged or destroyed simply to accommodate new development.



HULL CITY COUNCIL

The Humber Bridge at dusk. This Strategy explains why the region's trees and woodlands should be valued just as highly as man-made, iconic structures such as the Humber Bridge.

Policy Background



HULL CITY COUNCIL

Trinity Square, Hull. Trees are a vital component in our public spaces and urban centres.

Regional Cultural Strategy – this defines culture as encompassing concepts like identity and sense of place, and talks about understanding and valuing our past. For many people, trees and woodlands, because of their longevity and apparent timelessness, provide a degree of stability in this rapidly changing world and are a reminder about who we are and where we come from. Trees and woodlands and their management are an important part of our cultural tradition. They also contain a wealth of evidence for past land use, human occupation and activity. They help us to define our cultural identity and, through the adoption of this forestry strategy, will help to shape our cultural aspirations for the future.

There are a number of other regional policy agendas where trees and woodlands have a role to play. These include existing strategies such as the Regional Environmental Enhancement Strategy, the Tourism Action Plan, the farming and food Framework for Change, the Regional Framework for Health, as well as developing policies such as the Regional Rural Framework, the concept of 'green infrastructure' within the Northern Way Growth Strategy and the Climate Change Action Plan. The development of River Basin Management Plans under the Water Framework Directive will also have an important impact on how the region considers tree and woodland issues in the context of the water environment.

The forestry strategy contributes in a positive way to many of the aims and objectives of these strategies, with the aim being to ensure a consistency of approach across a range of policy areas.

Sub-regional and Local

Sub-regional Economic Partnerships are the grouping of public, business, community and voluntary sectors at the sub-regional level. They are focussed primarily on the economic agenda and are the main delivery mechanism through which Yorkshire Forward, the Regional Development Agency distributes its funding. Sub-Regional Investment Plans provide a strategic economic framework to guide wider public sector investment within the sub-regions, including public investment in our trees and woodlands.

A number of sub-regional Rural Partnerships have also been established within the region such as those in West Yorkshire and the East Riding. These partnerships bring together a wide range of interested parties and consider environmental, social and economic issues as they affect rural areas.

At the local level, Local Authorities are one of the key partners in the delivery of this Regional Forestry Strategy. Not only are they often significant owners of trees and woodlands in their own right but, through their community leadership role and processes like the planning system, they are well placed to influence the future management of private trees and woodlands within their district. The National Parks and Areas of Outstanding Natural Beauty perform a similar role in the region's designated landscapes.

The inter-relationship between local authorities and the communities they serve is changing. Local Strategic Partnerships have been established to bring together all parts of the public, business, community and voluntary sectors within a local authority district. These will be one of the main mechanisms through which many national and regional strategies are translated into action at the local level. Community Strategies are the principal framework for guiding the delivery of this local action and are intended to allow local people themselves to shape what happens within their communities. Local Biodiversity Action Plans form part of this developing local policy agenda.

Adopting a Thematic Approach

A large number of issues emerged during the development of this strategy. These are presented here under eight Themes:

1. **Regional Context**
2. **Trees, Woods and People**
3. **Sustainable Forestry**
4. **Creating a Setting**
5. **Natural Environment**
6. **Healthy Environments**
7. **Climate Change**
8. **Delivering the Strategy**

Theme 1 briefly describes the existing tree and woodland resource and considers the landscape within which it sits. A series of Guiding Principles are set out which will inform future decision-making about how we manage our trees and woodlands within this broad regional context.

Themes 2 to 7 consider the tree and woodland resource from a number of discrete perspectives. They include a consideration of the issues and opportunities arising from that particular perspective and establish a series of Aims and Objectives to inform the future management and development of the resource. Issues of regional importance under each objective are set out as a series of Desired Outcomes. Inevitably there is a degree of overlap between the outcomes in the different themes but this serves to demonstrate the wide range of benefits that trees and woodlands offer.

It is notable that national policy development is much more advanced in some areas than in others. For instance national and regional targets for biodiversity improvements are far more comprehensive than those relating to the climate change or health agendas. This disparity is reflected in some of the detail included under those respective themes.

Theme 8 describes in broad terms how the strategy is going to be delivered. It highlights the importance of partnership working and regional co-ordination, and sets out the intended programme for action planning, monitoring and review.

Each Outcome within Themes 2-8 is ascribed an Indicative Priority. These reflect the regional consensus about where action is needed, and the relative importance of that action at this point in time. The scale of priorities can be described as follows:

- Priority 1 – the issue to be addressed requires urgent attention, either as a tree and woodland issue in its own right, or because of the wider regional, national or international priority assigned to that issue;
- Priority 2 – less urgency required, but it is judged that the region still needs to take positive action to address the issue in the early part of the timeframe covered by this strategy;
- Priority 3 – either existing action to address this issue is assessed to be sufficient at the present time, or forestry activity in its widest sense is not the primary means by which the region has chosen to address this particular issue. Some progress may well result anyway as a bi-product of tree or woodland activity under one or more of the other outcomes within the strategy.

The Indicative Priorities will be used to guide decisions about the allocation of scarce resources and focus the development of appropriate actions on issues of greater regional importance.

The strategy has an intended lifespan of 15 years, with interim reviews being carried out at 5 yearly intervals. During that 15-year period circumstances may change and new opportunities and threats are likely to emerge that may well require these priorities to be reconsidered in the future. However, the Indicative Priorities included here reflect what the region currently considers to be issues that need to be addressed.

Together, these eight themes provide a Strategic Framework for the future management and use of the region's tree and woodland resource. This framework will be used to guide the development of an Action Plan that will be reviewed and updated throughout the lifetime of the strategy. That Action Plan will deliver the outcomes that the people of Yorkshire and The Humber Region have indicated that they want.

THEME I *Regional Context*



Illegal felling in West Yorkshire. We continue to lose mature trees to new development, sometimes despite legal protection.

FORESTRY COMMISSION, KATIE THORN

Introduction

This section provides an overview of the existing tree and woodland resource and the landscape within which it sits. Any change to the tree and woodland resource, or the way in which it is used, will have an impact on that landscape and the regional economic, environmental and social activity it supports. This section seeks to establish a number of guiding principles that will be used to ensure that any change is appropriate and is planned and implemented in a considered and truly sustainable manner. This ambition is encapsulated within the following Strategic Aim:

Theme 1 – Regional Context

Strategic Aim – to ensure that transformation and expansion of the region's tree and woodland resource takes account of and respects the historic, natural and cultural identity of the region while contributing positively to its economic, environmental and social development and regeneration.

The Tree and Woodland Resource

Average woodland cover for the region stands at approximately 5.8%. This is significantly lower than the average for England of 8.4%, and is very low compared with the European average of over 30%. Within the region there are marked disparities between different local authority districts, ranging from 13.6% woodland cover in Ryedale down to only 0.3% in Hull.

In terms of woodlands in relation to population, nearly 35% of the region's woods are concentrated in the districts of Ryedale and Scarborough, where only 3% of the region's population live. By contrast, less than 12% of the region's woodlands are located in West Yorkshire where nearly 42% of the region's population live.

Over 26% of the region's woodlands have been classified as Ancient, but over half of these have been planted with non-native species in the past. The region contains two notable concentrations of Ancient Woodlands. One spans the boundary between the Howardian Hills Area of Outstanding Natural Beauty and the North York Moors National Park, with a second in South and West Yorkshire where over 50% of all woodlands in some metropolitan districts are classified as Ancient. For a full breakdown of these statistics please see Table 2 on page 39.

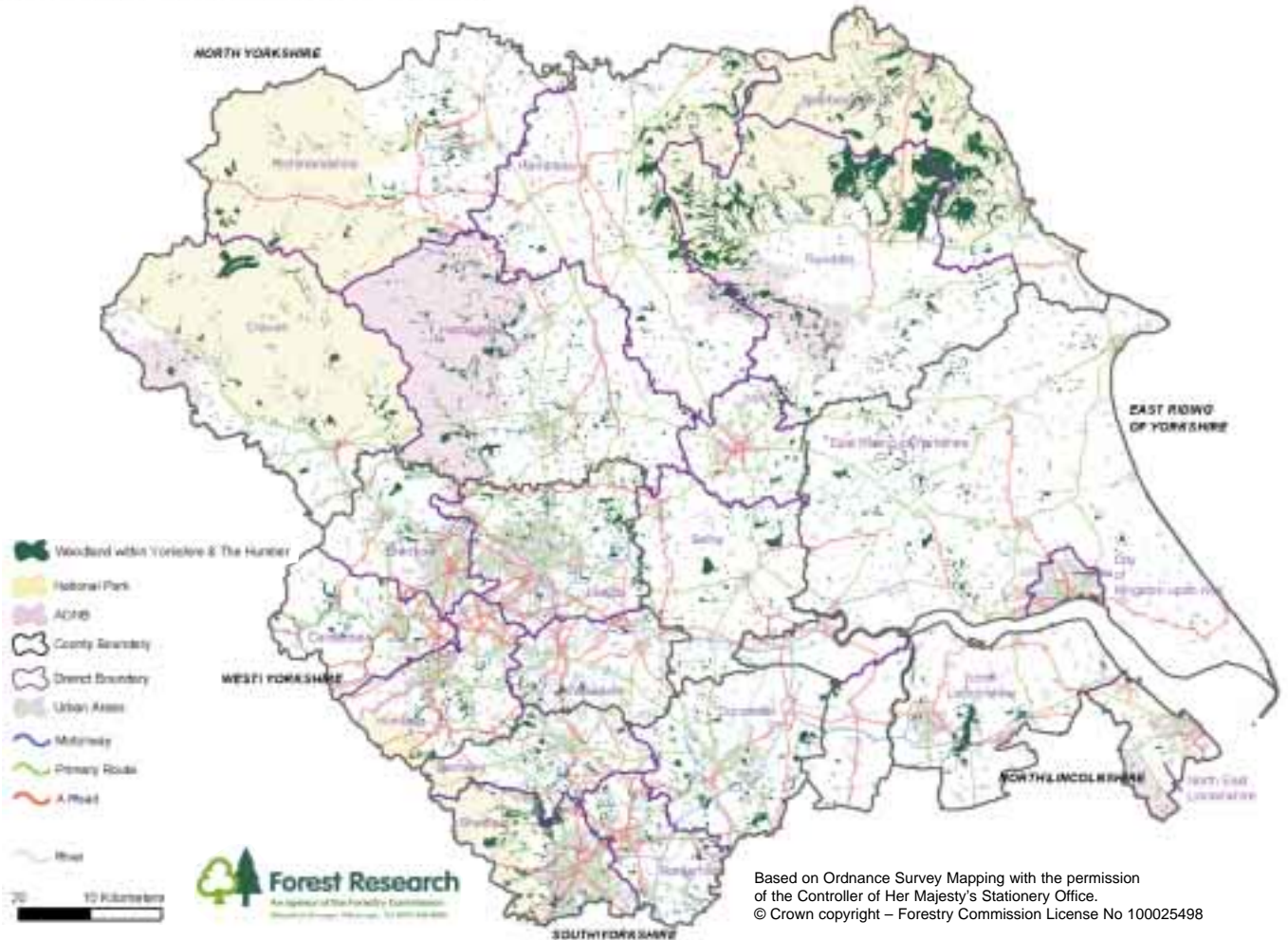
In terms of ownership, one third of the region's woodlands are owned or managed by the public sector and around two thirds are privately owned. Most of the Forestry Commission's current holdings are in North Yorkshire whereas most of the region's population is concentrated in South and West Yorkshire where local authorities are the significant woodland owners.

Tree and Woodland Management

Credit must be given to the long history of active tree and woodland management in many of the private estates in the region. As a result, a high proportion of the region's larger woodlands is under some form of active management. By contrast, most of our small woods are unmanaged.

There is also insufficient replacement planting of individual trees in both urban and rural areas. The 2002 National Inventory of Trees and Woodlands identified that there are more than 2 million trees in the region growing outside woodlands. Ancient or Veteran Trees are particularly important, not only because of their immense

YORKSHIRE & THE HUMBER Distribution of Woodland (2 ha and over)



biodiversity value, but also because of their cultural and historical associations. Our knowledge about such trees is limited but there are particularly notable populations at Duncombe Park National Nature Reserve near Helmsley, and in the surrounding Ancient Woodlands.

There is clear need for priority to be given to the management of our existing trees and woodlands. Part of the management required will include new planting to buffer or link fragmented woodland blocks but, as a general rule, the guiding principle in this respect is:

Guiding Principle 1 – a high priority is given to the management and protection of the region's existing trees and woodlands.

Tree and Woodland Cover

Existing policy within the Regional Spatial Strategy is to increase woodland cover across the region by 500 hectares a year. While it is difficult to justify a particular target figure, this strategy is clear in its overall vision that we need to increase tree and woodland cover across the region. This approach is consistent with both the England Forestry Strategy and the England Biodiversity Strategy. Therefore, the guiding principle advocated by this strategy is:

Guiding Principle 2 – to increase progressively the overall tree and woodland cover in the region but to prioritise new planting in areas where the maximum public benefit can be achieved.

THEME I *Regional Context*

Landscape Character

The landscape that we find today has evolved over hundreds if not thousands of years. It is central to our identity as a region, and is an important historical record in its own right. It reflects the activities of each new generation and, where that activity has damaged or degraded the landscape, trees and woodlands can have the potential to play a very positive role in its restoration and regeneration. Any new tree planting or woodland management resulting from the adoption of this strategy should be sympathetic to the overall character of the landscape. In some places this will mean seeking to maintain or strengthen existing landscape character; in others it may mean seeking to radically improve current landscape quality.

The important elements that make up the different landscapes of the region have been assessed and described in the Countryside Agency's 'Countryside Character Assessment' publication based on the Countryside Agency/English Nature defined Joint Character Areas. The principles of forest design are now well understood, and the technique of Landscape Character Assessment is also well developed, and many parts of the region now have published landscape guidelines. These sources will be used to guide decisions about new planting and woodland management proposals. Therefore, the guiding principle advocated by this strategy is:

Guiding Principle 3 – the overall integrity, character and quality of the region's landscapes are actively maintained and enhanced by new tree planting and woodland management .

Standards of Design and Implementation

The Forestry Commission's 'Guideline' series, produced in conjunction with the relevant partner agencies, covers topics such as Forests and Water, Archaeology, Landscape Design, Soils Conservation, and Nature Conservation. These have been developed over many years and draw on best practice and the experience of experts in each field. Rather than repeat that guidance here, planting and management schemes resulting from this strategy will follow these and other guidelines as they are developed. Therefore, the guiding principle advocated in this strategy is:

Guiding Principle 4 – design and implementation of all new tree and woodland planting or management schemes will adhere to published industry best practice.



These woodlands near Ripon provide part of the setting for a magnificent designed landscape which includes the 17th century Studley Royal Deer Park and 18th century Water Gardens. Originally part of the managed lands around Fountains Abbey which was founded in 1132, the two sites together are owned and managed by the National Trust and were designated as a World Heritage Site in 1987. Attracting over 300,000 visitors a year, they are one of the Trust's most visited properties in the country.

NATIONAL TRUST PHOTOGRAPHIC LIBRARY, ANDREW BUTLER

Historic Environment

The trees and woodlands in the landscape today are a reflection of the way land has been managed and used by each successive generation in the past. Woods have traditionally been areas of intensive human activity, supplying much needed shelter, resources and protection. As a result, our woodlands contain the upstanding and buried remains of a wide variety of past and recent human activity. Due to the relatively undisturbed nature of woodlands high densities of archaeological assets have survived, many of which are Scheduled Ancient Monuments.

Over 200 of the region's Scheduled Monuments are located within the Forestry Commission estate in North Yorkshire, approximately 8% of the region's total in less than 1.4% of region's land area. Other woodlands across the region may reveal similar densities of archaeological assets in the future. It is imperative that this wealth of historical assets is safeguarded when land management change is being considered. Therefore, the guiding principle advocated in this strategy is:

Guiding Principle 5 – the historic environment is appropriately assessed, and historic assets are identified, conserved and enhanced as appropriate as part of any new tree and woodland planting or management scheme.

Cultural Environment

The rich historic environment in many of our woodlands continues to shape and define our cultural identity today. The relationships and stories to be discovered give meaning to many of us about the places in which we live. They help shape our cultural identity and give us a sense of place.

Development of this sense of place gives many people a real feeling of 'ownership' of their local landscape, even though they may not own the land itself. People are wary of change in such circumstances whether it involves new planting or tree felling. That is why it is important to involve and engage with local communities when change is being considered so that they can contribute their local knowledge and have an opportunity to influence the decision making process. As an example, although non-native species may limit the biodiversity interest in some ecologically important woods, before they are automatically removed consideration should be given as

to why they were planted in the first place. The reason may well have importance in the historical and cultural development of that particular locality and this should have a bearing on management decisions about the future of that wood. Therefore, the guiding principle advocated in this strategy is:

Guiding Principle 6 – cultural identity and sense of place are given appropriate weight and consideration in any new tree and woodland planting or management schemes.

Protection and Designation

Yorkshire and The Humber Region has a particularly rich and varied landscape. Approximately 27% of the region is designated for its national landscape value, the highest of any region in England, including all or part of three National Parks and four Areas of Outstanding Natural Beauty. Also, approximately 11% of the region is designated as Sites of Special Scientific Interest, the majority of which are proposed or already support international designation. In addition, many more of our region's trees and woodlands are protected by Tree Preservation Orders, or designated as Sites of Scientific Interest or Local Nature Reserves. All are subject to the provisions of both Felling Licence and Environmental Impact Assessment regulations.

The region also has over 2500 Scheduled Ancient Monuments designated as being archaeological sites of national importance.

Where well-established management plans exist for these protected or designated sites, there will be a presumption that new planting or woodland management schemes will be consistent with them. Therefore, the guiding principle advocated in this strategy is:

Guiding Principle 7 – all new tree and woodland planting or management schemes will be consistent with and further the established priorities for protected sites and designated landscapes.

THEME 2 *Trees, Woods and People*



CALDERDALE MBC

Community volunteers helping to renovate a well used path in an urban fringe woodland

Background

Knowledge and awareness is crucial if we are to understand the historic and cultural significance of our trees and woodlands, their place and importance in the wider landscape, and the many benefits that they offer as a result of informed management. Society will only take full advantage of these many benefits when they are better understood by both the people and the communities who stand to benefit, and by those who set priorities for the allocation of scarce resources.

Our knowledge about the regional tree and woodland resource is limited. Current sources of data include:

- **National Inventory of Trees and Woodlands** – provides a strategic picture about the distribution and broad character of the woodlands across the region but does not include information about individual sites;
- **Ancient Woodland Inventory** – offers more site specific data, but is now somewhat out of date, excludes woodlands less than 2 hectares, and says nothing about their current condition;
- **Woods for People Survey** – presents data on public access to woodlands, but does not yet include any information about the quality of that access or the extent of its usage;
- **Local Record Centres** – hold information about the ecology of individual woodlands, but it is not collated at a regional level and is often not comparable with other data sources in terms of format or content;
- **Public Opinion Surveys** – provide evidence about public support for woodland management for wildlife, recreation and landscape, and also to help combat climate change;
- **Biodiversity Action Reporting System** – provides data on pro-active management at the local level but has only recently been launched;
- **Local Planning Authorities** – hold information on Tree Preservation Orders, woodlands designated as Sites of Scientific Importance, and trees or woodlands under threat from development proposals, but collation of this data at the regional level is limited;
- **Historic Environment Records** – hold information about the archaeological and historic assets of the region. They are located at County level and often have information about the wider cultural associations of these assets and woodlands. County archives are also a good source of historical and cultural information.

The wide range of values that our trees and woodlands represent are not always understood by either those responsible for their management, the communities who use and benefit from them, or local and regional policy makers. This lack of awareness can often lead to adverse consequences, including:

- the neglect of our ancient woodlands and the continuing loss of tree cover to development;
- lack of understanding and support within local communities for necessary woodland management;
- neglect or damage to locally, regionally, and nationally important cultural, historical, archaeological or environmental assets;
- a failure to understand and account for the indirect and long-term economic value of trees and woodlands to society that results from our short term approach to economic decision making.



NIDDERDALE AONB

Young rangers in Nidderdale tree planting



SHEFFIELD CITY COUNCIL, RICHARD GILL

Woodland planting with Whiteways School in Sheffield

THEME 2 *Trees, Woods and People*

A Positive Role for Trees and Woodlands

There is a need to draw together information about our trees and woodlands from all the different sources that currently exist. We need to clarify what we do know and, perhaps more importantly, to identify what we do not know so that we can begin to fill the gaps in our knowledge.

If that knowledge is to allow us to take advantage of the many benefits that trees and woodlands offer, it is crucial that we develop a much better appreciation amongst the policy makers and decision takers about the value and importance of the resource to the region as a whole.

It is also important, however, that those who own, manage or work with trees fully understand the benefits that the resource offers to society. The narrow but understandable national policy emphasis on timber production during much of the last century has perhaps clouded our vision and limited our ambitions. The growing emphasis now on the importance of sustainable development has given a new dimension to the concept of multi-purpose forestry, seeking to balance our wants and needs against those of the generations to come. It is the owners, managers and workers who should be the main advocates for change in the way the region values its trees and woodlands.

Woodlands provide a wide range of benefits, including being an educational resource. There are many excellent

examples within the region where woodlands are used as open-air classrooms using techniques such as 'Earth Education' and the 'Forest Schools' approach. Woodland environments provide a unique educational opportunity to deliver a range of key educational objectives in the fields of ecology, local identity, sustainability and citizenship, as well as in the achievement of wider educational attainment in science, English and mathematics. Such settings also help develop a range of personal skills such as self-confidence and self-reliance. We need to encourage and so increase this type of activity significantly if we are to secure the interest and support of future generations.

We also need to continue to engage more with the general public and develop a stronger sense of community self-interest across all sectors of society about the future of their local trees and woodlands. This can be achieved through the development of life-long learning opportunities about the value and importance of our trees and woodlands, and by broadening the skills base and knowledge about traditional crafts as a means of promoting involvement in the management of the resource.

Advocating a change in the way the region values its trees and woodlands can be successful if we can win broad support amongst the public. Most people already have a close affinity with trees. This strategy seeks to convert this affinity into a strong groundswell of support for a change in the way the future of our trees and woodlands is prioritised.



A meeting of the Ancient Tree Forum discusses the importance and future management of one of the Ancient Trees at Studley Royal, a World Heritage Site.

NIDDERDALE AONB

Theme 2 – Trees, Woods and People

Strategic Aim – To ensure the benefits provided by the region’s trees and woodlands are understood, recognised and valued

OBJECTIVE 2.1

Understanding the Resource – to gain a better understanding about the distribution, function and condition of trees and woodlands across the region in order to facilitate better informed decision making about priorities for management

Desired Outcomes	Priority
a) Improved co-ordination of existing data and information about the region’s trees and woodlands	2
b) Gaps in our knowledge about the region’s trees and woodlands are filled by targeted research and survey work	2

OBJECTIVE 2.2

Education and Awareness – to ensure that tree and woodland issues contribute fully to the region’s Education for Sustainable Development programme so that the future of our trees and woodlands are given a higher priority by all sectors of society

Desired Outcomes	Priority
a) Increased awareness and understanding amongst the region’s policy makers and decision takers about tree and woodland issues and their contribution to sustainable development in the region	1
b) Increased awareness and understanding amongst those who own, manage or work with trees and woodlands about the wider benefits they offer to society as a whole	2
c) Increased use of the region’s trees and woodlands as a resource and venue for education, interpretation, lifelong learning and skills training	2

OBJECTIVE 2.3

Community Engagement – to enhance existing community understanding and engagement with trees and woodland to develop an inclusive community involvement in the future management of their local environment

Desired Outcomes	Priority
a) Increased and inclusive community engagement in decision making about the management of their local trees and woodlands where appropriate	2
b) Increased and inclusive community engagement in the understanding, care and management of their local trees and woodlands where appropriate	2

THEME 3 Sustainable Forestry



FORESTRY COMMISSION

Softwood processing at Deffer Wood in Kirklees, West Yorkshire. Small scale sawmilling still provides an important source of income and employment in some parts of the region.

Background

Sustainable development is about ensuring a better quality of life for everyone, now and for generations to come. The internationally agreed definition is **'development which meets the needs of the present without compromising the ability of future generations to meet their own needs'** (Brundtland, 1987). The principle of sustainability is particularly relevant to forestry because trees and woodlands offer a wide range of benefits over a very long time span.

In 1999 the Government published 'A Better Quality of Life: a strategy for sustainable development in the UK' and, to support this, a national set of 15 'headline' indicators of sustainability has been established. Within the region, progress towards achieving sustainable development is assessed against the measures outlined in the Regional Sustainable Development Framework.

Within the field of forestry there have been a number of notable milestones:

- the 'UK Forestry Standard', published in 1998, established a comprehensive benchmark for sustainable forestry practice in this country;
- the 'UK Woodland Assurance Standard', published in 1999, provides an internationally agreed standard for certification of wood and wood products derived from sustainably managed woodlands. This has encouraged the growth of an added value market for certified timber;
- the 'UK Indicators of Sustainable Forestry', published in 2002, provide a measure of the sustainability of the woodland resource itself and the way in which it is managed.

Forestry in this country has a long history of addressing sustainability challenges. Over-exploitation before and during the First World War led to the creation of the Forestry Commission in 1919 with the primary purpose of re-establishing a strategic reserve of timber. That remained the principal objective for a significant proportion of the last century and led to the establishment of many of the country's conifer forests.

Increasing international trade in timber together with changes in exchange rates have undermined the financial sustainability of the United Kingdom forestry industry. In 2000 the United Kingdom imported approximately 85% of our total wood and wood product needs, a figure that had been progressively falling for several decades until the recent sharp decline in the price of imported timber.

In 2001/02 coniferous roundwood production in the region was approximately 270,000 tonnes a year, and hardwoods between 10,000-25,000 tonnes. This timber resource helped support approximately 320 businesses, wholly or partly dependent on home grown timber, and 1840 full time equivalent jobs. The recent decline in timber prices is thought to have reduced these figures significantly, and with that reduction our ability to effectively manage the resource in the future has also been affected.

Although the direct contribution of trees and woods to the overall regional economy is modest, it is a key sector in some rural areas, particularly where forest-based tourism and recreation is developing strongly. It is estimated that there were over 43 million visits to woodlands in the region in 1998, and the aggregate value of this and other social and environmental benefits to the region's economy is over £80million per year. Woodland related tourism and recreation is calculated to contribute £47million to this figure, with landscape benefits (£11m), biodiversity (£1.9m) and carbon sequestration (£3.5m) comprising the remainder. Because of the difficulties in calculating these non-market benefits, many of these values are thought to be conservative, particularly those relating to climate change benefits like carbon sequestration.

A Positive Role for Trees and Woodlands

Much of the extensive coniferous forests in the region are located in and around the North York Moors. There is limited softwood sawmilling and processing capacity locally and much of the timber produced has to be transported to markets outside the region. Not only does this mean the potential to add value to this growing timber resource is lost, but the relative isolation of the plantations and the limited road infrastructure in the area means costs are relatively high and the net value of standing timber is relatively low. Nevertheless, because the majority of the region's conifer forests were planted after 1950, regional production of timber has not yet reached its peak. Over the next 20 years the potential production of softwood will increase to around 340,000m³ a year, presenting a significant economic opportunity in some of the less prosperous rural areas.

A significant proportion of the country's timber is imported through the Humber ports but most is then transported to processing plants outside the region. The presence of this large volume of timber passing through the region presents a specific opportunity for processing capacity to be developed near the ports, adding value within the region and potentially providing a market for regionally grown timber in the future.

The region contains a nationally significant hardwood sawmilling cluster that provides a market for locally grown hardwoods. The expertise associated with this specialist sector and its associated furniture making industry presents opportunities in parts of North and South Yorkshire.

Recognition of the importance of reducing our reliance on non-renewable energy sources presents an opportunity to develop a strong woodfuel market within the region. There are an increasing number of small-scale woodfuel boilers, and the major power generators are increasingly looking for co-firing material in order to meet their Renewables Obligations. Although much of this material will come from biomass crops, there is potential for a significant proportion to be generated through the sustainable management of new and existing woodlands. This issue is explored further in Theme 7: Climate Change.

There is also a small but growing market for other non-timber products from our woodlands, including charcoal, foliage and food products.



The Winter Gardens, Sheffield. The use of timber in construction is increasing and can make a dramatic visual impact.

RICHARD KEENAN

THEME 3 *Sustainable Forestry*



FORESTRY COMMISSION

Round wood production within the region is predicted to continue to increase until about 2020.

The growing importance of woodlands and woodland-related recreation within the tourism sector is addressed within Theme 4. Woodland-based leisure and recreation can be a strong driver of the local economy in rural areas, but also in urban and urban fringe areas. With regard to the latter, the need for greater woodland access to help address health and health inequality issues is acknowledged within Theme 6, and the need to create a better environment where people live and work is addressed within Theme 4. This diversification away from a concentration on the timber processing aspects of forestry is opening up new woodland-related employment opportunities to a wider cross-section of society, including disadvantaged groups. It is also helping to make the forestry sector more sustainable in the long-term by opening up new revenue streams to support the traditional timber-based woodland economy.

The challenge perhaps is to ensure that these additional revenue streams feed back into supporting the costs of woodland management and are not seen as completely

separate from the woodland resource that underpins their generation. There is still a need to manage the trees themselves if these wider benefits are to be realised, and the production of timber as a sustainable resource is a growing imperative in the face of climate change. It is important to recognise the continuing important role of timber in supporting the costs of woodland management and, although the region cannot control the international timber trade, it can seek to influence the regional timber market through promotion and marketing, skills training and business advice. The current economic climate is posing a serious threat to the future of the forestry sector within the region. Without their skills and expertise it will be extremely difficult to deliver the aims and objectives of this strategy. Therefore, the retention of a viable and vibrant forest industry is a real sustainability issue that the region needs to address.

Theme 3 – Sustainable Forestry

Strategic Aim – A sustainably managed regional tree and woodland resource supporting the retention and development of a viable and vibrant forestry sector, and contributing to the overall sustainable development of the region

OBJECTIVE 3.1

Sustainability – the region's tree and woodland resource, and the associated industry, are recognised as contributing positively to the overall sustainable development of the region

Desired Outcomes	Priority
a) Improved regional performance against the national Indicators of Sustainable Forestry	1
b) Increased proportion of the region's woodlands achieve United Kingdom Woodland Assurance Scheme (UKWAS) certification	2
c) Enhanced performance by both the forestry sector and the region's tree and woodland resource against all the different measures outlined in the Regional Sustainable Development Framework	1

OBJECTIVE 3.2

Forest and Wood Products – to build on the regional strengths and encourage the continued development of an active market for both traditional and innovative forest products in order to contribute fully to the economic prosperity of the region

Desired Outcomes	Priority
a) Increased timber sawmilling and processing capacity adding value within the region	2
b) Increased demand for regionally produced wood products	2
c) A growing market for non-forest products	3
d) Increased contribution by the forestry sector to the changing rural economy	2

OBJECTIVE 3.3

Support Mechanisms – to ensure that support mechanisms are in place in order to maintain a resilient and innovative forest industry sector

Desired Outcomes	Priority
a) A comprehensive business development advisory service is available to the sector	1
b) A flexible regional forestry sector resulting from improved knowledge and skill levels	1
c) A more viable forest industry resulting from increased co-operative working	3

THEME 4 **Creating a Setting**



FORESTRY COMMISSION, BRIAN WALKER

The Keldy Cabin complex in North Yorkshire is an important component of the growing tourism industry within the North York Moors National Park

Background

Yorkshire and The Humber is a region of marked contrasts. On the one hand, industry and urban development dominate large parts of the landscape of West and South Yorkshire, as well as areas around the Humber estuary. On the other hand, much of North and East Yorkshire is rural, and agriculture is by far the dominant land use.

Many of the towns and cities are characterised by high densities of development with limited green space and an intimate mix of housing and industry. Many of the traditional industries like coal, steel and textiles contracted or declined during the latter part of the 20th Century leaving some areas blighted by dereliction and neglect. Despite this, pressure for new development has continued to grow, increasing still further the pressure on a natural environment already impoverished by industrial pollution. It is only in recent years that redevelopment of brownfield land has been a high priority within the planning system.

In the more rural areas, a high proportion of the land area is nationally designated for its landscape value, and leisure activities and tourism are significant drivers of the local economy. Trees and woodlands contribute significantly to many of these rural landscapes and are a particularly important component in the National Parks and Areas of Outstanding Natural Beauty. In the North York Moors National Park in particular the woodlands themselves are an important part of the increasingly important leisure and tourism industry.



FORESTRY COMMISSION

A Positive Role for Trees and Woodlands

Even before the establishment elsewhere in the country of new towns like Telford and Milton Keynes, it had long been recognised that a green and attractive environment was a positive attraction for investors. The South Yorkshire Forest Partnership has attracted significant European funding to demonstrate just how important attractive environments are in investment decisions.

Tree and woodland planting can transform the local landscape. This is recognised in some of the urban renaissance projects across the region, and woodland creation is playing a significant part in the reclamation of former colliery sites in South Yorkshire. A good environmental setting is now almost a pre-requisite for large or multinational companies because of the positive image that it portrays. In order to compete successfully in the international investment market, we need to significantly improve the natural environment in and around areas zoned for development as part of a comprehensive approach to regeneration.

Public expectations about their local environment have also changed over the years. People now expect a pleasant well-treed environment within which to live and work, with noisy or intrusive works, or major transport infrastructure, effectively screened from housing and public open spaces. Significant planting has taken place alongside both the new A1/M1 link-motorway in West Yorkshire, and the Leeds-York mainline railway to reduce the noise, pollution and visual intrusion of these major transport routes. It is important that initiatives like these continue. Not only do they transform the local landscape, they also help to develop new woodlands in some of the areas of greatest need.

The natural environment is also important because it provides the setting for leisure activities and tourism. As well as helping to define some of our more attractive landscapes, woodlands also have the capacity to accommodate significant numbers of people without appearing crowded, and to host adventurous and sometimes noisy sports without impacting unduly on the wider landscape. There are also good examples in the region of woodland management to support leisure and tourism objectives. The redevelopment of the Forestry Commission's Keldy Cabin complex in North Yorkshire, and the proposed new visitor centre, car parking and cycle trails at Dalby Forest represent a projected investment of over £9m. This level of investment is based on income from tourism now running at more than £1 m a year from the North York Moors Forest District, in excess of that derived from timber sales.



THE WAKEFIELD DISTRICT REACT PROGRAMME



Theme 4 – Creating a Setting

Strategic Aim – To utilise the many environmental strengths of trees and woodlands to underpin the economic and social renaissance of the region

OBJECTIVE 4.1

Attractive Environments for Economic and Social Benefit

– to enhance the setting for investment and community regeneration within the region through enhancing the environments where people live and work

Desired Outcomes	Priority
a) Investment is increased by environments made more attractive through tree and woodland planting and management	2
b) Existing employment and infrastructure development is better integrated into the local landscape through tree and woodland planting and management	2
c) The reclamation of derelict and underused land is made more sustainable through tree and woodland planting and management	1
d) Housing areas are made more attractive places to live through tree and woodland planting and management	2
e) Town centres and public spaces are made more attractive places to use through tree and woodland planting and management	2

OBJECTIVE 4.2

Attractive Environments for Leisure, Recreation and Tourism

– to enhance the landscape of the region and provide attractive settings for leisure, recreation and tourism

Desired Outcomes	Priority
a) The leisure, recreation and tourism experience of the wider landscape of the region is enhanced through appropriate tree and woodland planting and management	2
b) Increased promotion, management and sustainable use of the region's woodlands for leisure, recreation and tourism	2

THEME 5 *Natural Environment*



ROGER HENSON

Trees and woodlands are an important component of the Wharfedale landscape near Bolton Abbey in the Yorkshire Dales National Park

Background

The 2003 biodiversity strategy for England, 'Working with the grain of nature', includes the following vision – 'woodland and forests, managed and created to enhance both woodland and non-woodland species and habitats, that at the same time provide sustainable goods, environmental services and recreational benefits enhancing people's quality of life.' Although this vision is focussed on woodlands and forests, the importance of individual trees to many of the indicators and targets should not be under-estimated.

Progress in delivering the woodland element of the England Biodiversity Strategy is being measured against the following five wildlife-related indicators and objectives. The sixth indicator relates to public enjoyment of woodland and that subject area is addressed elsewhere in the strategy.

1. Woodland Birds – to reverse the decline in woodland bird populations.

Of the thirty three woodland bird species monitored nationally, populations fell by 15% between 1970 and 2002. The national target is to reverse this trend by 2020.

In contrast to the national trend, of the fourteen bird species found in our region the population of twelve actually increased and only one declined in the period 1994 to 2002.

2. Condition of Woodland Sites of Special Scientific Interest (SSSI) – to increase the proportion of SSSI designated land supporting woodland habitats which is in favourable or recovering condition.

The national target is to bring 95% of all nationally designated Sites of Special Scientific Interest into favourable or recovering condition by 2010. Nationally, woodland habitats comprise nearly 10% of the area designated and of this 70% was in favourable or recovering condition as at the end of 2004. This compares to 66% for all SSSIs.

In the Yorkshire and Humber region, 3783ha of woodland are designated as SSSI. As at the end of 2004 77% was in favourable or recovering condition, the remainder being assessed as unfavourable.

3. Status of woodland Biodiversity Action Plan priority species and habitats – to reduce the proportion of priority species and habitats for which status is unknown, and to arrest and ultimately reverse the decline in woodland priority species and habitats.

Six woodland Habitats Action Plans and sixty four associated Species Action Plans were established following publication of the UK Biodiversity Action Plan in 1994. A Habitat Action Plan for lowland mixed broadleaved woodland has been added subsequently. The main causes of habitat loss and decline are reasonably well understood but the current status of 50% of the priority woodland habitats and 39% of the associated species are still not known.

The national targets for restoration and expansion of priority woodland habitats have been broken down into regional targets based on an assessment of opportunity within each of the Natural Areas in the region.

4. Trends in woodland plant diversity – to improve the quality of woodland habitats by maintaining and enhancing plant diversity in broadleaved woodlands.

Nationally, plant species diversity in broadleaved woodland declined by 12% between 1990 and 1998, including species indicative of Ancient Woodland. This is thought to be as a result of a combination of pollution, nutrient enrichment, grazing, and lack of appropriate management including lack of control of alien invasive species.



TERRY WESTON

Willow Tit is one of the woodland bird species that is continuing to decline within our region

This finding is based on repeat surveys of a number of plots in broadleaved woodland across England. Some of those plots are located within our region but the small sample size does not allow regional trends in woodland plant diversity to be derived.

5. Area of Ancient Woodland – to maintain the area of ancient woodland.

Ancient Semi-Natural Woodland and Plantations on Ancient Woodland Sites make up 30% of the total woodland resource in England, and approximately 26% in our region. Ancient Woodland is important because it has been continually wooded since 1600, is a refuge for woodland plants, fungi, invertebrates and other species that cannot adapt to different environmental conditions, and contains ancient unmodified soil profiles. Ancient woodland is irreplaceable but losses to development or through neglect are still being suffered.

A Positive Role for Trees and Woodlands

The increasing emphasis on priority habitats and species has focussed attention on the diverse range of woodland types found within the region. A regional biodiversity audit has been published and the development of a regional biodiversity action plan is under consideration for the future. Local Biodiversity Action Plans have served to confirm the importance of these different woodland habitats to local people as well as raising the profile both of Ancient Woodlands and Ancient or Veteran Trees. They have also highlighted species action plans relevant to the woodlands of the region, including for example red squirrel, black grouse, yew and juniper, and have served to emphasise the national importance some of our existing woodland habitats such as the Upland Ash Woodlands in the Yorkshire Dales National Park.

Populations of woodland birds are generally on the increase in our region. We need to develop a better understanding about the reasons why that is the case in order to be able to continue that positive trend into the future.

We also need to prioritise the restoration of woodland Sites of Special Scientific Interest to a favourable condition, and develop a better understanding of the current status of all priority woodland habitats and species in our region. Only then will we be able to meet our international biodiversity obligations for woodland habitat restoration and expansion.

Table I Regional Targets for Restoration and Expansion of Priority Woodland Habitats

Habitat	Restoration Target	Expansion Target
Upland oakwood	Restore damaged or degraded upland oakwood: 240ha by 2010	Increase total area through planting and natural regeneration: 510ha by 2015
Upland mixed ashwood	Restore damaged or degraded upland mixed ashwood: 385ha by 2010	Increase total area through planting and natural regeneration: 500ha by 2015
Wet woodland	Restore damaged or degraded wet woodland: 50ha by 2010	Increase total area through planting and natural regeneration: 300ha by 2015
Lowland wood pasture and parkland	Restore former or degraded parkland: 50ha by 2010	Begin expansion: 10 key sites by 2012
Ancient and/or species-rich hedgerows	Secure sympathetic management of 50% of remaining resource by 2005, 100% by 2010	All Natural Areas have significant potential for the establishment of new hedgerows
Lowland mixed deciduous woodland	Awaiting regional targets	

THEME 5 *Natural Environment*



NORTH YORK MOORS NATIONAL PARK

Bluebells in a TPO protected Ancient Woodland in the North York Moors National Park

The restoration of Ancient Woodlands, particularly those planted with non-native species, offers a significant opportunity to deliver biodiversity gain. It is also important to target other native woodlands where information is already held, including designated sites such as Sites of Scientific Interest (or their equivalent) and woodland Local Nature Reserves, or woodlands protected by Tree Preservation Orders.

We also need to gain a better understanding about the region's ancient or veteran trees, and historic orchards, not only because of their biodiversity importance but also because of their cultural significance. This country contains a significant percentage of the total European resource of ancient trees and yet information about their distribution, numbers and condition is far from complete.

Woodlands are increasingly viewed as part of the overall, landscape scale biodiversity of the region. This has served to confirm that proper regard must be given to wider biodiversity issues when new plantings are planned. It is also reflected in the start of a process to remove inappropriate plantations on Ancient Woodland sites and threatened heathland habitats, and to an increased recognition of the importance of open ground habitats within woodlands.

Although the management of existing woodland is a high priority, woodland habitat expansion is also needed and there is a strong case for this to be focussed on improving links between, and increasing the core area of, Ancient Woodlands and other native woods. We need to minimise fragmentation and maximise connectivity both between individual woodlands, and between woodlands and other semi-natural habitats, thereby creating more functional habitat networks in the wider landscape.

These landscape scale biodiversity issues are also reflected in the priorities identified in Local Biodiversity Action Plans. They often include a strong preference for the use of native tree and shrub species in new plantings, and they also express concern about the damage caused by alien and invasive species. Plants like Japanese Knotweed and Himalayan Balsam can suppress native flora when they become well established. Animals such as the grey squirrel and some species of deer can out-compete their native equivalents and cause significant damage to trees and ground flora.

Theme 5 – Natural Environment

Strategic Aim – To achieve maximum biodiversity gain for the region through appropriate tree and woodland planting and management that takes account of the needs of all species and habitats

OBJECTIVE 5.1

Ancient and Native Trees and Woodland – to secure the ecological sustainability of the region's existing tree and woodland resource

Desired Outcomes	Priority
a) Distribution and status of woodland bird species is better understood within the region, and populations are maintained or enhanced	2
b) Woodland Sites of Special Scientific Interest are maintained or brought into favourable or recovering condition	1
c) Distribution and status of priority woodland habitats and species within the region is established, and regional targets derived from the national woodland habitat and species action plans are met	1
d) Woodland Sites of Scientific Interest are assessed, and maintained or brought into favourable or recovering condition	2
e) The area of Ancient Woodland is maintained and this irreplaceable resource is assessed and, if necessary, restored to favourable or recovering condition	1
f) The overall condition of other protected, designated or native woodlands is assessed and, where possible, maintained or enhanced (eg woodland Tree Preservation Orders and Local Nature Reserves)	3
g) The region's ancient or veteran trees, and historic orchards, are identified, conserved and enhanced	2

OBJECTIVE 5.2

Regional Biodiversity – to ensure that tree and woodland planting and management makes a positive contribution to the overall biodiversity of the region

Desired Outcomes	Priority
a) The region's ecosystems are enhanced through tree and woodland planting and management decisions that take account of the needs of biodiversity at the landscape scale	2
b) Improved delivery of Local Biodiversity Action Plans through targeted tree and woodland planting and management	2
c) The use of native species for tree and woodland planting in both rural and urban areas is promoted as appropriate	3
d) The presence of alien invasive species in woodland habitats is assessed, and controlled or reduced	3

THEME 6 **Healthy Environments**



Woodland walk at Newmillerdam Country Park, Wakefield

FORESTRY COMMISSION

Background

Since the publication of the 1999 white paper 'Saving Lives: Our Healthier Nation', the national health agenda has been focussed not only on tackling the major killer diseases, but also on addressing the large health inequalities that exist across the country and promoting greater awareness about healthy behaviours.

The rising incidence of obesity and stress related illnesses are reflections of our pressured but increasingly sedentary lifestyles. A major part of the government's approach is to persuade people to take greater responsibility for their own wellbeing through messages such as the need for healthy diets and more physical exercise. Lack of regular exercise is now recognised as being a major contributory factor in many types of ill-health, and the increasing dislocation between the natural environment and people's daily lives only exacerbates the problem.

Our region is near the bottom of many national league tables for issues such as life expectancy and disease incidence. Around 25% of the region's population are clinically obese, and the rate is rising faster than elsewhere in the country.

There are also marked contrasts within the region in terms of health inequalities, with parts of West and South Yorkshire and The Humber sub-regions having significantly worse statistics than many of the rural areas of North Yorkshire. For example, the incidence of circulatory disease in Barnsley, Hull and Rotherham is 60% higher than in Ryedale.

A Positive Role of Trees and Woodlands

While people may accept the need to take more regular exercise, for many that only becomes a reality when it can be taken in a stimulating and interesting environment. Research suggests that for many people woodlands are a desirable setting in which to take exercise because they offer aesthetic enjoyment in a sheltered natural environment.

English Nature has developed a theoretical model for the provision of accessible natural greenspace based on research relating the benefits of contact with the natural environment to the distance people are able or prepared to travel. This Accessible Natural Greenspace standard has been refined further by the Woodland Trust and developed into the Woodland Access Standard which provides guidance on a desirable level of provision for accessible woodland.

It has been shown that increased access to and awareness of the cultural and historic environment improves the quality of life for individuals and communities. Also, repeat visits are more likely where they involve participation in an event or activity in a woodland setting and, where that activity is focussed on the care and management of the woodland and its environment, a sense of ownership and community engagement develops.

Trees and woodlands also offer the opportunity of contact with nature in what might otherwise be a largely barren urban setting, and an increased awareness about the historic and cultural environment often preserved within woodlands. This helps the overall development of a sense of place and identity, and helps reduce the stress of urban living.

However, some people perceive woodlands as an unsafe or even alien environment and are reluctant to use or explore woodlands as a result. It is important that accessible woodlands are made as safe as possible when the footpaths and other infrastructure are being designed. It is also important to give people more confidence to explore and learn about woodland environments for instance through the provision of guided walks or having staff on site.

In addition, trees and woodlands provide 'air conditioning' benefits such as the filtering of pollutants, providing shade, and regulating humidity levels, as well as attenuating noise from road traffic.

Theme 6 – Healthy Environments

Strategic Aim – To help the region address issues of ill-health by maximising the contribution of trees and woodlands, particularly in areas of greatest health inequalities

OBJECTIVE 6.1

Facilitating Healthier Lifestyles – contribute to the region’s targets for increased levels of physical activity through providing increased opportunities for woodland recreational access

Desired Outcomes	Priority
a) More opportunities for physical recreation through increased woodland access opportunities for all near to where people live	1
b) Increased use of woodlands for physical recreation through greater provision of facilitated and guided access	3
c) People become more physically active through increased involvement, where appropriate, in the care and management of their local woodlands	2

OBJECTIVE 6.2

Creating Healthier Living Environments – contribute to an overall reduction in ill-health statistics within the region through the creation of well-treed and wooded environments near to where people live, work and play

Desired Outcomes	Priority
a) Communities in urban areas are brought closer to nature through increased tree and woodland cover	2
b) Atmospheric pollution in urban areas is reduced through increased tree and woodland cover	3
c) Reduced noise and atmospheric pollution along transport corridors through increased tree and woodland cover	3
d) Increased shade and humidity levels in urban areas through increased tree and woodland cover	3
e) Increased access to and awareness of the natural, cultural and historic environment in woodlands to improve the sense of place and identity for individuals and communities	3



TONY BARTHOLOMEW

Cycling in Dalby Forest. Cycling is an increasingly popular sporting and recreational pursuit, and is being boosted by a multi-million pound investment programme to create an extended network of routes at Dalby

THEME 7 *Climate Change*



FORESTRY COMMISSION: CRISPIN THORN

The new wood fuel boiler at the RSPB's Old Moor Visitor Centre in South Yorkshire

Background

It is now widely accepted that climate change is the most serious issue facing the planet and significant changes to the earth's climate will occur within the next few decades. Work by the United Kingdom Phenology Network suggests that already the onset of spring is now two to three weeks earlier than it was 30 years ago, and autumn is now about one week later.

In Yorkshire and The Humber region, worst case scenarios indicate that by 2080 average temperatures will rise by about 4°C, and precipitation will decrease in the summer by up to 60% but increase in the winter by up to 30%. Sea level rises of up to 70cm could lead to low lying coastal areas being inundated, and increasing storminess will exacerbate flood risk in vulnerable river catchments. For our region, the floods in autumn 2000 provided a powerful 'wake-up' call by illustrating the scale of the problem we may be faced with in the future.

The threat posed is being addressed in two ways:

- mitigation measures
 - to slow down the process of climate change;
- adaptation measures
 - to cope with the effects of that change.

Principal amongst mitigation measures is the attempt to reduce greenhouse gas emissions. The current Government target is to reduce emissions by 20% by the year 2010, a target also adopted by our region within the Regional Economic Strategy. However, the 2003 Energy White Paper proposes an even more ambitious target of 60% emissions reduction by 2050. It is thought that even this ambitious target will only stabilise atmospheric greenhouse gases just below the level where climate change could become dangerous and destructive.

A Positive Role of Trees and Woodlands

This strategy considers not only how trees and woodlands might contribute to the region's developing Climate Change Action Plan, but also what measures might be needed to protect the region's tree and woodland resource, and its associated habitats, from the effects of climate change.

There are six key areas where trees and woodlands have a positive role to play:

- **Wood as a source of renewable energy** – woodfuel, including short rotation coppice, replacing fossil fuels as a source of energy reduces net greenhouse gas emissions if the trees are replanted thus helping the region move towards a low carbon economy;
- **Woodland for carbon sequestration** – trees remove carbon from the atmosphere and store it as they grow, and the volume of carbon stored can be influenced by woodland management practices. Although the carbon stored in the country's entire forest estate is only equivalent to one year's carbon emissions, it is recognised that planting trees for carbon sequestration would help buy time while more comprehensive long-term solutions are developed to reduce carbon emissions;

- **Wood as a sustainable material** – it is now recognised that wood is a more sustainable material than concrete, steel and glass because of the much higher greenhouse gas emissions associated with the production and processing of those other materials. However, when wood decays it releases the stored carbon back into the atmosphere as CO₂ and it is therefore important to prolong the useful life of wood and wood products by recycling where possible;
- **Woodland as a means of alleviating the threat of flooding** – trees can reduce the speed of rainfall run-off in both river catchments and urban areas through increasing rainfall interception and enhancing storage capacity in soils. Woodland can also increase the flood storage capacity of floodplains and slow down the passage of flood flows as they move downstream, as well as helping to reduce river sediment loads in areas vulnerable to soil erosion. If modelled at the catchment scale to ensure that flooding and other problems are not merely displaced, trees and woodlands have the potential to reduce our reliance on expensive, engineered flood defences. The potential role of trees and woodlands in helping to reduce flood risk within the region will be examined in detail through the Environment Agency's Catchment Flood Management Planning process;
- **Trees and woodlands to manage water supplies** – trees and woods can increase the rate at which water percolates into the ground when compared to most other land uses. Appropriate woodland planting could potentially have a positive effect on groundwater recharge on the chalk soils in the east of the region where water supplies are already under threat. By contrast, research suggests there can be a negative impact from woodland planting on sandy soils, and short rotation coppice of willow or poplar on wet soils has been demonstrated to reduce water yields by 50% or more. Therefore, any reasonably large scale planting in areas where groundwater resources are limited will need to be undertaken in accordance with the Environment Agency's Catchment Abstraction Management Strategies;
- **Trees and woodlands to ameliorate local micro-climates** – in addition to the other 'air conditioning' benefits from trees mentioned in Theme 6, trees and woodlands can reduce energy consumption in buildings by up to 10% through increasing shade in summer and shelter in winter. These ameliorating effects will become increasingly important as the pace of climate change accelerates.



CALDERDALE MBC

Erosion from flash flooding at Ogden Water in Calderdale. Localised flash flood events seem to have increased in frequency in recent years.

THEME 7 *Climate Change*



ENGLISH NATURE. PETER ROWORTH

Flooding in the Vale of York. Large scale flood events are likely to become an increasing problem if climate change predictions become a reality.

Climate change also poses significant threats to our trees, woodlands and associated habitats:

- **Habitat changes** – as the climate changes so existing ecosystems will come under increasing threat from rising temperatures and changing rainfall patterns. Larger woodlands and woodland networks, linked to other semi-natural habitats, will provide the best opportunities for wildlife to adjust to the changing ecological landscape by providing a greater diversity of habitats within a relatively sheltered woodland environment;
- **Pests and diseases** – increased storminess and winter flooding together with more frequent summer droughts will increase stress for trees on vulnerable sites and make them more susceptible to attack from pests and diseases. This region is particularly vulnerable to exotic pests and diseases because of the volume of timber imported through the Humber ports;
- **Species and provenance selection** – future tree planting and woodland creation will not only need to consider existing site conditions, but also how those conditions will probably change during the lifetime of the trees being planted. Species and provenance selection will need to change accordingly.



WOODLAND TRUST. ALISTAIR NASH

Theme 7 – Climate Change

Strategic Aim – To help the region combat climate change through maximising the contribution of trees and woodlands

OBJECTIVE 7.1

Slowing the Rate of Change

– to contribute to a reduction in the region’s net greenhouse gas emissions.

Desired Outcomes	Priority
a) Increased use of wood and wood biomass as a source of renewable energy	1
b) Reduced net greenhouse gas emissions through increased tree and woodland planting for carbon sequestration	3
c) Increased levels of carbon stored in the region’s trees and woodlands through improved management	3
d) Increased use of timber as a sustainable building material	2
e) Increased recycling of wood and wood based products	3

OBJECTIVE 7.2

Coping with Change – to help the region adapt more successfully to changing climatic conditions

Desired Outcomes	Priority
a) Regional flood risk is reduced through increased woodland creation in river catchments	2
b) Improved sustainability of urban drainage systems through increased tree and woodland planting in the region’s towns and cities	3
c) Regional flood risk is reduced through increased woodland creation on floodplains	1
d) Water supplies are better protected through appropriate tree and woodland planting	3
e) Energy consumption in our towns and cities is reduced through the positive micro-climate impacts of increased tree and woodland planting	2
f) Ancient and native woodlands are made more resilient to the impacts of climate change through increased tree and woodland planting to buffer and link vulnerable sites	1
g) The biodiversity of the region is made more resilient to the impacts of climate change through increasing the range of woodland and open ground habitats within a sheltered woodland environment	2
h) The tree and woodland resource is made more resilient to the impacts of climate change through more considered species and provenance selection	3
i) Tree pest and disease problems are maintained at their current low levels through continued effective prevention and control measures	2

THEME 8 **Delivering the Strategy**



THE WAKEFIELD DISTRICT REACT PROGRAMME

If we are to maximise the many benefits from our woodlands we will need to retain a viable and vibrant forestry sector within the region

The successful delivery of this strategy is essential for the future of the trees and woodlands in the region. It aims to influence all parts of the public sector that have an interest in trees and woodlands and the benefits they bring. The strategy also aims to influence the private sector, both the owners of trees and woodlands and the industries that support and depend on their management.

Primarily this strategy is about maximising public benefit from the region's trees and woodlands. Therefore securing the support and involvement of all sectors of society will be fundamental to its success.

Partnership Working

The region can point to many examples of broad based, successful tree and woodland partnerships, as well as a significant number of local woodland initiatives stretching back over many years. Examples include:

- the South Yorkshire Forest Partnership, one of the national Community Forests;
- the three sub-regional woodland partnerships – Heywoods in Hull and East Yorkshire, Yorwoods in North Yorkshire, and the White Rose Forest in West Yorkshire;

- local partnership projects such as Freshney Forest in North East Lincolnshire, New Leaf in Wakefield, and the Forest of Bradford.

It is notable that many of the more successful tree and woodland partnerships have involved active community engagement. Examples include:

- the Colne Valley Tree Society which celebrated its 40th birthday in 2004 and has planted over 30 hectares of upland oak wood in the past 7 years;
- the Treeresponsibility group from the South Pennines who organise tree planting events that regularly attract more than 50 members of the public;
- active volunteer groups in areas like Calderdale in West Yorkshire where over 100 volunteers contribute in excess of 2000 volunteer days a year;
- Tree Warden schemes in areas like Nidderdale where 30 volunteer rangers are actively engaged in survey and tree planting schemes.

This level of involvement reflects the strong 'pride of place' to be found across the region and the strong public interest in tree and woodland issues. This volunteer involvement is drawn from all sectors of society and it is important that this inclusive approach continues to be fostered and promoted.

It is not only those who have a direct interest in the care and management of trees and woodlands who recognise their importance and are already working in partnership to maximise the public benefits they offer. There is also a broad range of other partnerships where it is recognised that the regional tree and woodland resource can make a positive contribution to the future sustainable development of the region. Examples include:

- the Sustainable Construction Forum – established to promote a more sustainable approach to building and construction, including the use of renewable and lower whole-life cost materials such as timber;
- the Regional Energy Forum – established to assist the region in the delivery of greenhouse gas emission reduction targets, including through the use of renewable energy sources such as wood fuel;
- the Regional Environment Forum – formed in 2001 to co-ordinate and represent the views of a wide range of organisations whose interest is the enhancement of the environment within the region.

All sectors of society have a vested interest in the region's trees and woodlands. A strong regional tree and woodland resource benefits everyone, regardless of social or economic circumstance. An inclusive, participatory approach to the future management of the resource is essential. Not only will this achieve broad support and ownership of the aims and objectives advocated in the strategy, it will also act as a catalyst for all sectors of society to become more involved in understanding and caring about their local environment, including those who for social or cultural reasons may not have been involved in the past.



WOODLAND TRUST

Woodland Planting at Swinacote

Table 2 Woodland Cover and Population by Local Authority District and Sub-Region

SUB REGION	Local Authority	Local Authority Area (ha) ¹	Total Woodland Area (ha) ²	Area of Ancient Woodland (ha) ³	Overall Woodland Cover (%)	Population Cover (1000s) ⁴	Woodland (hectares per 1000 people)
SOUTH YORKSHIRE	Barnsley	32,905	2431.1	1355.4	7.4	218	11.2
	Doncaster	56,852	3313.9	963.8	5.8	288	11.
	Rotherham	28,653	1955.2	983.8	6.8	249	7.9
	Sheffield	36,795	3765.0	1357.5	10.2	512	7.4
	Sub-Region Total	155,205	11465.2	4660.5	7.4	1267	9.0
WEST YORKSHIRE	Bradford	36,642	1580.6	651.9	4.3	473	3.3
	Calderdale	36,392	1866.0	867.1	5.1	193	9.7
	Kirklees	40,860	2299.4	1102.5	5.6	389	5.9
	Leeds	55,173	3659.0	730.4	6.6	717	5.1
	Wakefield	33,861	1238.7	525.5	3.7	316	3.9
	Sub-Region Total	202,928	10643.7	3877.4	5.2	2088	5.1
HUMBER	East Riding	249,696	5569.6	266.1	2.2	318	17.5
	Hull	8,149	22.1	0.0	0.3	241	0.1
	North Lincolnshire.	87,561	2985.9	262.7	3.4	154	19.4
	North East Lincolnshire	20,356	293.7	67.7	1.4	158	1.9
	Sub-Region Total	365,762	8871.3	596.5	2.4	871	10.2
YORK & NORTH YORKSHIRE	Craven	117,881	4515.1	1445.7	3.8	54	83.6
	Hambleton	131,124	7916.5	1352.0	6.0	85	93.1
	Harrogate	130,913	7339.7	1979.6	5.6	151	48.6
	Richmondshire	131,867	5000.2	1326.7	3.8	48	104.2
	Ryedale	150,659	20485.4	4861.8	13.6	51	401.7
	Scarborough	82,653	10789.1	2316.8	13.1	107	100.8
	Selby	60,222	2617.2	1036.4	4.3	78	33.6
	York	27,201	997.7	225.0	3.7	182	5.5
	Sub-Region Total	832,520	59660.9	14544.0	7.2	756	78.9
REGIONAL TOTALS		1,556,415	90641.1	23678.4	5.8	4982	18.2

Data Source ¹ Yorkshire Futures (based on census data)
² National Inventory (Forestry Commission, 2002)

³ Ancient Woodland Inventory (Carter, 1987)
⁴ Office for National Statistics Regional Trends 38, 2002

THEME 8 *Delivering the Strategy*

Regional Co-ordination

'Advancing Together' provides a high level strategic framework for the region as a whole and it is crucial that there is meaningful co-ordination between all the different policy agendas which impact on or draw benefit from the regional tree and woodland resource. To this end, both the Yorkshire and Humber Assembly and Yorkshire Forward have formally endorsed this strategy, and the support and commitment of other regional agencies and organisations has also been expressed.

Funding will come from a variety of sources, both public and private. It is important that those funding streams are co-ordinated and work to a common set of priorities in order to achieve synergy for the region as a whole.

This strategy provides a framework for delivery through to 2020. The planting and management of trees and woodlands requires long term commitment. Owners and managers need to be confident that the region is pursuing a consistent, long-term strategic vision for trees and woodlands in Yorkshire and The Humber. Leadership therefore will be crucial both for promoting the common agenda represented by this strategy and for co-ordinating its delivery.

Action Planning, Monitoring and Review

The strategy will be implemented by means of an Action Plan encompassing both:

- an indicative long-term outline for the delivery of all the aims and objectives over the lifetime of the strategy;
- a more detailed annual work programme that will identify exactly what will be done, when, and by whom.

The Action Plan will focus initially on the high priority outcomes but, as the process develops, it will set out detailed actions for the delivery of the lower priority outcomes as well. As it develops, the Action Plan will also establish targets for each outcome to enable progress to be assessed, and to facilitate an annual review of the short-term work programme.

During the lifetime of the strategy circumstances may well change and new opportunities will almost certainly arise. It is essential therefore that the strategy itself is subject to a periodic review to ensure that the aims, objectives and outcomes remain both appropriate. This formal review process will take place every five years.



Theme 8 – Delivering the Strategy

Strategic Aim – To achieve effective and efficient implementation of the aims and objectives of the strategy.

OBJECTIVE 8.1

Partnership Working – to ensure that lessons are learned and examples of best practice from within and outside the region are shared

Desired Outcomes	Priority
a) The adoption of a broad-based, inclusive partnership approach to implementation results in wide support for the aims and objectives of the strategy, involving all sectors of society	2
b) Future decision making is informed by best practice from both current and past regional tree and woodland initiatives, and from examples from outside the region	2
c) Fully inclusive community engagement in regional, sub-regional and local tree and woodland partnerships is encouraged and facilitated	2

OBJECTIVE 8.2

Regional Co-ordination – to ensure that all agencies and organisations who have an interest in the region's trees and woodlands are committed to the aims and objectives of the strategy

Desired Outcomes	Priority
a) Policy development within the region is both co-ordinated and integrated to ensure that the Regional Forestry Strategy both supports and is supported by related policy agendas	1
b) Funding streams are properly co-ordinated and integrated to ensure the delivery of the agreed regional tree and woodland priorities	1
c) Decisions on planting and management are better informed through the co-ordinated involvement of agencies, organisations and other partners who can contribute knowledge and expertise to the process	1
d) Delivery and review of the strategy is advocated, co-ordinated and monitored at an appropriate level to ensure regional added value is achieved	1

Glossary

Alien invasive species

A species that is not native to this country, and can spread vigorously within a locality and suppress or displace native species – examples include Japanese Knotweed and Himalayan Balsam

Ancient or Veteran Trees

The term ancient tree is one that is not capable of precise definition but it encompasses trees defined by three guiding principles: trees of interest biologically, aesthetically or culturally because of their age; trees in an ancient stage of their life; trees that are old relative to others of the same species. A veteran tree can be defined as a tree that is of interest biologically, aesthetically or culturally because of its age, size or condition.

Ancient Semi-Natural Woodland (ASNW)

An Ancient Woodland that contains a significant proportion of native species

Ancient Woodland

Woodland that has been in continuous existence since 1600

Arboriculture

The management and cultivation of individual trees or groups of trees

Biodiversity

The total variety of life, including all genes, species and habitats

Biodiversity Action Plan (BAP) An action plan to protect or enhance biodiversity (see also Local Biodiversity Action Plan)

Biomass

Plant material used as a source of energy

Brownfield land

Land that has previously been built on

Carbon sequestration

The process of removal of carbon from the atmosphere, in the context of this strategy through the action of growing trees

Climate Change

Climate refers to the average weather experienced over a long period, typically 30 years. This includes temperature, wind and rainfall patterns. The climate of the Earth is not static, and has changed many times in response to a variety of natural causes. The term 'climate change' usually refers to changes that have been observed since the early 1900s and has come to refer more specifically to those changes caused by man

Co-firing material

Material, such as biomass, burnt in power stations in mixture with coal or other fuels

Connectivity

The degree to which a species can move between habitats having similar characteristics. Connectivity is most affected by how far apart favourable habitats are and if there are barriers or filters to movement between them.

Countryside Character Areas

Character Areas reflect the natural and cultural dimensions of the landscape in terms of landscape, wildlife and natural features

Environmental Impact

Assessment (EIA) Assessment of the impact of a planned activity on the environment

Favourable or recovering

condition Terms applied to the condition of Sites of Special Scientific Interest – favourable condition is defined as being when the site is being adequately conserved and is meeting its conservation objectives; recovering condition is defined as being where a site has all the necessary management conditions in place and, provided the recovery work is sustained, the site will reach favourable condition in time

Felling licence

A licence to fell growing trees under the Forestry Act 1967, administered by the Forestry Commission

Forestry

The management of predominantly tree covered land (woodland) whether in large tracts (generally called forests) or smaller units (known by a variety of terms such as woods, copses and shelterbelts)

Forestry sector

Taken to encompass all parts of the woodland and forest industries sector, including tree, timber and fibre resource production and utilisation; tree-based services such as tree nurseries, forest management consultancy, tree operations and timber haulage, education and training; woodland based recreation and tourism; primary and secondary timber processing, including energy generation, paper production and craft activities; and the timber trading sector, including timber importing

Fossil fuels

Fuels derived from fossilised deposits such as coal, oil and gas

Green space

Areas of land dominated by natural vegetation, such as formal parks, sports pitches, woodlands, nature reserves etc., usually applied to such areas within the urban environment

Greenhouse gas

Carbon dioxide, and some other gases, can absorb infrared radiation emitted by the earth's surface thus increasing the temperature of the atmosphere. The effect is analogous to the heating effect occurring in greenhouses where radiant heat is trapped by the glass

Habitat network

The connections between places or habitats within which species of animals or plants live create a habitat network. As habitats become smaller and ever more isolated by urban development or intensive agriculture so species that require large areas for their survival are lost and there is a reduction in the ability of remaining populations to survive threats such as disease, flooding or other climate change impacts

Health inequalities

A phrase used to describe the concept that the health of communities varies from one locality to another, quite often as a result of different environmental, economic or social factors

Landscape scale biodiversity

The concept that habitat networks need to be viewed at the landscape scale if biodiversity resilience in the face of climate change is to be achieved

Local Biodiversity Action Plan (LBAP)

An action plan to protect or enhance the biodiversity of a locality, usually a local authority area (e.g. 'Calderdale's Natural Heritage', the LBAP for Calderdale in West Yorkshire)

Local Nature Reserve (LNR)

Areas designated by local authorities, in consultation with English Nature, under S.21 of the National Parks and Access to the Countryside Act 1949

Natural Areas

Biogeographic zones identified by English Nature which reflect the geological foundation, the natural systems and processes, and the wildlife in different parts of England.

Non-forest products

Non-timber related products derived from woodlands and forests, including charcoal, foliage or food products

Non-market benefits

Benefits from an economic activity that do not accrue to the person or organisation controlling that activity. These benefits accrue to the general public, and people cannot normally be charged for their individual consumption of these goods.

Planted Ancient Woodland Site (PAWS)

Ancient Woodland sites that have been planted with non-native species of trees, whether they be conifer or broadleaved species

Priority habitats

Habitats identified within the England Biodiversity Strategy as requiring priority attention for action

Priority species

Species identified within the England Biodiversity Strategy as requiring priority attention for action

Renewable energy

Energy derived from renewable sources such as solar energy, wind power or woodfuel

Scheduled Ancient Monument (SAM)

An archaeological monument that is included in the Schedule required to be maintained by the Secretary of State under Section 1 of the Ancient Monuments and Archaeological Areas Act 1979. Such monuments are protected by law

Short rotation coppice

Coppice management is the management of trees based on regeneration by re-growth from cut stumps. Short rotation coppice is the application of this management technique over a limited number of years, usually in the region of 3-6 years, with a view to producing material suitable for chipping and use as woodfuel

Silviculture

The techniques of tending and regenerating woodlands, and harvesting their physical products

Site of Scientific Interest (SSI)

This is a designation made by the local Planning Authority after consultation with experts and the regional office of English Nature. It is used to identify sites of local importance which complement nationally designated areas. Can also be known as Sites of Ecological and Geological Interest (SEGI) or Sites of Importance for Nature Conservation (SINC).

Sites of Special Scientific Interest (SSSI)

An area of land or water notified under the Wildlife and Countryside Act 1981 as being of special natural, geological or conservation importance, and are the best examples of our natural heritage

Social inclusion

An approach adopted to ensure that all sectors of society have access to services, opportunities for employment, or are included in decision making about issues or activities which might affect their lives

Species Action Plans

Individual action plans targeted at protecting or enhancing the conservation status of an individual species

Sustainability Appraisal

The process of assessing whether a policy, plan or project is sustainable. For Yorkshire & Humber Region all regional policies are subject to an assessment using the Regional Sustainable Development Framework

Tree Preservation Order (TPO)

An order made by a Local Planning Authority under the Town and Country Planning Act 1990 which makes it an offence to cut down, uproot, prune, damage or destroy the tree or trees in question without permission. A Tree Preservation Order can apply to a single tree, a group of trees or a woodland

Water Framework Directive

The European Directive requiring man-made pressures on the water environment to be assessed and managed in an integrated way

Woodfuel

Wood or wood based products (eg wood chip, sawdust etc) used to create energy, either in the form of heat through burning in a boiler or through the generation of electricity through gasification or other processes

Key references

- ANCIENT TREE FORUM (2004). *Ancient trees in the UK: Securing their future*. Woodland Trust, Grantham.
- BROADMEADOW, M. (ed.) (2002). *Climate Change: Impacts on UK Forests*. FC Bulletin 125. Forestry Commission, Edinburgh.
- COUNTRYSIDE AGENCY (2005). *The countryside in and around towns. A vision for connecting town and country in the pursuit of sustainable development*. Countryside Agency, Cheltenham
- DEFRA (2003). *A Biodiversity Strategy for England. Measuring progress: baseline assessment*. DEFRA Publications, London
- DEFRA (2003). *Working with the Grain of Nature – a biodiversity strategy for England*. DEFRA Publications, London.
- DEFRA (2004). *The Rural Strategy*. DEFRA Publications, London
- DEFRA (2005). *Making Space for Water. Taking forward a new Government strategy for flood and coastal erosion risk management in England. First response to the autumn 2004 consultation exercise*. DEFRA Publications, London
- DETR (2000). *Climate Change: The UK Programme*. HMSO, London.
- ECOTEC RESEARCH AND CONSULTING LTD. (2005). *Energy Forum Foundation Study Update (2003 data)*. Yorkshire and Humber Regional Energy Forum, Leeds
- ENGLISH NATURE (2002). *State of the SSSIs Report – Yorkshire and Humber*. English Nature, Peterborough.
- ENVIRONMENTAL AGENCY (2003). *Strategy for Flood Risk Management (2003/4 – 2007/8)*. Environment Agency, London.
- FORESTRY COMMISSION (1998). *England Forestry Strategy*. Forestry Commission, Edinburgh.
- FORESTRY COMMISSION (2002). *National Inventory of Woodland and Trees. England. Regional Report for Yorkshire and the Humber*. Forestry Commission, Edinburgh.
- FORESTRY COMMISSION (2003a). *Sustainable Forestry in the UK – The UK's National Forest Programme*. Forestry Commission, Edinburgh.
- FORESTRY COMMISSION (2003b). *Public Opinion of Forestry 2003: England*. Forestry Commission, Edinburgh.
- FORESTRY COMMISSION (2003c). *Forests and Water Guidelines, 4th edition*. Forestry Commission, Edinburgh.
- FORESTRY COMMISSION (2004). *Woods for People: woodland access, a review and inventory*. Forestry Commission, Cambridge
- FORESTRY COMMISSION (2004). *Sustainable Forestry in brief: Woodland and our changing climate*. Forestry Commission, Edinburgh.
- FORESIGHT (2004). *Future Flooding*. Office of Science and Technology, London.
- GOVERNMENT OFFICE FOR YORKSHIRE AND THE HUMBER (2003). *Farming and Food, A Framework for Change*. GOYH, Leeds.
- GOVERNMENT OFFICE FOR YORKSHIRE AND THE HUMBER (2004). *Our Region Our Health: A Regional Strategic Framework for Public Health in Yorkshire and The Humber*. Regional Public Health Group, Leeds.
- GOVERNMENT OFFICE FOR YORKSHIRE AND THE HUMBER (2005). *Yorkshire and The Humber Rural Framework: Developing Regional Rural Priorities*. GOYH, Leeds.
- HENWOOD, K. (2002). *Environment and health: is there a role for environmental and countryside agencies in promoting benefits to health?* Health Development Agency, London
- MAFF (2000). *England Rural Development Programme 2000-2006 – Appendix A3 Yorkshire and the Humber Region*. MAFF, London.
- NATIONAL NON-FOOD CROPS CENTRE (2004). *Wood fuel heating for public buildings*. NNFCC, York
- NORTHERN WAY STEERING GROUP (2004). *Moving Forward: The Northern Way – First Growth Strategy Report*
- NORTHERN WAY STEERING GROUP (2005). *Moving Forward: The Northern Way – Action Plan Progress Report*
- OFFICE OF THE DEPUTY PRIME MINISTER (2003). *Sustainable communities in Yorkshire and The Humber: building for the future*. ODPM, London
- PRIME MINISTER'S STRATEGY UNIT (2002). *Game Plan: a strategy for delivering the Government's sport and physical activity objectives*. Cabinet Office, London.
- SELMAN, R., DODD, F., & BAYES, K. (1999). *A Biodiversity Audit of Yorkshire & The Humber*. Y&H Biodiversity Forum.
- SPORT ENGLAND (2004). *Yorkshire Plan for Sport 2004-2008*. Sport England, Leeds
- SPORT ENGLAND (2005). *Yorkshire Participation Survey 2005*. Sport England, Leeds
- THE ROYAL COMMISSION ON ENVIRONMENTAL POLLUTION (2002). *Energy – The Changing Climate*. The Royal Commission on Environmental Pollution, London.
- UKCIP (2002). *Climate Change Scenarios for the United Kingdom. The UKCIP02 Briefing Report*. University of East Anglia, Norwich.
- WILLIS, K. G. et al (2003). *The Social and Environmental Benefits of Forests in Great Britain*. Centre for Research in Environmental Appraisal and Management, University of Newcastle.
- WOODLAND TRUST (2004). *Space for People: Targeting action for woodland access*. Woodland Trust, Grantham.
- YORKSHIRE & HUMBER ASSEMBLY (2001). *Regional Planning Guidance for Yorkshire and the Humber to 2016*. YHA, Wakefield.
- YORKSHIRE & HUMBER ASSEMBLY (2003). *Building the Benefits: Y&H Regional Sustainable Development Framework – Update 2003-05*. YHA, Wakefield.
- YORKSHIRE & HUMBER ASSEMBLY (2004). *Advancing Together – The Vision and Strategic Framework for Yorkshire and Humber*. YHA, Wakefield.
- YORKSHIRE & HUMBER REGIONAL ENVIRONMENTAL FORUM (2003). *Enhancing the Region's Environment*. Y&H Regional Environmental Forum, York
- YORKSHIRE CULTURE (2001). *Deep Roots, Real Achievements, Lofty Ambitions*. Yorkshire Culture, Wakefield
- YORKSHIRE FORWARD (2002). *Regional Economic Strategy – Ten Year Strategy for Yorkshire & Humber 2003-2012*. Yorkshire Forward, Leeds.
- YORKSHIRE FORWARD (2002). *Tourism – Yorkshire and Humber Tourism Action Plan*. Yorkshire Forward, Leeds.
- YORKSHIRE FORWARD (2005). *Regional Economic Strategy 2003-2012 – Progress Report January 2005*. Yorkshire Forward, Leeds.
- YORKSHIRE FUTURES (2004). *Advancing Together: High Level Regional Indicators*. Yorkshire Futures, Leeds.
- YORKSHIRE FUTURES (2004). *Advancing Together: Progress in the Region 2004*. Yorkshire Futures, Leeds.

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The process has also been supported by a large number of national and regional organisations through their involvement in the Regional Woodland Forum, the membership for which is detailed on the Regional Forestry Strategy webpages (<http://www.goyh.gov.uk>).

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