

North York Moors National Park

Management Plan

A WIDER VIEW

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Special Qualities of the North York Moors

Great diversity of landscape; sudden dramatic contrasts associated with this. Wide sweeps of open heather moorland; distinctive dales, valley and inland headlands. An abundance of forest and woodland; ancient trees and woodland rich in wildlife. Special landforms from the Ice Age; exceptional coastal geology. Majestic coastal cliffs and sheltered harbours; distinctive coastal headlands. A special mix of upland, lowland and coastal habitats; a wide variety of wildlife dependent on these. Settlements which reflect their agricultural, fishing or mining past; locally distinctive buildings and building materials. Long imprint of human activity; a wealth of archaeology from prehistory to the 20th Century. A rich and diverse countryside for recreation; an extensive network of public paths and tracks. Strong religious past and present; ruined abbeys and ancient churches. Strong feeling of remoteness; a place for spiritual refreshment. Tranquillity; dark skies at night and clear unpolluted air. Distinctive skills, dialects, songs and customs; strong sense of community and friendly people. A place of artistic, scientific and literary inspiration; a heritage of authors, artists, scientists and explorers.

Welcome...

...to the North York Moors National Park – a special landscape rich in character and distinctiveness, wildlife history and heritage. Cared for and about equally by those who live or work here, those who visit, and also by those who don't, but just want to know that it is alive and well.

The sea breeze and heather; the curlew's rallying call above yellow daffodils; the smell of damp leaves underfoot upon the earth in autumn. A place where, after 60 years as a National Park, the ethos of harvesting the wonders, enjoying the productivity, and planning for the needs of future generations whilst still respecting the limits and rhythm of nature, has become a culture and a special quality in itself. A careful way of working. A code for sustainability. Something I hope you can use and carry with you when you leave for wherever you are going.

Jim Bailey Chairman, North York Moors National Park Authority

66 This National Park takes a wider view 99



66 Ambitious positive outcomes **99**

66 Production while caring 99

Preface



The National Park Management Plan is the strategic framework for the future of the National Park. The high quality environment and friendly communities that exist today are a reflection of the way in which this unique place has been looked after over the years. Without the care of its communities, farmers, land managers and visitors the National Park would not be the place it is now, and the future of the Park is dependent on continuing this careful way of working. This Management Plan is pursuing a new and innovative approach by looking at the pressures facing the National Park and society as a whole and the services that the Park can provide. These services include the production of food, the provision of opportunities for improving health and wellbeing and responding to the effects of a changing climate, as well as the more traditional ones of wildlife and landscape. Responding to the challenges of climate change will include ensuring that the Park's important habitats are well connected. The public and partners have been involved in considering how we should address these wide ranging issues. The Plan contains the results of new research and investigation into what the Park currently provides and we have tried to answer the question: what should the Park be producing? This Plan is for everyone whether they live in, work in, visit or simply value the National Park. It is hoped that in five years time, through the dedication of everyone involved in looking after the Park and those who live in and visit the Park, we will be well on the way to meeting the long term aims set by the Plan. There will be more woodland in the Park, more food will be being produced and more people will be experiencing the opportunities for leisure and recreation that the Park has to offer. Importantly, the North York Moors will still be valued by many for its remoteness and tranquillity and the environment will still be as exceptional as it is today, continuing to justify its existence as a National Park.

Contents



Context **1.1** The North York Moors National Park Vision and Special Qualities of the North York Moors 7 1.2 What is the Management Plan? 1.3 **1.4** How the Management Plan Relates to Other Plans and Strategies **1.5** Why Review the Management Plan? **1.6** Benefits from Moorland, Woodland, Farmland and Coast Sustainable Development 1.7 Pressures for Change 1.8 1.9 How the Management Plan will be Delivered

6

6

9

10

12

12

14

14

17

2	Environment	22
2.1	Landscape	22
2.2	Historic Environment	25
2.3	Habitats and Wildlife	30
2.4	Tranquillity	38
2.5	Geodiversity	42
2.6	Air Quality	44
2.7	Soils	46
2.8	Moorland	48
2.9	Trees and Woodlands	50
2.10	Rivers and Streams	55
2.11	Coastal and Marine Environment	58
3	Understanding and Enjoyment	63
3.1	A Sustainable Growth in Visitors for the	
	National Park	63
3.2	Enjoying the Park	64
3.3	Promoting the Park	71
3.4	Understanding the Park	73

4	Business and Land Management	78
4.1	Tourism	78
4.2	Agriculture	82
4.3	Forestry and Woodland	88
4.4	Moorland Shooting	90
4.5	Lowland Shooting	92
4.6	Local Businesses	94
4.7	Fishing	93
5	Communities	100
5.1	Involvement	10
5.2	Culture and Traditions	10
5.3	Facilities	10-
5.4	Housing and New Development	10
5.5	Transport	10
5.6	Energy	11
J. 0		
5.7	Waste Management	11.

1. Context

1.1 The North York Moors National Park

National Parks worldwide are special places. National Parks in the United Kingdom have led the way in recognising the historic impact of humans on the natural environment. The National Parks and Access to the Countryside Act 1949 sought to make sure that our most beautiful and distinctive landscapes are protected for future generations to enjoy. The North York Moors is a place where nature and history inspire each other. It was designated as a National Park in 1952 and comprises 1,436 square kilometres of a rich variety of landscapes, habitats and buildings ranging from the largest tract of unbroken heather moorland in England to spectacular coastline, historic villages and large areas of woodland. It is home to around 25,000 residents who contribute to the culture, communities, upkeep and evolution of the National Park. There are large urban communities to the north of the Park in Teesside and the smaller towns of Whitby and Scarborough to the east.

The statutory purposes of National Parks, as set out in the 1995 Environment Act, are to:

 Conserve and enhance the natural beauty, wildlife and cultural heritage of the Park
 and

Promote opportunities for the understanding and enjoyment of the special qualities of the Park by the public. **9**

In pursuing these two purposes the 1995 Act also places a duty on National Park Authorities 'to seek to foster the economic and social well being of local communities'. In addition, the 1995 Environment Act makes it a duty for all 'relevant authorities' working in the National Park such as public agencies, the County Council, District Councils and Parish Councils to have regard to the National Park purposes. The Management Plan is therefore important not only for the National Park Authority but for all organisations who operate within or have an impact on the National Park. The vast majority of land and other property in the National Park is in private ownership and supports farming, recreation and other business activity. The purposes of National Parks and the aspirations and objectives for its management can only be achieved by engaging and working with these interests.

The Government's priorities for National Parks are set out in the National Parks Circular which focuses on five key outcomes for 2010 – 2015¹:

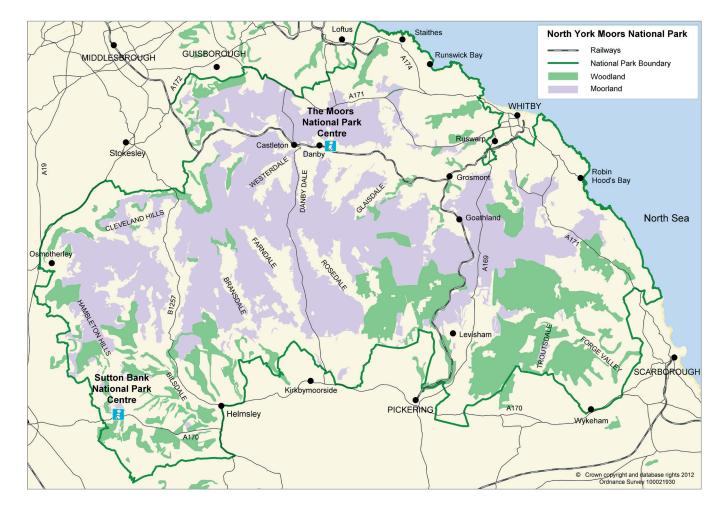
- A renewed focus on achieving the Park purposes;
- Leading the way in adapting to and mitigating climate change;
- A diverse and healthy natural environment, enhanced cultural heritage and inspiring lifelong behaviour change towards sustainable living and enjoyment of the countryside;
- Foster and maintain vibrant, healthy and productive living and working communities;
- Working in partnership to maximise the benefits delivered.

DEFRA has recently reaffirmed the priorities for National Park Authorities as being to implement the statutory purposes and to contribute towards achievement of the priorities outlined in the Circular, and to also contribute to rural growth and support the delivery of the Natural Environment White Paper. Beyond its scenic beauty the National Park is a place where people can learn about tackling environmental challenges for example developing sustainable land management practices and delivering environmental services such as the provision of clean water and the storage of carbon.



¹ English National Parks and the Broads – UK Government Vision and Circular 2010 (DEFRA, 2010)

Map 1: North York Moors National Park



1.2 Special Qualities of the North York Moors

Vision

A vision for England's National Parks to 2030 which all those with an interest in the National Parks are encouraged to work towards is set out in the National Parks Circular as follows:

'By 2030 English National Parks and the Broads will be places where:

- There are thriving, living, working landscapes notable for their natural beauty and cultural heritage. They inspire visitors and local communities to live within environmental limits and to tackle climate change. The wide range of services they provide (from clean water to sustainable food) are in good condition and valued by society.
- Sustainable development can be seen in action. The communities of the Parks take an active part in decisions about their future. They are known for having been pivotal in the transformation to a low carbon society and sustainable living. Renewable energy, sustainable agriculture, low carbon transport and travel and healthy, prosperous communities have long been the norm.
- Wildlife flourishes and habitats are maintained, restored and expanded and linked effectively to other ecological networks. Woodland cover has increased and all woodlands are sustainably managed, with the right trees in the right places. Landscapes and habitats are managed to create resilience and enable adaptation.
- Everyone can discover the rich variety of England's natural and historic environment, and have the chance to value them as places for escape, adventure, enjoyment, inspiration and reflection, and a source of national pride and identity. They will be recognised as fundamental to our prosperity and well being.'

Context

The vision for the North York Moors was developed as part of the consultation on the last Management Plan but its aspirations are still relevant. Some small but important additions have been made for this Plan. The vision is a long term view of the type of place that the National Park should be. The objectives of the Management Plan and activities of the National Park Authority and other organisations working in the National Park should help towards achieving the vision:

- A place managed with care and concern for future generations
- A place where the diversity and distinctiveness of the landscape, villages and buildings is cherished
- A place where biological and cultural diversity, and other special qualities are conserved and enhanced
- A place where the environment and way of life is respected and understood
- A place where communities are more self sustaining and economic activity engenders environmental and recreational benefits
- A place that is special to people and that provides pleasure, inspiration and spiritual well being; where calm and quality of life are celebrated
- A place where visitors are welcome and cultural and recreational opportunities and experiences are accessible
- A place that continues to adapt to change whilst National Park purposes continue to be furthered and pursued
- A place where natural resources are managed sustainably and environmental limits are recognised

The second National Park purpose refers to the promotion of opportunities for 'the understanding and enjoyment of the special qualities'. The special qualities have been defined as:

Great diversity of landscape Sudden dramatic contrasts associated with this

Wide sweeps of open heather moorland *Distinctive dales, valley and inland headlands*

An abundance of forest and woodland Ancient trees and woodland rich in wildlife

Special landforms from the Ice Age Exceptional coastal geology

Majestic coastal cliffs and sheltered harbours Distinctive coastal headlands

A special mix of upland, lowland and coastal habitats *A wide variety of wildlife dependent on these*

Settlements which reflect their agricultural, fishing or mining past Locally distinctive buildings and building materials Long imprint of human activity A wealth of archaeology from prehistory to the 20th Century

A rich and diverse countryside for recreation An extensive network of public paths and tracks

Strong religious past and present *Ruined abbeys and ancient churches*

Strong feeling of remoteness *A place for spiritual refreshment*

Tranquillity Dark skies at night and clear unpolluted air

Distinctive skills, dialects, songs and customs Strong sense of community and friendly people

A place of artistic, scientific and literary inspiration A heritage of authors, artists, scientists and explorers

1.3 What is the Management Plan?

The National Park Management Plan sets out the vision, strategic policies and outcomes for the National Park over the long term. It is a Plan for the National Park, its communities, businesses, visitors and organisations and will require all who have an interest in the National Park to work together to achieve its aspirations. It will ensure that National Park purposes are being delivered whilst contributing to the aims and objectives of other strategies for the area. This Management Plan is different from its predecessors in that it more clearly recognises the outputs and role of key industries and begins to tackle the question of what the National Park can produce to meet society's needs whilst ensuring the achievement of National Park purposes.

The Management Plan:

- identifies aims for the National Park;
- agrees policies to achieve these;
- lists the mechanisms and identifies key partners to achieve the policies and targets;
- sets clear targets and identifies potential capacity in some areas; and
- refers to the range of State of the Park indicators to inform its conclusions and ensure monitoring



1.4 How the Management Plan Relates to Other Plans and Strategies

The Management Plan takes forward national and local policies and other strategies within the framework of National Park purposes and duty along with local circumstances. It sets the context for other documents relating specifically to the National Park such as the Local Development Framework and Local Biodiversity Action Plan. The policies in the Management Plan will also help to inform both national and other local strategies, for example those produced by the constituent local authorities.

'The Natural Choice' White Paper² outlines the Government's vision for the natural environment over the next 50 years. The four key themes of the White Paper are:

- Protecting and improving our natural environment;
- Growing a green economy;
- Reconnecting people and nature; and
- International and European Union leadership.

National Park Authorities are already delivering many of the ambitions set out in the White Paper, for example through their work with volunteers and schools, working with partners on biodiversity, cultural heritage and local food and adopting an ecosystems services approach. Ecosystem services are defined as services provided by the natural environment that benefit people. In the National Park these include provision of drinking water, clean air, food production, open space for recreation, sense of place, sense of history and a place for inspiration. The Plan also takes account of the European Landscape Convention which establishes a framework for landscape management. The policies, plans and strategies of other organisations dealing with specific topic areas have been taken into account. These include plans such as the Uplands Policy Review, Marine Policy Statement and Biodiversity 2020 (the England Biodiversity Strategy), and locally the Yorkshire and Humber Historic Environment Strategy, Heritage Coast Management Plan, Catchment Flood Management Plans and Community Strategies. The following 'themes' can be identified from the five community based strategies developed by the local authorities covering the National Park:

- Conserve and enhance biodiversity, natural and built environments and cultural heritage;
- Reduce the risk and mitigate against the impact of flooding;
- Reduce carbon emissions and adapt to and plan for climate change;
- Encourage physical activity through use of green infrastructure;
- Increase visitor numbers especially in off peak months;
- Support apprenticeships/local skills, enterprise and local businesses;
- Improve accessibility and access to public transport including community transport;
- Improve communications infrastructure; and
- Maintain and improve access to services and support and grant aid for village facilities and community activities.

The Authority publishes a Business Plan setting out how it will allocate resources to deliver its share of the Management Plan over a three year period in the light of commitments by its partners. Strategies and plans on specific topics have also been published by the Authority since the last Management Plan including:

- North York Moors Local Development Framework
- Recreation and Access Strategy
- Communications Strategy
- Biodiversity Action Plan
- Education Strategy

This Management Plan identifies new strategies and plans which will be prepared over its lifetime. Some existing plans and strategies will be reviewed or replaced over the lifetime of the Plan.

The Management Plan therefore interacts with a range of partners' plans and strategies to help achieve its aims. These are supplemented by bilateral agreements and protocols on delivery which relate to specific outcomes.

² The Natural Choice: Securing the Value of Nature (DEFRA, 2011)

How the National Park Management Plan relates to other plans and strategies

1995 Environment Act (National Park Purposes) and National Park Circular

International and national policies and legislation, e.g. EU Habitats Directive, Soil Strategy for England, European Landscape Convention North York Meens National Park Management Plan Agreements and protocols between the National Park Authority and partners

National Park Authority's Business Plan

Other National Park Authority strategies and action plans

Corporate plans of partner organisations

Regional, sub regional and local plans and strategies, e.g. Local Transport Plans, Sustainable Community Strategies North York Moors Local Development Framework including Core Strategy and Development Policies

1.5 Why Review the Management Plan?

The Management Plan is being reviewed to take account of major changes in the pressures and opportunities facing the National Park. These include increased pressure on the world's food and water supplies, a changing climate, the need for renewable energy and public support for improvements in biodiversity. The new Plan also reflects our better understanding of how these different components interact. In writing the plan it was also important to review the performance of the previous Management Plan to identify where progress still needs to be made.

The Authority first produced and published a monitoring report in 1998, and continues to produce a State of the Park report every three years. This contains a standard set of indicators, selected through consultation with stakeholders, and has allowed change to be monitored over time.

Performance in relation to the indicators varied over the lifetime of the last Management Plan. Positive outcomes were observed in relation to land management, water quality and public rights of way, however trends in relation to other topics were not as favourable, in particular the loss of services such as village shops. Some elements such as weather are essentially beyond the control of organisations who operate within the National Park but can have an influence on indicators such as biodiversity, air quality and visitor numbers. These trends have been taken into account in developing this Management Plan, for example the recent decrease in the value of tourism means that greater emphasis will need to be placed on supporting tourism activity in the National Park.



1.6 Benefits from Moorland, Woodland, Farmland and Coast

Ecosystems services are the services provided by the natural environment that benefit people. Some are well known such as food, fuel and water and cultural services such as recreation and tourism. Others are less apparent but equally vital for human well being for example soil formation, biodiversity, flood regulation, nutrient cycling and pollination. It is important for society that ecosystems are maintained in a healthy condition. Upland areas like the North York Moors provide many ecosystem service benefits for people. The National Park contains valued landscapes and natural habitats and its soils and woodlands store carbon. It is an important source of water and food and it also has potential for renewable energy generation. Its landscape and natural beauty attract visitors seeking recreation and spiritual refreshment. Some of the services or benefits that the National Park currently delivers from the moorland, woodland, farmland and coast are shown in Figure 1. However, ecosystems and the benefits they provide are vulnerable to social, economic and environmental change.

The Millennium Ecosystem Assessment provided an appraisal of the state of the world's ecosystems and the services they provide. It found that changes to land use and habitats can alter ecosystems and reduce their capacity to provide a broad range of services and that approximately 60% of the services evaluated are being degraded or used unsustainably. The UK National Ecosystem Assessment is the first analysis of the UK's natural environment in terms of the benefits it provides to society and the economy. The Assessment found that whilst many ecosystems are delivering services well, others are in decline, such as through the loss of some important habitats.

Although some economic benefits have resulted from ecosystem modification, their degradation poses increased environmental risks such as flooding or water pollution. This Management Plan attempts to identify the services provided by the National Park and its potential to maintain or increase them without damage to the special qualities. Four areas important to the National Park's future have been subject to more research and investigation of what

	Moorland	Farmland	Woodland	Coast
PROVISIONING	Sheep meat & breeding stockGrouse	 Food - Crops, meat and dairy production, livestock breeding Growing crops to generate energy 	• Timber	 Coastal industry and tourism
REGULATING	 Carbon storage Flood management Water quality Control of soil erosion Pollination 	PollinationSoil & water qualityWater regulation	 Regulating floodwater Soil quality Control soil erosion Carbon sequestration 	• Natural hazard regulation
CULTURAL	 Tranquillity, remoteness and dark skies Recreation Spiritual refreshment 	• Farming landscape and heritage	• Recreation and opportunities for more active pursuits	• Seascape and landscape qualities

Figure 1: Ecosystem Services in the North York Moors

could be produced or supported in the future. These are woodland, agriculture, tourism and renewable energy. Some services, such as creating a sense of place and providing opportunities for learning and education and supporting services such as photosynthesis and soil formation, are common to all ecosystems.

Current legislation focuses primarily on individual elements of ecosystems such as specific species and habitats. For example, the Site of Special Scientific Interest designation primarily aims to protect sites of biodiversity or geological importance. However, future policy will need to develop a more integrated approach with an emphasis on maintaining the health of all elements of an ecosystem as well as ensuring that it is used sustainably. Sustainable economic growth depends on a healthy functioning environment. An integrated approach to the management of the Park's ecosystems and appropriate interventions will be needed. In the future, payments for ecosystem services may become more mainstream in recognition of the role that farming can have in meeting wider environmental objectives.

1.7 Sustainable Development

The most widely accepted definition of sustainable development is that originating from the 1987 Brundtland Report – 'Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs.'

The National Parks Circular states that National Parks should be exemplars in achieving sustainable development. This is about ensuring a better quality of life for everyone, both now and for generations to come. Within the National Park, conserving and enhancing the landscape, biodiversity, cultural heritage, tranquillity and natural resources and promoting public understanding and enjoyment of these should lie at the very heart of developing a strong economy and sustaining thriving local communities.

1.8 Pressures for Change

Many of the objectives contained within the last Management Plan are still relevant. The two National Park purposes and the duty still underpin all the policies and activities that affect the National Park. However, some circumstances have changed since the publication of the last Management Plan in 2004 and it is important that these are identified and taken forward within the policies in the new Management Plan.

In 2009, Professor John Beddington predicted that by 2030 the world could see a number of factors

including climate change, population growth and food, water and energy shortages combining to create a 'perfect storm'. The consequences of this could be international migration and public unrest as people move to find the resources they need to survive. Whilst at a global scale science has a role in developing solutions to this scenario, we also have a role to play at a local level.

Climate Change

The precise impacts of climate change on the National Park are uncertain. The UKCP 2009³ projections for Yorkshire and Humber suggest that hotter drier summers, warmer wetter winters, more storms and sea level rise are likely. Significant effects may not be apparent until later in the century, and the National Park is facing other more immediate pressures such as a global demand for food which will have a greater impact in the shorter term. However, some changes are already apparent and these could have a range of effects that will result in changes to the National Park's landscape character and special gualities. The National Park Authority has produced an assessment of the risks and opportunities for the Park arising from climate change⁴. The changes include more frequent flooding, increased risk of fire, different forms of vegetation and tree cover, the introduction of new species and the loss or decline of some existing plants and animals to pests and diseases, whilst important habitats may become more isolated.

Emissions of CO_2 and other greenhouse gases from energy generation, transport and land management practices are now widely accepted as making a contribution towards changing the global climate. Through its residents, businesses, visitors and land use practices the National Park was responsible for emitting over 390 kilotons of CO_2 in 2006. Just over a fifth of this can be attributed to the domestic sector, with transport accounting for nearly half and industrial and commercial users for around a third. Emissions of other gases in the National Park are also contributing towards climate change, particularly nitrous oxide and methane, which is to be expected due to the large agricultural base. In 2006, methane and nitrous oxide emissions from the Park were equivalent to 314kt of CO_2 . The UK has set a target to reduce CO_2 emissions by 80% (from a 1990 baseline) by 2050.

Whilst on a global or national scale the National Park is responsible for only a very small proportion of emissions, efforts should be made to reduce these and there is also an important role to play in setting a good example. The Management Plan can also provide a framework for the National Park to adapt to the predicted effects by, for example, protecting and developing well connected habitat networks to assist species movement and managing land to store more water upstream. The effects of climate change and how these can be addressed are considered throughout the Plan in relation to individual topics. Figure 2 considers how each of the Plan's aspirations can contribute towards mitigation of and adaptation to climate change.

³ UK Climate Projections (ukclimateprojections.defra.gov.uk) ⁴
 Adapting to climate change in the North York Moors National Park
 Assessment of Risks and Opportunities (North York Moors National Park Authority, 2011)

Water Framework Directive

The Water Framework Directive⁵ requires that all water bodies achieve 'good' status by 2015. Although there has been an improvement in the water quality at river monitoring sites over the lifetime of the current Management Plan there are still problems with diffuse pollution, and many water bodies are failing due to barriers such as weirs which delay or prevent fish migration.

Food Security

Greater pressure on land resources and escalating food prices in recent years has focused attention on the need for secure food supplies. The need to increase food production is recognised across Government policy, including in the England Biodiversity Strategy⁶. Whilst food production is driven by global markets it is important that the Management Plan recognises the productive capacity of the National Park. A study of farming and farm output in the National Park undertaken by Askham Bryan College⁷ provides an important



piece of evidence for the Management Plan. One of the issues arising from the report is how to sustain or improve the productivity of the sector without harming the National Park's special qualities – it is generally accepted that further intensification of agriculture for example through increased use of fertilisers and pesticides or more intensive factory farming would harm the environment and landscape of the National Park. However, improved skills and practices could increase production and profitability without detracting from the area's special qualities as could increased investment in certain forms of agricultural technology.

Tourism and Branding

Tourism is important to the economy of the National Park, bringing in £416 million in 2010. There is a need for a clearer identity and 'branding' of the North York Moors to maintain its attraction as a visitor destination and support the local economy. Without a strong brand, locally produced goods will not flourish and without awareness of the existence of the National Park the second purpose relating to understanding and enjoyment of its special qualities cannot be achieved. There is evidence that the value of tourism to the local economy has declined since 2007 and this Management Plan proposes an increase in visitors and visitor spending in order to reverse this decline. However, visitor activity needs to be managed to avoid harmful impacts. It is proposed that a new Promoting the Park Plan to sit alongside the existing Recreation and Access Strategy is developed with policies to achieve these objectives.

Upland Economy and Common Agricultural Policy Reform

The Government has conducted a policy review of the English uplands⁸ which emphasises their importance in providing

benefits for society such as food production, floodwater and carbon storage, provision of drinking water, landscape quality and biodiversity. The review document sets out how DEFRA and its partners will work to support the uplands and its communities. Payments to farmers and landowners for the delivery of ecosystem services is also being researched by DEFRA.

Health through Nature

Humans evolved in the natural environment and contact with nature is fundamental to our physical and mental well being. People have come to the North York Moors for over a thousand years for spiritual refreshment and contemplation. The health benefits of physical activity in reducing levels of obesity and stress are now a major part of the public health agenda compared with ten years ago. In 2009, almost a quarter of adults in the UK were classified as obese⁹. Although physical activity levels amongst adults are increasing, those achieving the recommended amounts are in the minority. Access to outdoor activities and contact with nature is seen as increasingly important for children. Walking is Britain's most popular outdoor recreational activity and the rights of way network in the National Park is an important resource to meet this demand. The National Park as a whole provides calm in a busy world and allows people to enjoy the non material aspects of life.

⁵ Directive 2000/60/EC

- ⁸ Uplands Policy Review (DEFRA, 2011)
- ⁹ Statistics on obesity, physical activity and diet (Health and Social Care Information Centre / NHS, February 2009)

⁶ Biodiversity 2020: A Strategy for England's wildlife and ecosystem services (DEFRA, 2011)

⁷ Agricultural Output in the National Park – Current Level and Future Prospects (Askham Bryan College, 2011)



Woodlands and Forestry

There is an ambition nationally to increase the area of tree cover for the multiple benefits this provides including increasing resilience to climate change through connecting and buffering existing woodland habitats, storing carbon, reducing the risk of flooding, using wood fuel as a sustainable source of energy and providing recreation opportunities.

Localism

The UK's National Parks have always combined a large element of local governance alongside a national remit. Many of the principles of localism are already embedded in the National Park culture. A huge range of people and organisations work together to make the North York Moors function effectively whilst keeping the place a special one for future generations.

Localism should allow the special nature of the North York Moors to develop further without undue interference. The challenge will be to balance local aspirations with the national interests of a protected landscape.

Skills

It is understood that the traditional skills base in the National Park is declining. Taking forward the policies of the Management Plan will require, for example, trained craftspeople who can work with local materials and understand the subtleties of the Park's distinctive heritage features. The agricultural sector will need to have access to knowledge of new technology and production techniques. The land managers across the National Park will need the skills to embrace new ways of working from growing wheat to delivering environmental schemes.

Contraction of Resources

The National Park Authority and most of its public sector partners are facing a period of change and shrinking of staff and financial resources. This is a significant change since the publication of the last Management Plan and affects the projects and activities that can be delivered not just by the Authority but all publicly funded organisations whose activities affect the National Park.

1.9 How the Management Plan will be Delivered

The Management Plan has four sections dealing with the Environment, Understanding and Enjoyment, Business and Land Management and Communities. Whilst the concept of ecosystems services is embedded within the Plan, to avoid repetition the chapters have not been structured around the main ecosystems. There are overall aims for each topic area and more specific policies setting out the approach to achieving those aims. The means of achieving policies are also identified such as through specific projects, activities or other strategies. This includes reference to the important work of other organisations, communities, businesses and landowners in delivering the policies of the Management Plan. There may be other projects or organisations which will also help to deliver the policies which have not been specifically identified at the time of writing.

Actions arising from the policies contained within the Management Plan must be undertaken in accordance with statutory National Park purposes and, where necessary, the Sandford principle¹⁰ must be applied which requires greater weight to be attached to the purpose of 'conserving and enhancing' if it appears that there is a conflict between the two National Park purposes. In line with the requirements of the Habitats Directive¹¹ the Plan should be implemented in a way which will ensure that there will not be any significant effects that would harm the integrity of Natura 2000 sites (Special Areas of Conservation and Special Protection Areas) in recognition of the legal status of the Natura 2000 sites. Detailed mitigation measures are contained within the Appropriate Assessment report which accompanies the Management Plan. This should be referred to in producing any further plans or carrying out any projects relating to the policies of the Plan. For policies which relate to development, planning permission will not be granted for development that would harm the integrity of Natura 2000 sites, in accordance with the Habitats Directive.

Gaining a clear commitment from partners of all kinds to work towards the Management Plan's aims and to prioritise resources to achieve the targets as far as possible is essential. National and/or local agreements between the National Park Authority and other bodies including Natural England¹², Environment Agency¹³, Forestry Commission¹⁴ and English Heritage¹⁵ are or have been in place. The National Park Authority has agreed with these partners that signing up to protocols is the most effective means of delivery. Local protocols and joint action plans have been identified against relevant policies where appropriate, some of these are yet to be prepared. In addition the National Park Authority manages the rights of way network under a Delegation Agreement with North Yorkshire County Council and Redcar and Cleveland Borough Council.

Regular discussions will be held with key stakeholders to check progress on delivering the Management Plan. Alongside the work of the National Park Authority and other stakeholders, there may be a need to secure wider external funding to deliver the policies. A variety of ways will be used to publicise the Plan and report on its progress, for example through Moors Messenger.

As a new approach which reflects the principles of 'ecosystem services', and in addition to strategic topic based policies, this Management Plan looks at what the National Park could accommodate without harming the special gualities. The Plan is not specifically aiming to achieve these levels of change and separate targets have been set based upon what could realistically be achieved by 2017. The table overleaf shows how these changes could be achieved without harming the special qualities and without hindering the achievement of each other. At this strategic level it is not possible to quantify or be precise about exactly what the impacts might be, but this will help in drawing up more detailed plans at a later date. The table also flags up what the potential negative impacts might be if these changes did not happen in the correct way, and could act as a guide to implementing some of the Plan's policies. It is considered however that the policies in the Management Plan will ensure that such issues are addressed.

 10 Introduced in legislation in the 1995 Environment Act 11 Directive 92/43/EEC

¹²Natural England and English National Parks Authorities Association: Protocol on Collaboration for Environmental Land Management Delivery

¹³Working Together Agreement between the Environment Agency, the English National Park Authorities Association (ENPAA) and the Welsh Association of National Park Authorities (WANPA)

¹⁴An Accord between the Association of National Park Authorities and the Forestry Commission and Local Accord Between the Forestry Commission and the North York Moors National Park Authority which was updated into a Joint Action Plan 2009-2012 (these have expired but the intention is to update)

¹⁵ Joint Statement on the Historic Environment in the National Parks of England, Scotland and Wales



Monitoring and Targets

It is recognised that the new approach adopted by the Plan means that simple monitoring based on objectives, targets and indicators is not possible or appropriate, and a more sophisticated approach is needed to cover all elements. This must reflect the reality that the Plan covers a large area of multi-functional land, largely privately owned, is designed to look well ahead into the future and be of value to a wide variety of organisations. The Plan will be monitored in the following ways:

 Some of the themes covered by the Plan are aspirations or informed estimates as to what the Park could produce or accommodate and are therefore not expressed as targets – the conclusions are there to inform wider decision taking and policy formation;

- Certain policies are considered to be achievable but no target has been set due to the number of factors associated with implementation, instead the monitoring relates to an assessment of progress in a desired direction of travel;
- There are elements of the Plan which are considered to be achievable and also can be relatively easily controlled by partners and the National Park Authority
 – for these policies specific targets have been set;
- In addition, a large number of policies in the Plan will be taken forward via the National Park Authority's Business Plan, in which more detailed targets will be set;
- Protocols and agreements between the National Park Authority and other organisations are identified as the means to achieve a number of policies and high level targets – these will also contain more detailed targets;

 A number of factors, for example ozone levels, are beyond the control of any organisations working within the Park but it is nevertheless desirable to monitor trends. In these areas monitoring will be via a State of the Park indicator.

This approach should allow the Plan to be used by national and local policy makers as well as by partners and the Authority in business planning and target setting. It will also enable the annual process of recording achievement of the Plan's aims to be carried out with reference to the specific targets. The well established process of recording the overall State of the Park can also be continued. The system adopted is, in short, a reflection of the integrated nature of the Plan. This in turn reflects the integrated nature of the UK's National Parks. Readers should be aware that the indicators listed in the Plan represent only a fraction of all of the information that is recorded about the Park. This is particularly true for natural environment indicators.

Figure 2: Implementing the aspirations of the Management Plan

This table explains the considerations that should be taken into account in delivering the aspirational elements of the Management Plan. Any activities arising from implementation of the Management Plan should be undertaken in a way which furthers National Park purposes.

AREA OF ASPIRATIONAL CHANGE	TARGET / POLICY BY 2017	WHERE SHOULD THIS BE ENCOURAGED TO HAPPEN?	WHERE SHOULD THIS GENERALLY NOT HAPPEN?	WHAT WOULD THE BENEFITS BE?	WHAT SHOULD BE AVOIDED?	HOW WILL THIS HELP IN ADAPTING TO OR MITIGATING CLIMATE CHANGE?
1,000 additional hectares of species rich grassland	150 hectares of restored or created species rich grassland	Unimproved grassland, semi-improved grassland, species-poor improved grassland, roadside verges, field margins, possibly on some conifer plantations	On the Park's most productive agricultural land, woodland (except for conifer plantations) or land which could improve connectivity of other important habitats.	More and better connected habitat networks, increased resilience to climate change, enhanced landscapes	Unjustified loss of the Park's most productive agricultural land, use of land that could potentially be suitable for tree planting, harm to the natural environment, landscape and cultural heritage and its 'sense of place'.	More and better connected habitats will particularly benefit those species favouring a cooler climate which may otherwise become stranded in small pockets of suitable habitat.
3,000 additional hectares of woodland	300 hectares of woodland	Land of lower agricultural productivity, bracken covered slopes	On the Park's most productive agricultural land, open moorland, important grassland habitats or land which could improve connectivity of other important habitats.	Better networks of woodland, more carbon stored in trees, species better able to adapt to climate change, greater potential supply of woodfuel	Unjustified loss of the Park's most productive agricultural land, harm to the natural environment including loss of important wildlife, harm to landscape and cultural heritage and its 'sense of place', loss of important open access land ¹⁶ .	More carbon stored in trees. More and better connected woodlands will help to support woodland flora and fauna which may otherwise become stranded.
An extra 1.6 million visitors	Increase number of visitors	Particularly arriving at 'hubs' as set out in the North York Moors Recreation and Access Strategy	Places currently or that could be potentially harmed by visitor pressure, tranquil areas.	Increased income for the local economy and businesses, increased understanding and enjoyment of the Park by the public, improved health and wellbeing	Over use of sensitive areas, disturbance and damage to important nature conservation sites, loss of tranquillity, inappropriately located or designed new tourism related developments	Encouraging people to visit the National Park may reduce the CO ₂ emissions associated with overseas travel. Warmer weather may help to attract more people into the National Park.

¹⁶Open access land is land which is mapped as open country or registered common land under the Countryside and Rights of Way Act 2000. If tree planting takes place on open access land consideration should be given to dedication of open access land under the 2000 Act or dedication of a linear public right of way or permitted access.

Context

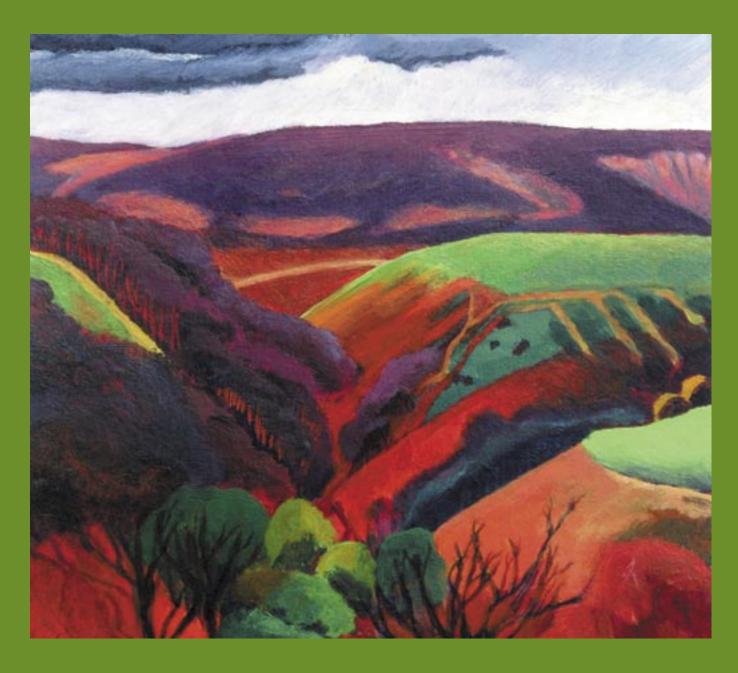
Figure 2 continued

AREA OF ASPIRATIONAL CHANGE	TARGET / POLICY BY 2017	WHERE SHOULD THIS BE ENCOURAGED TO HAPPEN?	WHERE SHOULD THIS GENERALLY NOT HAPPEN?	WHAT WOULD THE BENEFITS BE?	WHAT SHOULD BE AVOIDED?	HOW WILL THIS HELP IN ADAPTING TO OR MITIGATING CLIMATE CHANGE?
An extra 6,000 moor sheep	Increased agricultural production	Areas of moorland currently undergrazed	Areas of moorland currently overgrazed or at optimal grazing levels	Increased production of food, increased profitability of farming, better environmental management of moorland habitats, support for farming livelihoods.	Increasing sheep numbers on land already overgrazed or at optimal grazing levels.	Increased availability of locally grown and produced food may help to reduce food miles (and therefore CO ₂ emissions).
5% increase in crop yields	Increased agricultural production	Land already in productive agricultural use, land of low environmental value	Loss of important grassland habitats, moorland, woodland, land of low productivity which could be used to help to create better connected habitats	Increased production of food, increased profitability of farming, more efficient farming practices with less harmful impacts on the environment, less productivity pressure on areas of high environmental value, support for farming livelihoods.	Use of methods which may have a detrimental effect on the environment such as increasing the use of fertilisers, ploughing up of important habitats, inappropriate drainage, diffuse pollution.	Increased availability of locally grown and produced food may help to reduce food miles (and therefore CO ₂ emissions). Warmer weather may extend the growing season, but may also increase the susceptibility of crops to disease.
Offset around a quarter of the National Park's CO ₂ emissions through energy efficiency and renewable energy	Decrease in CO ₂ emissions	On existing buildings, in watercourses, within curtilages of farm buildings	Where there would be unacceptable impacts on the landscape, built and cultural heritage, natural environment or biodiversity.	Reduced CO ₂ emissions, reduced energy bills for consumers, expanding the markets in the renewables industry	Large scale renewable energy developments in open landscapes, loss of or damage to habitats, species or historic assets, as set out in the Renewable Energy Supplementary Planning Document.	Reduced energy use and an increase in energy generation from renewable sources will help to reduce CO ₂ emissions which are generally accepted as contributing towards climate change.

The Moors

Empty and open Quiet, unspoken Each tree seems to have a face It's such a beautiful, special place

Laura Thompson, age 9



2. Environment

Conserving and enhancing the environment is the first purpose of National Park designation and is crucial in its own right and in ensuring that the National Park continues to provide benefits for people. There are many elements which make up the unique character of the North York Moors, as evidenced by the list of special qualities, most of which are a result of the interaction between natural and human influences. Analysis of environmental issues needs to combine a range of scientific and aesthetic techniques and be based on good evidence.

The environment of the North York Moors provides many benefits to the people living in the National Park and in the villages and towns on its outskirts, to the millions of people who visit each year and to the National Park's economy. In 2010/11, 74% of people coming to the National Park visited natural attractions¹⁷.

Designation as a National Park brings special protection under the planning system and a range of other environmental mechanisms. Whilst protection is primarily afforded through planning, designations such as Site of Special Scientific Interest and Scheduled Monument, the requirements for all organisations to have regard to National Park purposes and other European and national legislation relating to, for example, particular habitats together ensure protection of the Park's environment. Enhancement is also dependent on these processes together with partnerships with land managers through mechanisms such as agri-environment schemes.

Climate change is predicted to bring about a range of effects on the environment of the National Park. Warmer wetter winters and hotter drier summers may result in the loss of some species, an increase in others and the introduction of new ones which may be a threat to the Park's environment. This could also lead to changes in the landscape. Remaining important habitats may also become more isolated and a key priority for this Management Plan is to create better connected habitat networks. Increased risk of fire, flooding and new pests and diseases may threaten dramatic losses.

This chapter covers seven thematic areas which are common to the whole of the National Park – Landscape, Historic Environment, Habitats and Wildlife, Tranquillity, Geodiversity, Air Quality and Soils. However there are more detailed issues that are specific to certain landscape and habitat types. These are covered in four supplementary sections – Moorland, Trees and Woodland, Rivers and Streams and the Coastal and Marine Environment. Each section contains policies together with the means to achieve these, in partnership with other organisations where relevant. Environmentally dependent economic uses, including agriculture and shooting, are covered in the Business and Land Management section of the Plan.

2.1 Landscape

The landscape and seascape of the National Park is a valuable asset in its own right and landscape was the primary reason for National Park designation. It is the landscape that attracts visitors thereby also making it an important economic asset.

The National Park is included within a single National Landscape Character Area, the 'North York Moors and

Cleveland Hills'. The area contains a great diversity of landscape which was recognised in the 1947 Hobhouse Report which led to its designation as a National Park:

within a relatively small compass an amazing wealth and variety of beauty.

This diversity includes open heather moorland, intimate dales, the coast, the open 'big sky' landscape of the Hambleton and Tabular Hills, extensive woodland areas and dramatic geological features such as Sutton Bank, Roseberry Topping, Forge Valley, Newton Dale and the Hole of Horcum. The coastline of the Park forms a distinctive seascape, characterised by high cliffs interspersed with narrow valleys. Although there is no legal definition of seascape, the UK Marine Policy Statement suggests that it should mean landscapes with views of the coast or seas, and coasts and the adjacent marine environment with cultural, historical and archaeological links with each other. The National Park also contains a number of designed landscapes which are included on English Heritage's Register of Historic Parks and Gardens. These are Rievaulx Terrace, Duncombe Park, Mulgrave Castle and Arncliffe Hall.

The landscape of the National Park has changed over time. In particular, since designation there has been significant loss of heather moorland and an increase in conifer plantations, and a loss or degradation of traditional field boundaries. Some of these changes have started to be reversed or mitigated over the past twenty years. Large scale change has now largely

¹⁷Yorkshire Regional Visitor Survey 2010/11, Welcome to Yorkshire



ceased and the pressures driving change are now different, for example increases in relatively small scale structures such as road signs.

The 2008 Countryside Quality Counts survey¹⁸ identified the North York Moors and Cleveland Hills landscape as 'changing, enhancing' which means that the area's landscape character is being strengthened and improved.

In 2006 the United Kingdom signed up to the European Landscape Convention which establishes a framework for landscape management and provides a useful definition of landscape as 'an area, as perceived by people, whose character is the result of the action and interaction of natural and/or human factors'. Thus landscape is the combination of attributes that define an area in terms of sight, sound and smell. It includes the wildlife and cultural heritage as well as its tranquillity, landform and overall appearance. The National Parks Circular emphasises landscape conservation as a priority for the National Parks and recognises the importance of partnership working between the National Park Authorities, communities and organisations to achieve this.

In 2003 the National Park Authority commissioned a Landscape Character Assessment of the North York Moors. This identifies the different landscape character types in the National Park, their characteristics, the pressures for change facing each area and the significance of that pressure. The Assessment has been used to inform plans and actions for the National Park, for example the Local Development Framework which contains a policy to conserve and enhance the character areas identified in the Landscape Character Assessment. The Assessment underwent a refresh in 2010 to provide an update on pressures for future changes and establish landscape quality objectives. This has provided a clear picture of priorities and these will be taken forward in a Landscape Conservation Action Plan. Reference to the Action Plan is included in the National Park Authority's Business Plan and bilateral agreements with partners and stakeholders.

Challenges

The main, potentially damaging pressures for change in the landscape over the next 15 years identified by the refreshed Landscape Character Assessment are:

- changes to land management and farming particularly if environmental schemes are curtailed, including a decline in traditional skills, lack of maintenance and/or loss of traditional farm buildings, structures and field boundaries, undergrazing and inappropriate burning of the moorland;
- changes in forestry including potential impacts of harvesting forested areas, lack of management of small semi-natural woodlands, and increased planting in response to demand for biomass. Increasing the area of woodland in appropriate places is anticipated to lead to landscape enhancements;
- problems associated with leisure and recreation including traffic and parking, litter, provision of tourist facilities such as campsites and holiday cottages and erosion of rights of way;

¹⁸State of the Natural Environment in Yorkshire and Humber (Natural England, 2008)

Environment

- the impacts of new development, particularly roads, highway infrastructure, tracks, communications infrastructure, wind turbines, large new agricultural buildings, visitor facilities, coastal defences, extensions to villages, urbanisation of settlements and large scale developments outside but close to the National Park's boundary;
- climate change and its implications for increased flooding and coastal erosion, drought leading to increased fire risk, the introduction of non-native species, new pathogens and diseases and increased demand for renewable energy both within and outside the National Park.

In 15 Years Time...

The diverse and distinctive landscape of the National Park is being protected and enhanced through measures including the conservation of traditional field boundaries, appropriate tree planting and improvements for biodiversity. New development contributes to the quality of the landscape. Controlled burning regimes ensure that large scale moorland fires do not take place.

AIM

■ The landscape character and quality will be maintained and reinforced, in particular the distinctiveness of the Landscape Character Areas will be conserved.

POLICIES	MEANS TO ACHIEVE	KEY PARTNERS
E1. The landscape character of the National Park will be maintained and enhanced	Landscape Conservation priorities (Action Plan under preparation)	National Park Authority Natural England
ennanceu	National and local grants	National Park Authority Natural England
	Landscape enhancements	National Park Authority Natural England (for Agri-environment schemes) Forestry Commission
	Joint Action Plan (local)	National Park Authority Natural England
E2. Traditional farmed landscape features will be conserved, enhanced and reinstated where possible	Agri-environment schemes	National Park Authority Natural England Land managers
	Traditional Building Skills Apprenticeship Scheme	University of York National Park Authority English Heritage York College
E3. New development will not have a detrimental impact on the landscape of the National Park	Local Development Framework Core Policies A and G	National Park Authority Neighbouring Planning Authorities
E4. The visual impact of highway	North Yorkshire Local Transport Plan	North Yorkshire County Council
improvements and new or replacement highways infrastructure will be minimised	Redcar and Cleveland Local Transport Plan	Redcar and Cleveland Borough Council

How Management Plan progress will be reported

STATE OF THE PARK INDICATOR	TARGET / DESIRED DIRECTION OF CHANGE	
The status of the landscape ¹⁹	The landscape is identified as 'changing/enhancing'	
Percentage of land managed in line with conservation objectives ²⁰	Percentage has been maintained or increased	



2.2 Historic Environment

The North York Moors is exceptionally rich in archaeological and historical features. The long imprint of human activity and the wealth of archaeology from pre-history to the twentieth century have been identified in the Park's special qualities. Some of these are protected by legislation but there are also a very large number of features that have no statutory protection. Cultural heritage was cited, in the 1947 Hobhouse Report, as one of the reasons for the North York Moors' designation as a National Park. The Report commented on the 'wealth of architectural interest', and in particular noted the picturesque villages and monastic ruins.

Archaeology

The National Park contains thousands of archaeological sites. These represent the activities of human beings from the end of the last Ice Age (around 12,000 years ago) to important industrial landscape and military remains from the 20th Century, including from the Cold War. Evidence for human activity from prehistory (the Mesolithic and Bronze Age periods), plus remains of early Ecclesiastical and industrial sites, are of particular significance. There are currently records of over 20,000 historical and archaeological sites and features within the National Park.

Many sites survive as upstanding monuments where land management has been less intensive, particularly across the moorland, in forest areas and on the valley fringes. In

¹⁹ This will utilise the Countryside Quality Counts assessment or its successor.

 $^{^{20}}$ Conservation objectives include a broad range of objectives covering landscape and nature conservation.

Environment

common with some other upland areas these remains are not buried and are therefore extremely vulnerable to surface disturbance.

Over 800 monuments in the National Park have statutory protection as Scheduled Monuments, reflecting the national importance of this resource. In fact 32% of the Scheduled Monuments in the Yorkshire and Humber region are found in this National Park. Of the Scheduled Monuments, 328²¹ are currently judged to be at medium or high risk although work is being undertaken to address this through the Monument Management Scheme supported by English Heritage. Of these 328 there are 136 Scheduled Monuments as well as 5 listed buildings identified in English Heritage's Heritage at Risk Register 2011. This equates to 15% of all Heritage at Risk sites in the Yorkshire and Humber register. Understanding of the archaeological potential of the moorland has been significantly enhanced from the results of survey and research after an accidental fire on Fylingdales Moor in 2003. The historic landscape revealed by the fire included Neolithic rock art, bronze age burial mounds and cultivation remains, evidence of water collection and supply for the alum industry and Second World War slit trenches. All of these phases of activity survive side by side, providing a physical record of some 5,000 years of use.

Although excavation is nowadays generally regarded as a last resort, carefully planned and targeted excavation is important for the advancement of archaeological knowledge, an effective mechanism for public participation and is of considerable public benefit. Investigation has taken place at the plough-levelled Iron Age promontory fort at Boltby Scar, as part of the Lime and Ice project, funded by the Heritage Lottery Fund, to help the National Park Authority to better understand and interpret the important prehistoric landscape of the National Park's western escarpment.

The development of the National Park's Archaeological Research and Management Framework has helped to focus archaeological activity to provide answers to some long standing questions. The Mesolithic project, involving the National Park Authority, Tees Archaeology and English Heritage, is currently helping to re-evaluate the existing models of Mesolithic occupation, subsistence and chronology in north east Yorkshire. At the time of writing, an industrial archaeology project is also being developed involving local communities, to focus on the importance of Grosmont and its associated rail links in fuelling the development of the iron industry of north east England. It is recognised that further research is required to develop our understanding of how the early ecclesiastical history of the National Park area is linked to the origins and growth of our present villages.

The Built Environment

The built environment continues to form an essential part of the National Park's appeal to visitors, combining with the landscape to give the area its unique identity.

The vernacular building style contributes significantly to the overall character of the landscape. Stone and pantiles constitute the vernacular building materials although Welsh and some Westmorland slate began to be used from the mid 19th century. The built environment of the area reflects the geology of the National Park with limestone the predominant building material in the south and sandstone in the north. The vernacular building form is the longhouse built using cruck construction. Although a large number of buildings have undergone successive improvements and alterations, many contain residual elements of earlier longhouses, for example cruck frames in roof spaces. This vernacular has informed the development of farms, from simple linear farms to the more loosely developed farmsteads that were added to cumulatively during the more prosperous farming periods, up to higher quality estate designed farmsteads.

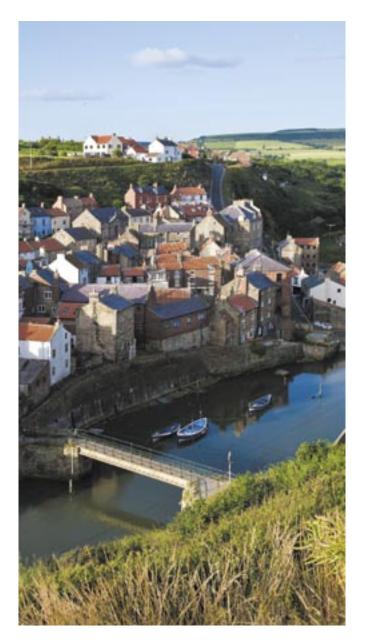
The area's ecclesiastical heritage, including abbeys, monasteries, priories, nunneries and churches also plays an essential role in defining the character of the area. Whilst not common features in the landscape, there are a number of castles and similar structures, mostly around the edges of the Park, which provide an insight into the area's diverse history. These include West Ayton, Whorlton, Helmsley and Danby.

The reclusive, monastic tradition combined with coastal smuggling heritage, small settlements, undeveloped moorland and the echoes in the landscape of long abandoned industrial activity creates an enigmatic atmosphere that has inspired a long tradition of folklore and legend.

The North York Moors has a relatively large number of Listed Buildings compared to other National Parks. 3,012 buildings in the National Park are currently listed for their special architectural or historic interest. Of these, 95²² are on the Authority's Buildings at Risk register and five of the highest gradings are identified as being at high risk by English Heritage. The reasons for buildings falling into disuse and disrepair include their functional replacement by modern agricultural buildings, their remote and inaccessible locations and the

²¹As at May 2012

²² Annual Performance Report and Plan 2010 /11 (North York Moors National Park Authority, 2011)



ability of owners to keep their buildings in good repair. Work is ongoing to reduce this number and in 2010/11, 11 buildings were removed from the 'at risk' register. This was achieved through a mixture of re-assessment, historic buildings grant, enforcement action, planning approvals for change of use and owner action. Listed Buildings are an irreplaceable asset and must be protected as an integral part of the cultural heritage and distinctiveness of the National Park.

There are a variety of sources of funding available for improvements to Listed Buildings in the National Park – the National Park Authority runs a Historic Buildings Grant Scheme for buildings on the 'at risk' register and other sources of funding include the Landscape Intervention Fund and Environmental Stewardship. The National Park Authority also offers advice to owners wanting to make alterations or repairs to Listed Buildings. Partnership schemes in Staithes and Robin Hood's Bay have tackled a number of Buildings at Risk and delivered significant enhancements to the public realm.

Conservation of the historic environment often creates opportunities for enhancement which can facilitate the introduction of viable new uses, having knock-on benefits for the economy.

The quality of the National Park's villages is outstanding with Thornton-le-Dale a regular winner of the title 'Britain's Prettiest Village²³. There are 42 Conservation Areas within the National Park which are designated because of their special architectural and historic interest. The relationship between buildings and spaces, traditional street layouts and the design detailing and materials of traditional buildings all contribute to the distinctive character of each Conservation Area. The National Park Authority has a duty to preserve or enhance their character and appearance through careful control of new development, and it has carried out pioneering work to help protect these Conservation Areas from erosion of character through the wide-scale introduction of Article 4 Directions. This has brought in additional controls over alterations to features such as doors, windows, boundary walls and gates in 38 Conservation Areas.

The National Park Authority has a duty to publish proposals for the protection and enhancement of Conservation Areas. Conservation Area Assessments and Management Plans have been produced where necessary in response to particular local issues and pressures. These identify the features that contribute to the character of the area and set out how they will be maintained through managing change in a sympathetic way and securing improvements wherever possible. Partnership working between various interests including local communities, landowners, local history groups, schools, English Heritage, Highways Authorities and the National Park Authority is key to achieving improvements in the historic environment.

²³ www.enjoyengland.com

AIM

■ The archaeological and built heritage of the National Park will be conserved for future generations to understand and enjoy, and for its own intrinsic value.

Challenges

- Disturbance and damage to archaeological sites, including by cairn building, upgrading of access tracks and drains, cutting heather, inappropriate moorland burning and wildfires and from recreation such as off-road vehicles, walking, mountain biking or horse riding.
- Erosion of settlement character through incremental alterations and small scale developments, and pressure for inappropriate alterations to the built heritage, including from renewable energy installations.
- Under use or redundancy of certain types of historic buildings such as traditional farm buildings and churches, which can lead to neglect or disrepair.
- A lack of craftsmen trained in conservation buildings skills such as the use of lime.
- Raising knowledge and awareness of the historic environment.
- Damage to historic assets caused by flooding, storms and coastal erosion resulting from climate change.

In 15 Years Time...

The National Park's archaeological and built heritage is well protected and enhancements and repairs are undertaken to Scheduled Monuments and Listed Buildings. Through partnership working, the National Park Authority and other organisations are working towards the removal of all sites identified on English Heritage's 'Heritage at Risk' register (2011).

POLICIES	MEANS TO ACHIEVE	KEY PARTNERS
E5. The archaeological and built heritage will be conserved or restored	Historic Buildings Grant and Conservation Area Enhancement Grant	National Park Authority
where appropriate	Article 4 Directions	National Park Authority Property owners
	Local Development Framework Core Policy G	National Park Authority English Heritage
	Monument Management Scheme and Joint Action Plan (local)	National Park Authority English Heritage
	Cultural Heritage Action Plan	National Park Authority
E6. Local materials, styles and building techniques will be used in restoration and in new developments where	Local Development Framework Core Policy G	National Park Authority English Heritage
appropriate	Historic Buildings Grant and Conservation Area Enhancement Grant	National Park Authority
E7. New development in the National Park will seek to conserve and enhance heritage assets and their settings	Local Development Framework Core Policy G	National Park Authority English Heritage



POLICIES	MEANS TO ACHIEVE	KEY PARTNERS
E8. Knowledge, awareness and	Cultural Heritage Action Plan	National Park Authority
understanding of the archaeological and built heritage will be increased	Joint Action Plan (local)	National Park Authority English Heritage
	Heritage Lottery Fund	National Park Authority
	North Yorkshire and Cleveland Heritage Coast Management Plan	North Yorkshire and Cleveland Coastal Forum
	Museums and visitor centres	National Park Authority Museum operators
	Lime and Ice project	National Park Authority
E9. The traditional skills base will be developed and promoted	Training days, advice and publications	National Park Authority English Heritage
	Traditional Building Skills Apprenticeship Scheme	University of York National Park Authority English Heritage York College

How Management Plan progress will be reported

INDICATOR	TARGET / DESIRED DIRECTION OF CHANGE
Number of Scheduled Monuments on the Monument Management Scheme list at risk	By 2017, the number at risk (principally High Risk and Medium Risk with high vulnerability) has been reduced by 65 from the number presented on the initial list.
Number of Listed Buildings on the Buildings at Risk register	35 Buildings at Risk have been removed from the register



2.3 Habitats and Wildlife

The National Park supports a wide diversity of habitats and species reflecting the local variations in geology, topography, soils, land use and climate.

The 50,000 hectares of moorland plateau includes the largest continuous tract of heather moorland in England. Its importance for conservation is recognised by designation as a Site of Special Scientific Interest, a Special Area for Conservation and a Special Protection Area for breeding merlin and golden plover. Most of the moorland consists of dry heath although wet heath and blanket bog are also present. In the main, management is for sheep and red grouse. In addition there are areas of the Park that whilst not designated are still important for supporting protected species, for example providing foraging areas.

The Tabular Hills in the south of the National Park still support diverse limestone grasslands, although the plateaux areas have been largely improved for agriculture. Relict populations of rare species are still present in a few locations. Animals such as brown hare are locally common on farmland and nationally declining bird species such as grey partridge and lapwing breed in good numbers in some areas. Where species rich grassland occurs in mosaic with scrub or woodland, rare butterflies exist such as Duke of Burgundy which is at the northern edge of its British range. Such sites are vulnerable to loss through increases in scrub and woodland, as they are seldom easily grazed.

Elsewhere in the National Park the majority of grasslands have been improved for agriculture, although a few flowerrich hay meadows and pastures survive. Roadside verges also retain valuable grassland flora in many areas. In areas of poor drainage, marshy grasslands are present and these are important for waders such as curlew, lapwing and snipe which still breed in good numbers. Of the 45,000 hectares of grassland in the National Park, there is thought to be around 1,150 hectares of species rich grassland. The process of restoring and creating species rich grassland on species-poor swards has been taking place through Environmental Stewardship schemes and projects sponsored by the National Park Authority. It is considered that approximately 1,000 hectares of species rich grassland could be restored or created without compromising other interests.

Farmland throughout the dales and hills contains barns, ponds, copses, hedgerows, old trees, pastures and dry stone walls which create a mosaic of habitat types and provide refuge and food to a wide range of wildlife, including moorland birds. The interaction between farmlands and wildlife is an important component of the National Park. Species such as arable plants and farmland birds live within the agriculturally managed landscape often adapting or taking advantage of the way the land is managed. Agri-environment schemes are enhancing the way farmland is managed to benefit wildlife by creating farmed features such as cultivated margins or nectar rich areas free from herbicides and fertilisers.

The National Park's coastal and marine area supports a wide range of habitats including woodlands, heathlands and grasslands of national and international importance many of which are now unmanaged. These represent some of the most natural habitats in the National Park. The shoreline is largely rocky with occasional sandy coves and includes important intertidal habitats. The nature conservation interest of the coastline and inshore waters is an important component of the recognition of the entire coastline as Heritage Coast.

Numerous rivers and streams, including the tributaries of the Rye, Derwent and the whole of the Esk catchment, arise in the National Park and cut into the moorland plateau. These watercourses support a variety of wildlife including white-clawed crayfish, otter, water vole and salmon. The river Esk supports a small and genetically distinct population of the internationally-threatened freshwater pearl mussel. There is only one significant natural lake, Lake Gormire near Sutton Bank, which is fringed by fen, bog and wet woodland communities. Scaling Dam reservoir is important for its wintering wildfowl, and Cod Beck reservoir supports a large breeding toad population. These are the most significant man-made lakes. Ponds support a variety of breeding amphibians, including great crested newts. Fens, flushes, springs and seepages may be found close to moving water sources and areas of impeded drainage, some of which support very rare soldier flies and whorl snails.

The 'windy pits', a network of roofed-over fissures formed by bedrock movement in the south west of the National Park, support nationally significant numbers of bats. Collectively they represent an important series of swarming sites and hibernation roosts. Bat species recorded from the windy pits include the recentlyrecognised Alcathoe bat, one of only two known British locations. Its presence here may reflect the relatively unspoilt, richly wooded valleys that characterise this part of the National Park.



Environment

Many of the most important habitats and wildlife species in the National Park are protected by international and/or national legislation. The National Park contains 58 Sites of Special Scientific Interest covering nearly a third of the National Park's area. Five of these are also judged to be of European importance and have been designated as Special Areas of Conservation, and one as a Special Protection Area, under the Habitats Directive. In addition there are two National Nature Reserves which are managed by Natural England in conjunction with the landowners. Priority habitats and species in the National Park are identified in the North York Moors Biodiversity Action Plan along with actions necessary for their conservation. These actions often apply to land outside SSSIs where the mix of habitats combines to form valuable areas for wildlife on a large scale.

Invasive species have been the subject of increased focus due to their impact on sensitive habitats. Most problematic are Himalayan balsam which has colonised banks along parts of the Seph, Rye and Upper Esk and Japanese knotweed which is present on the Lower Esk.

There have been cases of illegal persecution of protected species in the National Park. Such incidences will continue to be addressed by the relevant enforcement agencies with appropriate support from the National Park Authority.

Improving Habitat Connectivity

It is the combination and variety of features and habitats in the environment that taken together make the North York Moors special. It is important to consider how these various components interact and function as an overall ecosystem.

The England Biodiversity Strategy takes forward the

recommendations of the Lawton Review²⁴. This identified that England's habitats do not currently represent a coherent and resilient ecological network and concluded that areas for wildlife need to be better and bigger, there should be more of them and they should be joined up.

Work has already been taking place in the National Park to restore PAWS (plantation on ancient woodland sites), improve riparian habitats and to conserve and enhance species rich grasslands, which are some of the Park's most important habitats. These areas together with the SSSIs form the basis of a network, however some are isolated or lack scale to function as effective ecosystems. Addressing gaps in connectivity between habitats in the National Park is a critical and exciting challenge and should be central to the work on biodiversity for the life of this Plan. It will become even more crucial as the effects of climate change become more apparent. Changing conditions could see current habitats and food sources, such as moorland and important grassland, threatened by the introduction of new or invasive species, whilst some species, such as the Duke of Burgundy butterfly or the dwarf cornel, may become stranded in small pockets of suitable habitats and be unable to migrate to cooler climates as the temperature increases or the ground becomes too dry.

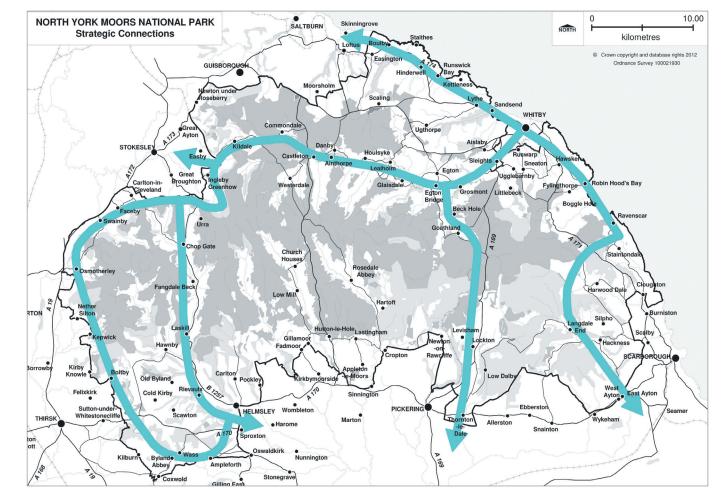
Improving connectivity involves creating linear links and expanding habitats to make the areas inter-reliant and more robust. Improving connectivity requires consideration of the purpose of the connection and what is most appropriate in an individual location for the species concerned. Within the National Park there are also other considerations to be made regarding the use of land, particularly in relation to the increasing pressures to produce more from agricultural land and providing opportunities for recreation. Looking strategically at a habitat network can help to ensure that land is put to the most effective use to meet potentially competing objectives, but this must not detract from the necessity of improving conditions for wildlife.

A habitat mapping exercise has been undertaken to establish where there are the 'building blocks' of well connected habitat networks in the National Park, potentially with links beyond the Park's boundary. The strategic connections map shows at a broad level the potential networks of habitats across and beyond the Park. Enhancing these will provide the focus for habitat improvements. It is considered that moorland, forming one large tract, is well connected, and therefore the focus of improving connections should be on other habitats whilst recognising the role of the moorland as a whole. In creating better connected habitats, it is important to focus on the function of the connections being made rather than the overall amount of habitat which is created or restored. The map of the key connections within and around the Park should be the main driver for work on biodiversity over this Plan period.

Challenges

 The need to continue to enhance and improve habitat connection in areas affected by previous land management practices. Such practices included moorland reclamation, grassland improvement, drainage, conversion to arable and especially replacement of native woodland with conifers. This is particularly significant as certain species may become increasingly at risk of becoming more isolated as a result of climate change.

²⁴ Making Space for Nature: A Review of England's Wildlife Sites and Ecological Network (Chaired by Professor Sir John Lawton, 2010)



Map 2: Strategic habitat connections

- There has been a nationally recorded decline in pollinating insect populations over recent years. The full explanation is not clear but lack of suitable habitat is one of the factors. Habitat enhancement through increasing flowering plant presence and duration has been shown to help reverse this decline.
- Increasing sedimentation of rivers causing the choking of gravel beds and nutrient enrichment.
- Storms, droughts and wildfires, floods and increased temperatures, brought about by climate change, will require natural systems to be more resilient.
- Possible impacts on moorland wildlife from increasing activity for the management of grouse.
- Continuing and increasing colonisation by invasive species such as Himalayan balsam and Japanese knotweed, particularly along river banks.
- Continuing decline in practical and traditional countryside management skills such as hedging and walling and hill flock management.
- Changes to the means of delivering enhancements for biodiversity through the introduction of Local Nature Partnerships, Nature Improvement Areas and biodiversity offsetting.
- Addressing wildlife crime.

In 15 Years Time...

The National Park supports a wide range of habitats and species, including large areas designated at international and national level. Habitats in the National Park are much better connected and native woodland flora and fauna are expanding significantly. New areas of species rich grassland have been created which are helping to increase populations of pollinators.

Environment





AIM

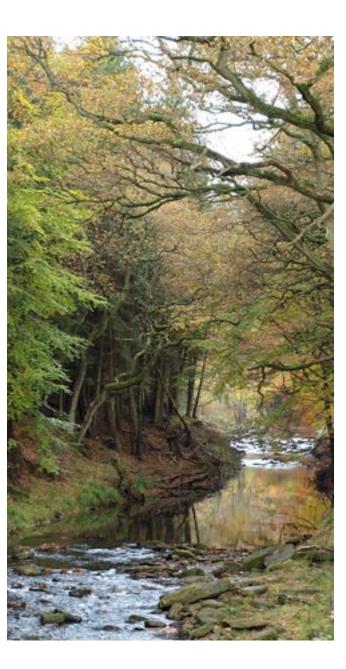
The North York Moors will continue to support a diverse range of priority species and habitats with increased extent, connection and resilience.²⁵

POLICIES	MEANS TO ACHIEVE	KEY PARTNERS
E10. There will be no net loss of priority habitats ²⁶	North York Moors Local Biodiversity Action Plan	National Park Authority
	Local Development Framework Core Policy C	National Park Authority
	Agri-environment schemes	National Park Authority Natural England Landowners and managers
	Marine Plan (to be prepared)	Marine Management Organisation
E11. Existing habitats will be conserved, restored and expanded where appropriate, focusing on enhancing habitat connectivity	Delivery of Habitat Connections Map	National Park Authority Natural England and other partners such as Yorkshire Wildlife Trust and Butterfly Conservation
	North York Moors Local Biodiversity Action Plan	National Park Authority Natural England and other partners
	Local Development Framework Core Policy C	National Park Authority
	Agri-environment schemes	National Park Authority Natural England Landowners and managers
	Joint Action Plan (local)	National Park Authority Environment Agency
	Provision of incentives for the development of habitat networks	National Park Authority and various other organisations

²⁵ Resilience is defined as a species' or habitat's ability to adapt to, or withstand, environmental impacts such as climate change or extreme weather events.

²⁶ Also see Trees and Woodlands section

POLICIES	MEANS TO ACHIEVE	KEY PARTNERS
E12. The connectivity and resilience of habitats will be improved both within and beyond the National Park,	Agri-environment schemes	National Park Authority Natural England Landowners and managers
particularly in relation to species rich grasslands, woodlands and river corridors. Additional areas of species rich grassland will be restored or	Joint Action Plan (local)	National Park Authority Environment Agency
created on lower productivity grassland	Delivery of Habitat Connections Map	National Park Authority Natural England and other partners such as Yorkshire Wildlife Trust and Butterfly Conservation
E13. The conditions for wildlife within	Water Framework Directive	Environment Agency
streams, rivers and riparian habitats will be improved	Joint Action Plan (local)	Environment Agency National Park Authority Landowners
	Esk Pearl Mussel and Salmon Recovery Project	National Park Authority Environment Agency Natural England Land managers River interest groups
	Agri-environment schemes	National Park Authority Natural England Landowners and managers
E14. A more diverse range of habitats will be supported, particularly through management of field margins and	North York Moors Local Biodiversity Action Plan	National Park Authority
grasslands	Agri-environment schemes	National Park Authority Natural England Landowners and managers





POLICIES	MEANS TO ACHIEVE	KEY PARTNERS
E15. New development will protect biodiversity and provide enhancements where appropriate	Local Development Framework Core Policy C	National Park Authority
E16. Awareness, knowledge and enthusiasm will be raised amongst communities, land managers and	Agri-environment schemes	National Park Authority Natural England Landowners and managers
visitors about measures necessary to protect habitats and wildlife	Education Service Review and Strategy	National Park Authority
E17. Changes in farming practice will be sympathetic to the environment and deliver new features where possible	Interpretation Plan for Engaging with Casual Visitors to the North York Moors National Park	National Park Authority
E18. Measures will continue to be undertaken to reduce the threat of or eradicate invasive species	Agri-environment schemes	National Park Authority Natural England Land managers
	Esk Pearl Mussel and Salmon Recovery Project	National Park Authority Environment Agency Natural England Land managers River interest groups

How Management Plan progress will be reported

INDICATOR	TARGET / DESIRED DIRECTION OF CHANGE
Percentage of SSSIs in favourable or recovering condition	At least 90% of Sites of Special Scientific Interest are in favourable or recovering condition, and contribute towards the England Biodiversity Strategy target for 50% of SSSIs to be in favourable ²⁷ condition by 2020
Number of missing key ecological connections that have been made	A high proportion have been made
Area of species rich grassland created or restored	The area of species rich grassland has been increased by 150 hectares by 2017, contributing to the connectivity target. This will contribute to the England Biodiversity Strategy target to increase the area of priority habitat nationally by 200,000 hectares
Population of wading birds breeding on moorland	Populations have been maintained
Population of merlin	The population has not declined



²⁷Agreement on definitions with Natural England to be arranged

2.4 Tranquillity

Tranquillity is one of the National Park's most appreciated special qualities. In resident and visitor surveys it is repeatedly identified as something that people value and concern is expressed over its erosion and loss. The sense of remoteness engendered by the extensive, open, undeveloped spaces is a valued quality, contributing to people's enjoyment of 'getting away from it all'. These qualities have led people to come to the North York Moors seeking spiritual refreshment for many centuries as shown by the long and continuing tradition of monastic houses.

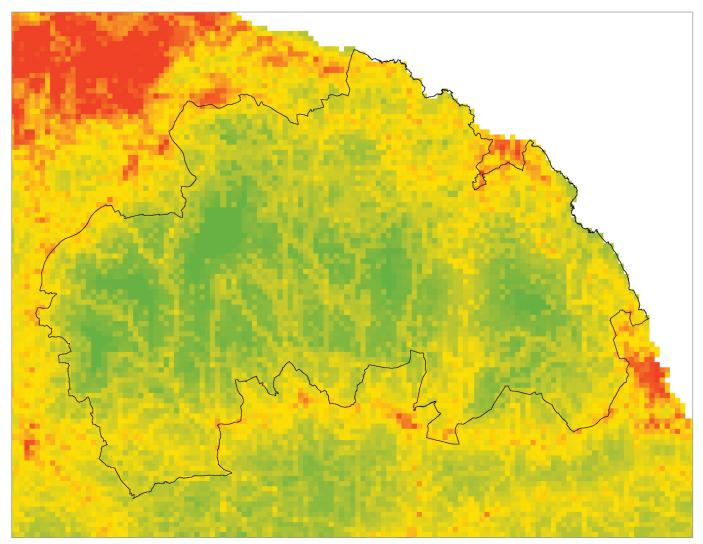
Tranquillity is difficult to define exactly as it is a combination of factors but it could be described as 'the quality of calmness experienced in places with mainly natural features and activities, free from disturbance from man-made ones'²⁸.

The national mapping of tranquillity undertaken in 2006²⁹ is based on a complex modelling process assessing and weighting a wide range of factors based upon what can be heard or seen. This includes positive factors such as remote and wild landscapes, streams and rivers and native trees, and those that are considered to be negative such as urban development, people, powerlines and traffic noise.

The tranquillity map shows the uplands, including the North York Moors, as being important and extensive tranquil areas in northern England. The mapping undertaken by the Campaign to Protect Rural England shows that almost 90% of the National Park can be classed as relatively tranquil to a greater or lesser degree.

The map shows the varying levels of tranquillity within and around the National Park, with green areas being the most tranquil, yellow being less tranquil and red being the least tranquil.





Source: National Tranquillity Mapping Data 2007 developed for the Campaign to Protect Rural England and Natural England by the University of Northumbria. OS Licence number 100018881

²⁸ Saving Tranquil Places – How to Protect and Promote a Vital Asset (Campaign to Protect Rural England, 2006)
 ²⁹ Undertaken by Northumbria University for Campaign to Protect Rural England and Natural England

Most of the National Park is generally considered to be natural, remote, wild and free from human impact, with the most tranquil areas of the National Park being the moorland and dales. Other elements of the National Park that contribute towards its sense of tranquillity include running water and, particularly in the south of the National Park, the presence of native trees and woodland. With the exception of some small pockets close to built up areas on the fringes of the National Park, the ability to see stars at night features highly across the area.

The less tranquil areas of the National Park are broadly correlated to the road network and the fringes which are close to urban areas. Most of the National Park would appear to suffer from at least occasional noise from roads. Noise from motorcycles and aircraft including helicopters can also detract from tranquillity. In the Esk Valley, central areas, the coast, fringes and roads of the National Park, tranquillity is reduced due to the concentration of people.

The tranquillity of the National Park is also known to be affected by the use of off-road motorised vehicles for recreational purposes. In addition to noise, the accumulation of non-natural items can also impact upon the perception of tranquillity, such as signs, tracks and structures associated with recreational shooting and large structures such as wind turbines.

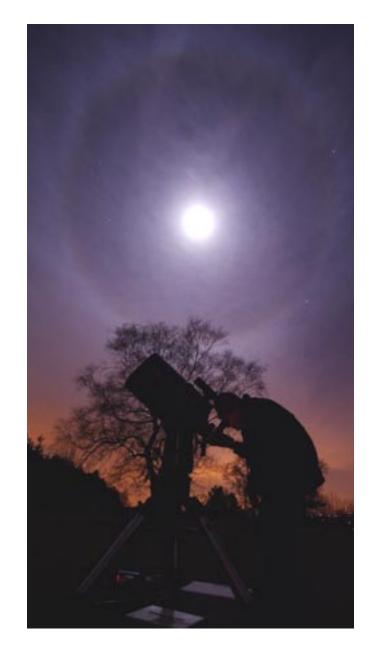
Dark night skies mapping produced by CPRE shows that the area of skies classed as 'dark' declined between 1993 and 2000. It is unknown to what extent this trend has continued. Dark skies are diminished by road and street lighting, domestic security lighting, sports grounds, mast lights and other large premises particularly where they are located in open countryside. In the case of the North York Moors intrusion of light into the dark night skies is thought to be generally a result of its proximity to large urban areas, particularly Teesside to the north. The Authority has worked with the Ministry of Defence over training proposals and issues such as security lighting at Fylingdales which has resulted in significant improvements. Generally though the National Park's night skies are considered to be dark and Sutton Bank Visitor Centre has recently been identified as a Dark Sky Discovery Centre.

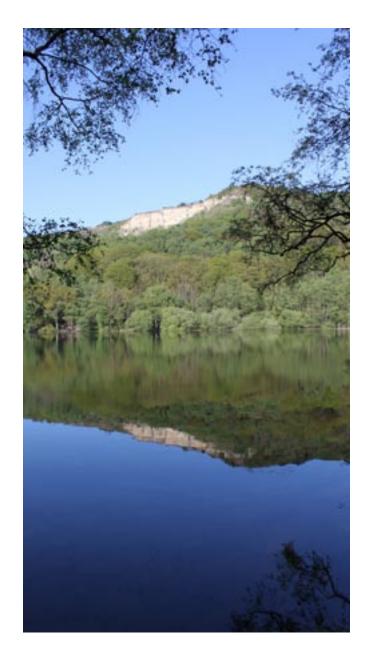
Challenges

- The potential for increases in levels of light pollution, noise and disturbance from both within and beyond the National Park.
- Increasing levels of traffic.
- Managing the potential increase in the number of visitors.
- Pressure for large scale developments, particularly wind farms, outside but close to the National Park.

In 15 Years Time...

Most of the National Park is considered to be a tranquil place. Increases in visitor numbers and new development do not undermine the tranquillity of the National Park.





AIM

■ The North York Moors will continue to be a place of tranquillity, remoteness and dark night skies, providing opportunities for spiritual refreshment.

POLICIES	MEANS TO ACHIEVE	KEY PARTNERS
E19. Existing tranquil areas will be protected, and expanded where possible	Individual projects as resources allow	National Park Authority Natural England Yorkshire Dales National Park Authority
	Interpretation and promotion material	National Park Authority
	Local Development Framework Core Policy A	National Park Authority
E20. Dark skies will be protected and improved. New development in the National Park will not cause	Local Development Framework Core Policy A	National Park Authority
unacceptable light or noise pollution	North Yorkshire Local Transport Plan	North Yorkshire County Council National Park Authority
E21. Noise from the use of recreational motorised vehicles will be minimised	Recreation and Access Strategy for the North York Moors National Park	National Park Authority Police
E22. Noise from all types of military aircraft will be kept within acceptable levels	Continual liaison	National Park Authority Ministry of Defence
E23. New development outside the National Park will not affect tranquillity within the National Park	Consultations on planning applications	National Park Authority and adjoining local planning authorities
E24. The impacts of traffic on the tranquillity of the National Park will be minimised, and alternatives to the	North Yorkshire Local Transport Plan	North Yorkshire County Council National Park Authority
private car will be promoted	Redcar and Cleveland Local Transport Plan	Redcar and Cleveland Borough Council National Park Authority

How Management Plan progress will be reported

INDICATOR

Percentage of the area of the National Park classed as tranquil³⁰



³⁰ Future measures of tranquillity may not be directly comparable with previous measures

2.5 Geodiversity

The geology of the North York Moors is predominantly of Jurassic age masked in some areas by glacial and periglacial deposits. This is particularly evident along the coast where many of the cliffs are capped with boulder clay. The Park, particularly the coast, is internationally renowned for its fossil evidence. This includes dinosaur remains which has led to the coast being termed the 'Dinosaur Coast'. Other important geological features of the National Park include Sutton Bank and the western escarpment which were formed during the ice age, the northern escarpment of the Cleveland Hills and the particularly prominent Roseberry Topping, the numerous Dales cutting through the central moorlands and the glacial outflow channels of Newton Dale, Cleveland Dyke and Forge Valley.

The underlying geology has had an influence on the appearance of the National Park's buildings and villages – limestone and calcareous grit of the upper Jurassic being the main building material in the south of the National Park, with sandstones of the middle Jurassic in the north.

Many features of the National Park are designated for their geological importance. Twenty three of the 58 Sites of Special Scientific Interest in the National Park are designated for their geological value. In addition, a series of Regionally Important Geological Sites (now known as Local Geological Sites) have been designated in the part of the National Park in Redcar and Cleveland and work is under way to identify further sites in the rest of the National Park.

There is a European network of Geoparks which aims to protect geodiversity, promote geological heritage and support

geological tourism. The North York Moors is not currently part of this network; becoming part of it would be appropriate given the importance of the geological interest across the Park. Any future Geopark should represent a continual area of geological interest and should be pursued if the administrative load is proportionate. Whilst much of the geology of the National Park is generally considered to be static in the short term, there are some places where natural or human processes are leading to changes. Natural processes include the gradual erosion of banks alongside river courses and the deposition of eroded material downstream. Dynamic coastal processes actively contribute to



natural changes in the coastline including rockfalls, landslips, silt deposition and undercliff slumping. Non-natural changes to the National Park's geology have occurred through the extraction of minerals such as coal, ironstone, alum, jet, roadstone and ballast from the Whinstone dike, sandstone and limestone. Extraction for aggregates has now ceased at Spaunton and Spiker's Hill quarries leaving just two small building stone quarries in operation. The National Park is important on a national level for its reserves of potash which are mined at Boulby, although the resultant changes to the geology will only be evident underground.

Challenges

- Raising awareness and increasing understanding of the significance and interest of the unique geology of the National Park.
- Continuing, and potentially increasing, processes of coastal erosion leading to changes in the coastal geology.

In 15 Years Time...

The North York Moors has achieved Geopark status and is recognised internationally for its distinctive escarpments, dales and coastal cliffs, and its significant remnants of the Jurassic era. A network of Sites of Special Scientific Interest and Local Geological Sites highlights the particularly significant features.

POLICIES	MEANS TO ACHIEVE	KEY PARTNERS
E25. The geological interest of the National Park will be promoted with a view to obtaining Geopark status	Partnership working to meet the relevant requirements for Geopark status	National Park Authority Natural England
E26. Geological assets will be protected and enhanced where appropriate	Local Development Framework Core Policy C	National Park Authority
E27. Awareness and understanding of the National Park's geological assets will be increased	Interpretation, events and information	Tees Valley RIGS Group North East Yorkshire Geology Trust

How Management Plan progress will be reported

There are no relevant targets or indicators

Environment



2.6 Air Quality

Although remote and noted for its fresh air the location of the National Park means that it can suffer from air pollution. Air quality monitoring at High Muffles, a National Rural Monitoring Site on the edge of Cropton Forest, has revealed widely fluctuating levels of ozone since the publication of the last Management Plan in 1998³¹. At this site, ozone levels are measured continuously providing a detailed picture of the air quality. Ground level ozone can have various effects on animals, plants and humans. Ozone concentrations may occur a long distance from the source of the pollutants, which makes effective action to prevent high concentrations particularly difficult. Whilst the National Park has a role to play, effective action needs to be taken at a more strategic level.

As the National Park is a largely open, rural environment, there are not considered to be any localised air quality problems associated with transport. Nitrogen dioxide, emitted by vehicles along with other chemicals, is monitored at High Muffles and no exceedences have been recorded over the past decade.

Whilst appropriate moorland burning regimes help to sustain the moorland, burning, either controlled or through accidental fires, can have localised, temporary impacts upon air quality. There are no Air Quality Management Areas in the National Park, reflecting the generally clean condition of the air.

Challenges

• Air quality is predominantly influenced by activities outside the National Park.

In 15 Years Time...

The clean, fresh air in the National Park helps to support the high quality natural environment.

³¹ UK Air – Annual and Exceedence Statistics (uk-air.defra.gov.uk)

POLICIES	MEANS TO ACHIEVE	KEY PARTNERS
E28. New development will not lead to an unacceptable deterioration of air quality	Local Development Framework Development Policy 1	National Park Authority
quanty	Emissions consents and enforcement	Environment Agency
E29. Appropriate burning regimes will be established/maintained to reduce the risk of large scale moorland fires	Agri-environment schemes	National Park Authority Natural England Land managers

How Management Plan progress will be reported

INDICATOR

Number of days of exceedence of ozone pollution levels at High Muffles



2.7 Soils

Soil is essentially a non-renewable resource as it takes hundreds of years to form. The National Park supports a variety of soil types from raw peat in the uplands to clay and silt floodplain soils in lowland areas.

Generally the North York Moors do not suffer from peat erosion to the same extent as other upland National Parks. Peat is important as it stores carbon which would otherwise be released into the atmosphere and contribute to climate change. There are around 4,100 hectares of blanket peat on the moorland, and around a further 46,000 hectares of peaty soils. It is estimated that over 6 million tonnes of carbon is stored in peat in the North York Moors³². Yorkshire Peat Partnership are restoring a number of areas of peatland including Glaisdale, Baysdale and Bransdale. Future work should focus on maintaining those areas which have been restored already and targeting other areas which have not been restored.

The land in the National Park is of agricultural grades 3-5 ranging from moorland soils to productive arable land in the south and along the coast. Agricultural and other land management practices can lead to the loss of soil, which is often washed into water courses leading to further problems of sedimentation and diffuse pollution. A range of measures can be adopted to reduce soil loss and sedimentation. These include the use of buffer strips, catchment areas for run-off and reducing 'bare soil time'. It is possible to reduce the amount of bare soil time through sustainable management regimes.

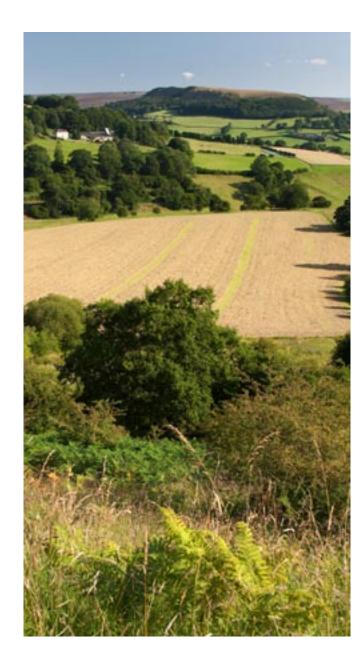
Challenges

- Ensuring that land management practices do not result in the loss of soils.
- Loss of soils due to wildfires.
- Loss of soils due to an increase in droughts and heavy rainfall predicted to result from climate change.
- Risk of peat erosion due to wildfire and exacerbated by historic damage.

In 15 Years Time...

The moorland contains large areas of blanket peat and peaty soils, while soils in the rest of the National Park continue to support agricultural production. There are no significant problems associated with soil erosion and sedimentation in rivers.

³² Draft Estimated Peatland Carbon Storage and Greenhouse Gas Flux in English National Parks and Areas of Outstanding Natural Beauty (Natural England, 2011)



AIM

- Good quality soils and peat will continue to support the wildlife, agriculture and forestry of the National Park.
- The moors will continue to maintain around 4,100 hectares of blanket peat.

	POLICIES	MEANS TO ACHIEVE	KEY PARTNERS
	E30. Blanket peat bog will be managed appropriately to ensure its retention	Peat restoration projects	Yorkshire Peat Partnership
		Agri-environment schemes	National Park Authority Natural England Land managers
	E31. Soils will be managed sustainably	Agri-environment schemes	National Park Authority Natural England Land managers
		Catchment Sensitive Farming Initiatives	National Park Authority Natural England Environment Agency
		Esk Pearl Mussel and Salmon Recovery Project	National Park Authority Environment Agency Natural England Land managers River interest groups

How Management Plan progress will be reported

INDICATOR

The area of blanket peat



2.8 Moorland

The North York Moors contains the largest continuous tract of heather moorland in England, and this forms the iconic landscape at the heart of the National Park. Alongside environmental management, the majority is managed for sheep grazing and red grouse shooting although there are some extensive moors that are not grazed or shot. Most of the moorland is designated at international level as a Special Protection Area and a Special Area of Conservation, due to the importance of the wet and dry heath habitat and the bird populations.

Nationally, there has been considerable debate over the appropriate use of burning as a management tool and there is clear evidence that too frequent or poorly managed burning is damaging the conservation value of moorland. On the North York Moors, properly managed burning is considered to be essential for the conservation of the moorland, and rotational burning can reduce the risk of wildfire. The North York Moors is lower in altitude and considerably drier than most upland moorland in Britain. Heather growth is more rapid and the predominantly dry nature of the heathland means that extensive stands of tall heather pose a considerable fire risk. Experience of accidental fires on unmanaged moors has demonstrated their destructive capacity which can lead to long term damage or irreversible loss, not just to vegetation and wildlife but also to peat, soils and archaeological remains.

The only alternative to burning is cutting. This is used on some moors to a limited extent but is not possible on rocky moors or where there is no vehicular access. Widespread cutting would also inevitably damage the unique archaeological remains on the moors. For this reason it is considered that there is usually no feasible alternative to sensitive and appropriate rotational burning and grazing to deliver conservation benefits for the wildlife, cultural heritage and landscape. In some places it is appropriate to establish 'no burn' areas or longer burning rotations.

Sheep numbers on the moors were, until recently, in decline due to the harsh environment for grazing sheep resulting in low levels of productivity. More recent environmental schemes and initiatives have halted this decline by rewarding the environmental role of sheep grazing as a way of managing the moors.

Bracken is a poisonous plant for both humans and grazing stock. It can form dense stands which smother out all other vegetation, are of limited environmental value and which create thick layers of persistent litter that provide an ideal environment for tick. Bracken has been a major problem on the moors and although its extent has been significantly reduced since the 1980s by long term programmes of control it still requires management to prevent re-establishment.

The moors of the National Park are susceptible to tick and tick born diseases such as louping ill which can have devastating effects on sheep and grouse and Lyme Disease which affects humans. Well managed sheep flocks can help address these problems by reducing the presence of disease and the populations of tick. There is also clear evidence that the control of predators such as fox, stoats, magpie and carrion crow is beneficial to the conservation of important breeding waders as well as grouse.

The ability of the moorland to store water is becoming increasingly important. Measures such as the creation of woody debris dams and blocking moorland drains have been put in place on some parts of the moors which will help to reduce the effects of run-off on surrounding communities during heavy rainstorms.

Much of the National Park has an important role to play in holding rainwater and releasing it slowly to areas downstream beyond the National Park's boundary thereby potentially reducing flooding and the 'flashyness' of the rivers. The value of this function, and the means to enhance it, is of considerable importance given the predicted weather patterns associated with climate change.

Challenges

- Retaining sheep on the moors.
- Pressure for additional infrastructure such as tracks, ponds, butts, walls and fences.
- Increased frequency and severity of flooding events and drought as a result of climate change leading to increased pressure to retain rain water on the moors.
- Increasing risk of moorland fires, particularly as droughts become more frequent.
- Ensuring that controlled burning is carried out in an appropriate way and does not affect watercourses, and avoiding wildfires.

In 15 Years Time...

The moorland is managed in a way which retains its distinctive landscape, wildlife and heritage. Various measures are in place which support the role of the moorland in holding rainwater. The moorland will be managed to maintain its distinctive landscape, wildlife and heritage.

POLICIES	MEANS TO ACHIEVE	KEY PARTNERS
E32. The moorland will be managed in a way which maintains the open landscape, supports biodiversity and	Agri-environment schemes	National Park Authority Natural England Land managers
protects the cultural heritage	Monument Management Scheme	English Heritage National Park Authority
E33. The ability of the moorland to store rainwater to reduce run-off and reduce	Catchment Flood Management Plans	Environment Agency
the risk of flooding to communities and environments both within and outside the National Park will be improved	Slowing the Flow and similar projects	National Park Authority Environment Agency Land owners DEFRA
	Agri-environment schemes	National Park Authority Natural England Land managers
E34. Appropriate burning regimes will be maintained and accidental fires will be prevented wherever possible	Agri-environment schemes	National Park Authority Natural England Land managers
	Heather and Grass Burning Code	DEFRA Natural England Land managers
E35. Grazing levels on the moors will be maintained at levels required to maintain the habitat and cultural heritage of the area	Agri-environment schemes	National Park Authority Natural England Land managers



Environment

How Management Plan progress will be reported

INDICATOR

Area of moorland managed in line with conservation objectives



2.9 Trees and Woodlands

Woodland covers 22% of the National Park and provides a valuable economic and environmental resource to the area. About 20% of woodlands in the National Park are 'ancient', having been continuously wooded for at least 400 years, although half of this is plantation on ancient woodland sites (PAWS), having been replanted mainly with conifers. Woodland is a major component of the National Park's landscape and has an increasingly recognised role in storing carbon and reducing the risk of soil erosion and subsequent sedimentation of rivers.

Plantation woodlands are generally concentrated in the large Forestry Commission and private forests in the south-east and on the fringes of the National Park to the south-west, west and north. These forests were mainly planted as a strategic timber resource in the 20th century and design was not always sympathetic to landscape appearance due to the angular nature of some of them. They are now increasing in diversity and age structure and opportunities are being taken to improve landscape as felling programmes proceed. Careful planning and control of operations has given rise to exciting major improvements in recent decades through development of remnant native woodland and heathland networks, protection of riparian and wetland areas, more sensitive drainage and softening of forest edges.

The plantation forests are now generally considered to be beneficial to the biodiversity of the National Park due to increased structural diversity and increasing opportunities for more sensitive management as the forests have matured. Major gains for biodiversity have been secured through the removal of plantation woodland at May Moss, Bumble Wood and Southwoods for example. In addition the larger plantation forests support nationally important populations of nightjar, as well as being the main stronghold for some scarce species such as goshawk, crossbill and pine marten. However, in some forests, particularly on the poorer soils and the more exposed upland sites, the species currently preferred for timber production can have an impact on biodiversity and amenity value. New and developing knowledge about species choice, tree provenance and silvicultural systems must continue to be applied if plantation forests are to contribute positively to biodiversity and landscape, and continue to be an economic resource.

Smaller plantations and farm woodland can have a significant impact on landscape guality and careful consideration of management and new planting is required. Many plantations in inappropriate locations have been removed over the past 10 years and this has had a very positive landscape impact. There are sites where removal of plantations and restoration to moorland will be a priority on conservation grounds and in any event timber production may no longer be considered economic on inaccessible or demanding ones. Some sites may become less economically viable as higher yielding species become less successful due to climate change. Restoration to open habitats may be an option to consider but this will need to be balanced against a range of objectives, including the desire to increase carbon sequestration. The government's policy in this area requires that compensatory planting should be undertaken elsewhere when woodland is to be converted to open habitat.

Ancient semi-natural woodlands, which make up 2% of the National Park, are more fragmented and have survived on steeper ground in the valleys and dales with many being isolated and unmanaged. Although most ancient native woods are relatively small there are some exceptions, with significant larger woods at Mulgrave and Roxby in the northern part of the National Park and Forge Valley in the south east. It is possible that an increase in demand for wood fuel could see a resumption of management in many of these native woodlands and this could help improve their condition if done in accordance with the UK Forestry Standard.

PAWS, where conifers have replaced the native trees, are a large and important element of the biodiversity of the Park. The North York Moors contain the largest concentration of PAWS in the north of England. Despite significant restoration schemes by the Forestry Commission and some private owners, assisted by the National Park Authority, the remaining resource is being steadily eroded and much is in danger of permanently losing its value as an ancient woodland site as, over time, the surviving ancient native woodland ground flora and shrub layer will disappear. It is therefore important that PAWS are not replanted with successive generations of conifers as this would lead to the permanent loss of an important habitat. Such events should, therefore, only happen in specific circumstances or/and with suitable mitigation. Once restored, PAWS must be maintained to prevent conifer re-growth. Restoring PAWS to native species provides a major opportunity to enhance woodland habitats and increase resilience, as well as potentially reducing soil erosion, neutralising pH levels and contributing to improving habitat networks.

The Park has nationally important populations of veteran trees and has some of the best sites in northern England for old trees and their associated wildlife. Areas such as Bilsdale and Farndale still support quite extensive areas of old wood pasture, and smaller numbers of ancient trees are present in various places throughout the National Park. The trees are often centuries old and it may be necessary to manage them or to maintain a favourable environment around them to help them survive in the long term. Establishing a new generation of young trees in notable veteran tree areas can be important and there are significant opportunities to plant trees to improve habitat connectivity and to enhance landscape.

Some of the National Park's woodland is protected at international level as Special Areas of Conservation and 1,400 hectares is designated as Sites of Special Scientific Interest. Priority woodland habitats are identified in the Local Biodiversity Action Plan and actions will be informed by a review of the 2002 forest habitat network report³³, commonly known as the Peterken Report.

Trees and woodlands have a valuable role in storing carbon in wood and forest soils. It is estimated that 7.5 million tonnes of carbon is stored in the Forestry Commission owned woodland. They also play an important role in mitigating the effects of climate change through intercepting rain water which potentially reduces the severity of flooding downstream and also lessens the effects of sedimentation of rivers. Trees also provide shade which may become increasingly important for wildlife in rivers and on livestock farms if summers become hotter. The role of trees outside woods, such as infield and field boundary trees, in providing habitat connectivity and benefitting livestock farming in response to climate change is starting to be more widely accepted.

³³ Native Woodland Development in the North York Moors and Howardian Hills (George F Peterken, 2002)

Prospects for Future Tree Planting

It is considered that an additional 3,000 hectares of woodland could be accommodated in the National Park, taking the total proportion of woodland in the National Park from around 22% to around 24%. It is thought that this could be accommodated on land of low productivity, including on bracken covered slopes but also through extending existing ancient semi-natural woodland which will better connect existing habitats. New planting may comprise new tracts of woodland, wood pasture and associated natural colonisation which will contribute to the creation of better habitat networks. Further work is required to ascertain precisely where this may be feasible and to avoid conflicts with other environmental and land use interests.

Challenges

- Increasing demand for wood fuel.
- Potential threats to trees from climate change through extreme weather conditions and new or evolving pests and diseases, and to woodland flora and fauna, as a result of climate change.
- Ensuring that all forestry operations do not damage the conservation value of woods and trees and adhere to the minimum standards set out in the UK Forestry Standard.
- Potential for increased tree planting.
- Finding acceptable sites for new planting on land which would produce more timber.

 Loss of value of PAWS if steps are not taken to enhance or restore sites through appropriate and timely management.

In 15 Years Time...

The woodland in the National Park supports a wide range of flora and fauna. Many conifer plantations have been replanted with native species. Planting of native trees is taking place on bracken covered slopes and other appropriate areas. There are more boundary and infield trees.

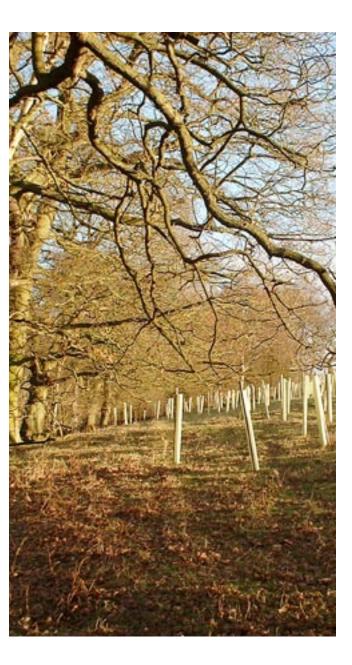
Trees and woodlands play an important role in mitigating and adapting to the effects of climate change through intercepting rainfall, supporting soil structures and storing carbon.



AIM

The multiple benefits delivered by woodlands and forests in the National Park will be maintained and enhanced.

POLICIES	MEANS TO ACHIEVE	KEY PARTNERS
E36. Better connected and more resilient woodland habitat networks will be created through appropriate planting, management, restoring PAWS	Review of the Peterken Report and actions arising	National Park Authority Forestry Commission Private landowners
and positive management of other woodlands and of veteran trees	Joint Action Plan (local)	National Park Authority Forestry Commission Forest Enterprise
	Delivery of Habitat Connections Map	National Park Authority Natural England Forestry Commission
	Agri-environment schemes	National Park Authority Natural England Forestry Commission Land managers
	North York Moors Local Biodiversity Action Plan	National Park Authority
	English Woodland Grant Scheme	Forestry Commission
E37. The removal of plantations from inappropriate sites will be supported where this will deliver landscape enhancement or other environmental	Review of the Peterken Report and actions arising	National Park Authority Forestry Commission Private landowners
benefits.	Joint Action Plan (local)	National Park Authority Forestry Commission Forest Enterprise





POLICIES	MEANS TO ACHIEVE	KEY PARTNERS
E38. When felled, PAWS will be replanted with species that support the restoration of ancient woodland, in most circumstances.	Advice and grants to private owners	Forestry Commission National Park Authority Private Landowners
	Joint Action Plan (local)	National Park Authority Forestry Commission Forest Enterprise
	Forest Designs Plans Forestry Commission regulatory role	Forestry Commission
E39. Plantation forests will be managed in accordance with sustainable forest	Grants and regulation	National Park Authority Private landowners
management principles taking account of the high standards needed in a National Park and best practice regarding developing climate change resilience will be incorporated into forest planning and management.	Forest Design Plans	Forestry Commission
E40. Individual and groups of trees that are of amenity and conservation value will be protected and new tree planting	Review of the Peterken Report and actions arising	National Park Authority Private landowners Natural England
will be encouraged, where appropriate	Tree Preservation Orders	National Park Authority
	Agri-environment schemes	National Park Authority Natural England Land managers
E41. There will be no net loss of priority woodland and wood pasture, parkland and veteran tree habitats	North York Moors Local Biodiversity Action Plan	National Park Authority
	Local Development Framework Core Policy C	National Park Authority Forestry Commission

How Management Plan progress will be reported

INDICATOR	TARGET / DESIRED DIRECTION OF CHANGE
Area of woodland and wood pasture planted	300 hectares has been planted by 2017, contributing towards connectivity targets
Area of PAWS restoration	At least 600 hectares of PAWS restoration initiated by 2017
Area of woodland managed in line with conservation objectives	Area managed in line with conservation objectives has increased



2.10 Rivers and Streams

The rivers and streams of the North York Moors contribute significantly to the special qualities of the area. They are a source of drinking water for both people and animals, a recreational resource and are valuable, yet fragile, habitats. They form a key habitat network and need to be protected from degradation.

The Water Framework Directive is the key driver behind future maintenance and enhancement of the National Park's waterbodies. Under the criteria of the Water Framework Directive only 18% of the National Park's 79 water sources are classified as 'good' with 43% 'moderate' and almost 30% in 'poor' condition. The reasons for this are mainly related to physical obstructions to fish migration but also include problems associated with agricultural and moorland run-off, shading in forested areas, acidity and sedimentation.

In general, direct point source water pollution from farming is no longer a major concern, but diffuse pollution remains an issue. This includes nitrate and chemical run off and sediment input (which often carries phosphate with it). The source of water pollution is not limited to agriculture as moorland drainage, road run-off, septic tanks and sewage treatment also contribute to pollution in the National Park's rivers and streams.

The Environment Agency is investigating further the causes of failing water bodies, which will identify the actions that need to be taken at a local level. It is thought that some instances of failure are due to natural causes, such as low pH levels, which cannot be resolved.

Environment

Monitoring of fish populations by the Environment Agency shows that the rivers and streams of the National Park are important for brown trout, brook lamprey and bullhead and that populations have remained reasonably stable over the last 10 years. The Esk is a salmon and sea trout river which is important for the economy of the area. Salmon numbers have improved since a release programme using Esk provenance stock was introduced in the mid-1990s, but salmon numbers are still not meeting the River Esk Salmon Action Plan targets, although targets for sea trout are being attained.

Water quality improvements in the Humber Catchment now mean that migratory salmon and sea trout can potentially access all of the Rye and Derwent tributaries in the National Park. The main restrictions to this are physical barriers, such as weirs, outside the National Park boundary.

The aim for increasing renewable energy may lead to pressure for more hydroelectric schemes along the National Park's rivers. Such installations must include measures to ensure that fish migration can still take place and in some instances measures can be put in place to improve on the current situation.

Rivers that flow through the Park can be prone to flooding during times of heavy rainfall and some communities in and around the Park have suffered from this. Notable recent incidents in the Park include flooding in Hawnby, Rievaulx and Helmsley in 2005 and floods have also been recorded at settlements along the Esk Valley. There have also been many floods in settlements just outside of the National Park including at Pickering, Great Ayton and Skinningrove. As well as damage to property and risk to people, flooding incidents in the Park have also damaged roads, rights of way and farmland. Annual rainfall in the National Park is generally greater than in the surrounding lower lying areas and can be over 1,000mm³⁴ per year. The topography of the National Park, with steep sided, narrow valleys, means that run-off is often rapid and rivers can become inundated in times of high rainfall. Measures such as blocking moorland drains are being put in place to increase the ability of the moorland to store water and release it slowly.

Challenges

- Meeting the requirements of the Water Framework Directive for all water bodies to achieve 'good' status by 2015.
- Removing barriers to fish migration.
- Continuing diffuse pollution of water courses.
- Climate change is predicted to bring about an increase in the frequency and severity of flooding, and also periods of drought, both of which may affect water levels, quality and wildlife.
- Reducing the risk of flooding both within and outside the National Park.

In 15 Years Time...

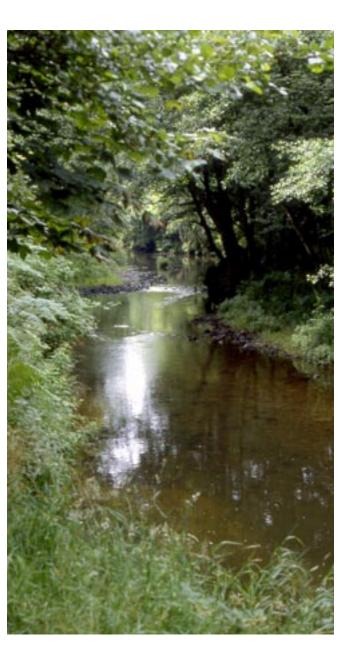
All water bodies in the National Park are achieving 'good' status under the Water Framework Directive, where this has been possible, which has also led to improvements in the landscape and for biodiversity more generally. Following the removal of some barriers in rivers, salmon and other species are now present in many of the National Park's rivers. Rivers are less susceptible to flooding in high rainfall as water is released more slowly from the moors.



³⁴ North East Yorkshire Strategic Flood Risk Assessment (ARUP, 2010)

The rivers, streams and other water resources of the National Park will be of a high quality providing habitats for wildlife, clean drinking water and places for recreation.

POLICIES	MEANS TO ACHIEVE	KEY PARTNERS
E42. 'Good' status (under the Water	River Basin Management Plans	Environment Agency
Framework Directive) of all water bodies will be achieved, where feasible	Joint Action Plan (local)	National Park Authority Environment Agency
	Agri-environment Schemes	National Park Authority Natural England Land managers
	Catchment Sensitive Farming Initiatives	National Park Authority Natural England Environment Agency
E43. Watercourses will be protected and restored for the benefit of wildlife	Esk Pearl Mussel and Salmon Recovery Project	National Park Authority Environment Agency Natural England Land managers River interest groups
	Joint Action Plan (local)	National Park Authority Environment Agency
	Agri-environment Schemes	National Park Authority Natural England Land managers
	Catchment Sensitive Farming Initiatives	National Park Authority Natural England Environment Agency
E44. The National Park's ability to store rainwater will be improved to reduce the risk and impacts of flooding to communities and environments within and outside the National Park.	Slowing the Flow and similar projects	National Park Authority Environment Agency Land owners DEFRA Local communities
	Catchment Flood Management Plans	Environment Agency



Environment

How Management Plan progress will be reported

INDICATOR

Number and percentage of water bodies identified as 'good' under the Water Framework Directive



³⁵ Some are thought to be failing due to natural reasons and it is not possible or desirable to resolve these issues

2.11 Coastal and Marine Environment

The National Park's eastern boundary comprises 42km of coastline comprising valuable marine habitats and outstanding sea views. The communities and cultural heritage of the coast are strongly linked to the tradition of the sea as a way of life. The dramatic coastal scenery along the Park's eastern boundary is enhanced by the open skies and seascape adjoining it. Uninterrupted views over the sea can be gained from various high vantage points along the coast, most notably at Ravenscar and Boulby. Work is currently being undertaken nationally on Seascape Characterisation by Natural England and will be a key element of Marine Plans in the near future. The presence and quality of the coast attracts many visitors and the seascape adds a major element to the National Park's character.

The National Park's distinctive coast is largely wild and undeveloped, characterised by undulating sea cliffs and rocky shores, interspersed with small, traditional fishing villages. The coast is significant geologically, containing evidence of the Jurassic age and the more recent alum, jet and ironstone industries.

The marine environment is important for its reefs, is a major crab and lobster fishery and supports a wide range of other flora and fauna including marine algae, sponges, sea urchins, starfish and cold water corals. Rocks, boulders and the many shipwrecks provide ideal habitats for such species. The rocky coastline and the sea itself are important for seabird populations such as kittiwakes, and grey and common seals live in the waters off the National Park's coastline.

Approximately half of the coast and shoreline is designated as Sites of Special Scientific Interest and the cliffs near to Robins Hood's Bay are designated internationally as a Special Area of Conservation, with the inshore waters there defined as a Sensitive Marine Area. Cliffs and slopes, rocky shore and marine sub-tidal areas are identified as priority habitats in the North York Moors Local Biodiversity Action Plan. The entire coastline is defined as Heritage Coast for its natural environment, landscape and opportunities for recreation.

There are three bathing beaches as defined by the Bathing Water Directive in the National Park - Staithes, Runswick Bay and Robin Hood's Bay. With the exception of Staithes they have regularly passed the bathing water quality assessments to date. Problems at Staithes are thought to be caused by a number of factors not least of which is the fact that the sample point is within the harbour wall. The Bathing Water Directive³⁶ requires all bathing waters to be 'sufficient' by 2015.

The 2009 Marine and Coastal Access Act changes the management of the marine environment. Amongst other provisions, the Act will lead to the establishment of Marine Conservation Zones, and the marine area around Runswick Bay has been proposed for designation. The Marine Management Organisation is responsible for planning and licensing in the marine area. The Marine Strategy Framework Directive aims to achieve Good Environmental Status of Europe's seas by 2020.

A significant problem for many coastal and marine areas is litter, either from beach users or that is washed up from the sea. The coastline of the North York Moors is no exception and there are many instances of material, in particular plastics, washing up on the beaches. One of the requirements of the Marine Strategy Framework Directive is to ensure that litter does not cause harm to the marine environment. Integrated Coastal Zone Management is an internationally recognised method of managing the coastal zone. The varied interests of many agencies and local interest groups on the coast of the National Park are represented through the North Yorkshire and Cleveland Coastal Forum. The River Tyne to Flamborough Head Shoreline Management Plan 2 sets out the policies in relation to coastal management.

Challenges

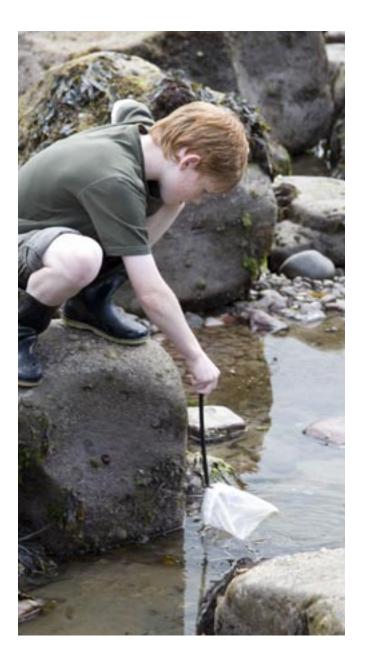
- The Bathing Water Directive requires all bathing water, including inshore waters up to a mile out to sea, to achieve 'sufficient' status by 2015.
- Continuing demand for recreational activities such as walking.
- Pressure for development related to aquaculture.
- The need for alternative and sustainable forms of energy such as wave and tidal energy.
- Sea level rise may lead to coastal adjustment and cliff line retreat.
- Increased storminess brought about by climate change may exacerbate coastal erosion processes.

In 15 Years Time...

The marine environment is healthy and supports sustainable fisheries, and bathing waters are in good condition.

³⁶ Directive 2006/7/EC





AIM

The natural and historic coastal and marine environment and its distinctive landscape and seascape will continue to be renowned for its beauty and diversity.

POLICIES	MEANS TO ACHIEVE	KEY PARTNERS
E45. The wildlife, seascape, tranquillity and historic environment of the coast and marine area will be protected and enhanced	North Yorkshire and Cleveland Heritage Coast Management Plan	North Yorkshire and Cleveland Coastal Forum
	North York Moors Local Biodiversity Action Plan	National Park Authority
	Strategy for the Coast	North Yorkshire and Cleveland Coastal Forum
	Local Development Framework Core Policies C, D and G	National Park Authority
	Marine Plan (to be prepared)	Marine Management Organisation
E46. Bathing water quality will be improved where necessary and current standards will be maintained or improved elsewhere	Action Plan between Environment Agency and National Park Authority	Environment Agency National Park Authority
	Catchment Sensitive Farming Initiatives	National Park Authority Environment Agency
	Strategy for the Coast	North Yorkshire and Cleveland Coastal Forum
	Yorkshire Bathing Water Partnership	Yorkshire Water Scarborough Borough Council
E47. Natural processes will be allowed to continue along much of the coastline, with coastal and flood risk management measures being maintained or implemented where necessary.	River Tyne to Flamborough Head Shoreline Management Plan	Scarborough Borough Council Redcar and Cleveland Borough Council National Park Authority

How Management Plan progress will be reported

INDICATOR

Number of beaches identified as 'sufficient' under the revised Bathing Water Directive.



Ralph Cross

Just wander up as far as Rauf On a fine an' sunny day: See t' Cleveland Hills an' Roseberry A vast o' mahls away.

Drink in that pure, that balmy air, Midst breckon, moor an' moss; Enjoy that quiet solitude Aroond that ancient cross.

An'd whahl ye sit an' meditate Beneeath a cloodless sky, Ye think hoo men an' tahms tha change As t' yeears pass swiftly by.

But Rauf's steead there for centuries An' t' moor sheep roond 'im rub-He's fower mahls fra Castleton An' tweea fra Blaka' pub.

by Tun 'Moor Jack', Castleton



3. Understanding and Enjoyment

National Parks are for everyone. The freedom to explore and enjoy beautiful landscapes was a major impetus behind the creation of National Parks and this was embodied in the second statutory purpose for National Parks:

• To promote opportunities for the understanding and enjoyment of the special qualities of the Parks by the public. •

More recently, the National Parks Circular emphasises the importance of people in the environment and the role that these protected landscapes play in promoting social, economic, spiritual and physical wellbeing.

Every year, millions of people make use of the recreational opportunities provided by the National Park's environment, from a day's walk or school visit to a multi-day sightseeing or more adventurous mountain biking visit. Not only does this provide benefits in terms of the health and well-being of the population, it also enhances understanding and knowledge of the National Park and the environment as a whole and is a major factor in the local economy. However, the benefits people gain from being in the Park do not need to be associated with undertaking an 'activity'. The fact that the landscape is designated creates a sense of inherent value and just being in the Park can offer people a sense of calm, peace and tranquillity and a rejuvenation of spirit.

The proximity of large urban areas, particularly to the north of the Park, highlights its importance in providing opportunities for recreation.

3.1 A Sustainable Growth in Visitors for the National Park

During 2010, 10.2 million visitor days were spent in and around the National Park, comprising 6.4 million visitors³⁷. Since the publication of the last Management Plan in 1998, there has been an average growth in visitor days by approximately 1-2% each year. During this period, there have been fluctuations both up and down, however, the most recent period from 2007-2010 has seen a drop of 5% (half a million) in visitor days and 5% (350,000) in visitors. Current estimates indicate that if this trend were to continue a further 4.5% of visitor days and 5.5% of visitors would be lost from 2010 through until 2015³⁸. In contrast, the number of visitors to the Yorkshire and Humber region has increased over recent years by around 6%³⁹.

Given the benefits which tourism brings in terms of raised awareness of the special qualities and the opportunity to enjoy the National Park as well as the financial benefits to the local economy, a reduction in tourist days would be seen as having an overall negative impact on the National Park.

VisitEngland's Strategic Framework for Tourism⁴⁰ proposes the principles of 'wise growth' and identifies a headline ambition of 3% real growth in the *value* of tourism in England year on year between 2010 and 2020. This is growth in the economic value of tourism rather than in visitor numbers.

If this ambitious growth rate is achieved for England and mirrored in an increase in the value of tourism for the North York Moors, we anticipate that this might mean an increase on 2010 figures of 1.6 million visitor days (to 11.9 million) and around 1 million additional visitors (to 7.5 million) between 2010 and 2015 in the National Park⁴¹. The National Park has already experienced a peak of 10.8 million visitor days in 2007 without major impact on the special qualities.

During the summer months, there are some places in the National Park where current visitor levels do cause congestion and disturbance. However, there are many other places and other times of year when the National Park, its communities and its businesses have the capacity to sustain more visitors than current levels.

It is impossible to arrive at a precise measure of what level of visitation an area can withstand before communities, other visitors or the landscape and wildlife are negatively affected. The more diverse the area and the wider the range of visitor it receives, the more difficult it is to make an accurate forecast of the capacity of that area to sustain a certain number or type of visitor.

The current level of damage and disturbance caused by recreation and tourism is very limited and very localised. There is experience of managing visitors and facilities to lead to more sustainable recreation. There is spare capacity at tourism based facilities such as hotels, youth hostels and camp sites. From this it is considered

- ³⁸ To project further than a 5 year period is not deemed accurate enough, hence revised projections will be calculated in around 3 years for the following 5 year period of the Management Plan
- ³⁹ Great Britain Travel Survey / Welcome to Yorkshire, data on Visitor Trends by Purpose of Trip 2006 – 2010.
- ⁴⁰ England A Strategic Framework for Tourism 2010 2020 (VisitEngland, 2011)
- ⁴¹ Scarborough Tourism Economic Activity Monitor Projections (Global Tourism Solutions (UK) Ltd, 2011)

³⁷ Scarborough Tourism Economic Activity Monitor 2010 Report (Global Tourism Solutions (UK) Ltd, 2011)

Understanding and Enjoyment

that the National Park could accommodate a growth in visitor days but this will depend upon the nature of activities undertaken, the timing of the visit and the places visited.

Based upon current levels of activity in the National Park, it is considered that, were the levels of growth set out above experienced, each year around 800,000 additional long walks and 510,000 additional short walks may be taken, there would be around 570,000 further visits to the beach and around 590,000 more visits to a country pub. Smaller increases would also be seen in relation to cycling, visiting tourist attractions and people going shopping.

Given the potential benefits of a growth in visitors to the well being of the public and to the local economy, it is proposed that the Authority should support and encourage growth, but only in so far as it does not negatively impact on the communities and special qualities of the area.

It is considered that an additional 1.6 million visitor days and 1 million visitors by 2015 can be absorbed by the National Park without detrimental effect. These increases would need to be carefully promoted and managed with the aim that visitors arrive at the right times, in the right places and in the right way to minimise impact and maximise benefit. This principle of 'wise growth' balances growth aspirations with the principles of sustainability in tourism. Any further growth aspirations for the latter years of the Management Plan period will need to be considered prior to 2015 in line with the circumstances at the time.

3.2 Enjoying the Park

The varied landscapes of the North York Moors offer a great diversity of opportunities for recreation and access. People enjoy

the National Park for a variety of recreational pursuits including walking, cycling, horseriding, a day at the seaside, enjoying the scenery, eating out, sports, visiting cultural and natural heritage sites, visiting museums and visitor centres and participating in a wide range of other outdoor activities from pony trekking and mountain bike riding to sailing, shooting and fishing. Many people also enjoy the National Park through volunteering for a wide range of activities including repairing paths and dry stone walling. In addition, a wide range of events is held in the National Park each year which draws in many visitors, such as events on the North Yorkshire Moors Railway and Robin Hood's Bay Victorian Weekend.

Recreation Activities most commonly undertaken on a visit to the North York Moors⁴²

Longer walk (more than 1 hour)	50%	
Visiting a country pub	37%	
Visiting the beach	36%	
Short walk (less than 1 hour)	32%	
Car touring	22%	
Visitor attraction	11%	
Cycling	6%	
Special event	6%	

The North York Moors are relatively well-resourced in terms of most types of access and recreation provision, with a 2,300km network of public rights of way and around 65,000 hectares of open access land (45% of the National Park's area) as well as a number of long distance trails and cycle routes. The National Park also contains a wide variety of recreational facilities appealing to a broad range of interests, such as the Forestry Commission's Dalby Forest, Yorkshire Gliding Club, historic sites such as Rievaulx Abbey and the North Yorkshire Moors Railway. In addition to facilities, events celebrating the cultural heritage of the Park are another way to enjoy its special qualities.

The rights of way network is perhaps the most important physical resource for enabling the public to directly enjoy the special qualities of the National Park. Agreements between the National Park Authority and North Yorkshire County Council and Redcar and Cleveland Borough Council delegate to the National Park Authority the statutory powers and duties relating to management of public rights of way.

The Countryside and Rights of Way Act 2000 introduced the right of access on foot to open country which now covers almost half of the National Park. The National Park Authority is the 'Access Authority' for the purposes of the Act. In 2009 the Marine and Coastal Access Act introduced the legal framework for a right of public access around the coast. Natural England, with the input of the National Park Authority, is developing proposals for access around the coastline but it is not clear when this will be introduced in the North York Moors.

The area is also well used for organised recreational events. Every year there are hundreds of these across the National Park, ranging from major events such as the Mountain Bike World Cup and motor rallies through to small scale orienteering exercises, cycling enduros, and charity walks and rides.

⁴² North York Moors Casual User Survey, 2011 (Qa Research)



Two of the country's most popular long distance walking routes cross the National Park – the Coast to Coast and the Cleveland Way National Trail. The Cleveland Way is managed in partnership with Natural England and the Coast to Coast is managed along with the rest of the rights of way network.

There has been major development for cycling and the recreational use of forests over recent years, in particular at Dalby where international standard mountain biking facilities now host the Mountain Bike World Cup. Lower key cycling improvements are also being carried out on the former Whitby – Scarborough railway line and on the Moor to Sea cycle route. The National Park Authority and Natural England have agreed an events protocol to ensure that event organisers avoid sensitive times and locations and that the nature of the activity is appropriate.

This range and diversity of opportunity does however bring with it a need for management, to ensure that the opportunities are well managed and benefits are available to as wide a cross section of the population as possible and that the enjoyment of the area does not conflict with wildlife, landscape, community and land management interests.

Focussed effort by the Authority's staff and volunteers has seen the condition of the public rights of way network improve significantly over recent years. There is also a continuing drive to make the network more accessible to disabled people. On access land, the Authority has drawn up access management plans with all of the major estates with the aim of making the most of the access opportunity without damaging land management interests. Implementation of these plans is ongoing.

The National Park Authority offers advice and support to communities, user groups, event organisers and land managers,

Understanding and Enjoyment



aimed at minimising any impacts on conservation and local communities and on enjoyment of the area by others.

Whilst most of the activities that take place in the National Park are undertaken within acceptable limits, some recreational activities are having a detrimental impact upon the natural environment and local communities. Work is ongoing to prevent unsustainable recreational use. For example, a coordinated programme of joint action by police and the National Park Authority's Ranger Service targeting illegal motorised use and a 'problem solving group' including community, landowners and the National Park Authority, tackling misuse of a popular visitor site. The Natural Environment and Rural Communities Act of 2006 introduced new measures relating to off road vehicular rights and gave National Park Authorities the power to make Traffic Regulation Orders. Unsurfaced Unclassified Roads, some of which are referred to as 'Green Lanes' are part of the highway network and therefore the duty to maintain them lies with North Yorkshire County Council and Redcar and Cleveland Borough Council. In exceptional circumstances, where vehicular use of these routes is having a significant impact on conservation of the natural and cultural heritage of the National Park and its enjoyment by the public, the National Park Authority may consider taking action including the use of Traffic Regulation Orders. In all other cases, the Highways Authority will act. This agreed division of responsibilities reflects the statutory position and the National Park Authority's very considerable voluntary contribution focussed on the maintenance of the wider rights of way network.

In addition to the ongoing work to improve access and recreation, a number of fixed term projects are currently under way. This includes the Community Access Project which provides funding and support to communities wishing to improve access in their area.

93% of visitors are believed to travel to the National Park by car⁴³ and in 2006 transport in the National Park accounted for around 45% of CO₂ emissions. Further, the 2010/11 Yorkshire Regional Visitor Survey⁴⁴ showed that 57% of visitors to the National Park listed 'driving around and sightseeing from the car' as an activity they undertook.

Challenges

- Reversing the current trend of a decline in the number of tourists and tourist days spent in the National Park.
- An increasing need to improve health and wellbeing, particularly in view of increases in levels of obesity and heart disease, set against increasingly sedentary and technologyled lifestyles of many young people.

- Embracing the drive nationally to reconnect people with nature and increase the number of volunteers.
- Embracing the development of an 'experience economy' that focuses on experience over material goods.
- The effects of climate change may lead to damage to some of the National Park's infrastructure such as bridges and rights of way. CO₂ emissions related to tourism must be minimised, particularly if it is considered that the number of tourist days will rise.
- Ensuring that recreational activities in the Park do not result in harm to the natural and historic environment and tranquillity and do not disturb communities and vulnerable or protected wildlife.
- Minimising conflicts between different recreational interests.

In 15 Years Time...

More people of all ages, backgrounds and abilities now have a high quality, enjoyable experience of the National Park. They undertake a range of activities including walking, cycling, sightseeing and other more adventurous activities. These activities bring benefits in terms of people's health and wellbeing and are undertaken in ways which minimise the impact on the natural environment.

⁴³ North York Moors Recreation and Access Strategy (North York Moors National Park Authority, 2008)

 ⁴⁴ Yorkshire and Humber Regional Visitor Survey, 2010-11 (Welcome to Yorkshire)

AIM

- More people will visit the National Park to enjoy the special qualities.
 There will be increased and improved opportunities for the public to enjoy the special qualities of the National Park.
- **Conflicts between enjoyment of the National Park and other interests will be minimised.**

	POLICIES	MEANS TO ACHIEVE	KEY PARTNERS
	U1. Opportunities for a range of recreational activities will be developed around existing 'hubs'	Recreation and Access Strategy for the North York Moors National Park	National Park Authority
U2. The public will be able to enjoy the National Park using the rights of way network and open access areas	National Park using the rights of way	Recreation and Access Strategy for the North York Moors National Park	National Park Authority
	Delegation Agreement with North Yorkshire County Council	National Park Authority	
		People, Paths and Places – the Rights of Way Improvement Plan for North Yorkshire	North Yorkshire County Council National Park Authority
		Rights of Way Improvement Plan for the Borough of Redcar and Cleveland	Redcar and Cleveland Borough Council
		Access Management Plans	National Park Authority Landowners and land managers
	U3. Opportunities to enjoy the National Park will be available to a wide cross section of society	Continual liaison and feedback from under-represented groups	National Park Authority Disability Advisory Group Community champions
	U4. Provision of high quality information on the recreational opportunities in the National Park will be made available using a wide range of media	Publications, interpretation material and website	National Park Authority



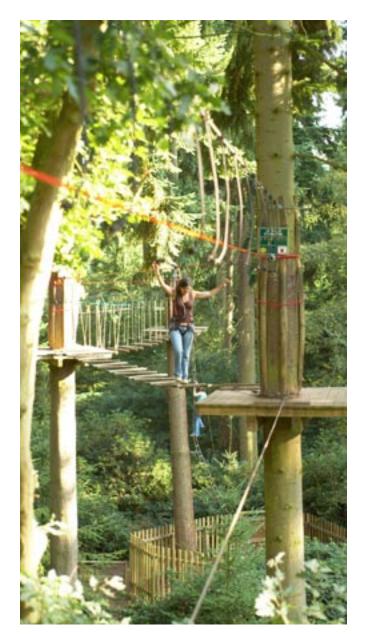


POLICIES	MEANS TO ACHIEVE	KEY PARTNERS
U5. Conflicts between recreation and the interests of communities, land managers and other user groups will be minimised	Anti Social Behaviour Partnership and local problem solving groups	National Park Authority Police
	Events protocols	National Park Authority Natural England
	Fire liaison partnership and wildfire group	National Park Authority North Yorkshire Fire Service
	Access Management Plans	National Park Authority Landowners
	Local Access Forum	National Park Authority and Forum members
U6. Conflicts between recreational activities and conservation of the special qualities of the National Park will be minimised	Anti Social Behaviour Partnership and local problem solving groups	National Park Authority Police
	Continued partnership to improve management of green lanes	National Park Authority North Yorkshire County Council Redcar and Cleveland Borough Council Natural England Police
	Traffic Regulation Orders where necessary to protect the National Park's special qualities	North Yorkshire County Council Redcar and Cleveland Borough Council National Park Authority
	Local Access Forum	National Park Authority and Forum members

POLICIES	MEANS TO ACHIEVE	KEY PARTNERS
U7. The public will be able to improve their health and wellbeing through reconnecting with nature	Coast Alive Project and successor projects	National Park Authority
reconnecting with nature	National Park walks and events programmes	National Park Authority
	National Park volunteers scheme	National Park Authority
	Provision of information and facilities	National Park Authority
U8. Local communities will enjoy improved access to recreational activities and be engaged in developing and managing local access	Community Access Project (through LEADER funding)	National Park Authority
	People, Paths and Places – the Rights of Way Improvement Plan for North Yorkshire	North Yorkshire County Council National Park Authority
	Rights of Way Improvement Plan for the Borough of Redcar and Cleveland	Redcar and Cleveland Borough Council
	Recreation and Access Strategy for the North York Moors National Park	National Park Authority
U9. There will be opportunities for people to access the National Park	Delivery of transport service to target groups	National Park Authority
without a car	North Yorkshire Local Transport Plan	North Yorkshire County Council
	Redcar and Cleveland Local Transport Plan	Redcar and Cleveland Borough Council



Understanding and Enjoyment



How Management Plan progress will be reported

INDICATOR	TARGET / DESIRED DIRECTION OF CHANGE
Number of visitor days	The number of visitor days has increased
Percentage of Public Rights of Way are easy to use	85% are easy to use
Percentage of Public Rights of Way that are signposted where they leave the road	Maintain percentage signposted where they leave the road at 95%
Percentage of visitors who enjoyed their visit ⁴⁵	To maintain at at least 95%



⁴⁵ Respondents selecting either 5 or 6, on a scale of 1 to 6, when asked to what extent they enjoyed their visit. Surveyed through the Casual User Survey.

3.3 Promoting the Park

In 2007, the National Park family undertook research⁴⁶ across the country to ascertain the awareness levels of National Parks both in a UK context and individually. The North York Moors was identified as having a national awareness level of 6% and came 5th in the list of National Parks people could name behind the Lake District, Peak District, Snowdonia and the Yorkshire Dales. Only around a third of people in the Yorkshire and Humber region are aware of the North York Moors National Park⁴⁷.

During 2007 research was undertaken by the Yorkshire Moors and Coast Tourism Partnership into what the brand of the National Park and surrounding area should be in order to promote tourism. It was recognised that the villages in the North York Moors were attractive and appealing and the area 'breathtaking', 'unspoilt' and 'peaceful'. Recent research⁴⁸ shows that people visiting the Park most commonly described it as breathtaking, natural, peaceful and inspirational.

The National Park Authority plays a crucial role in promoting the National Park along with other organisations such as Welcome to Yorkshire, the regional tourism body. During 2010, a Communications Strategy was created by the National Park Authority which identified the unique selling point of the North York Moors as the strong link between the cultural and built heritage and the natural landscape, creating a focus for external communications around 'where nature and history inspire each other'. This will remain the National Park Authority's core approach to promoting the North York Moors.

Websites including the Authority's and Welcome to Yorkshire's, plus social media, play an important role in providing

information to potential visitors to the National Park. The Authority's website, which currently maintains around 310,000 unique users, needs to continue to be customer orientated and interactive, focussed around what there is to see and do in the National Park and include, where appropriate, new technological developments which can help us engage with people in a way they demand.

The National Park Authority has devoted considerable resources to work with under-represented groups through its core activities and via the Reaching Out, Heritage Connections and all three Mosaic projects. These have enabled the Authority to work with over 65,000 people and to develop a strong group of community champions. This work has been systematically mainstreamed to ensure continued support. The Authority has also 'taken the North York Moors to people' in the surrounding towns and cities by putting displays in libraries and by fitting out the mobile display unit for urban audiences and using it in town centres. Ongoing monitoring indicates that a very small proportion of visitors to the National Park are from under-represented groups⁴⁹ and so there is clearly much that remains to be done.

Challenges

- Increasing awareness of the brand of the North York Moors to enable achievement of the Park's second purpose and to benefit local businesses.
- Continuing to increase awareness amongst, and remove barriers for, under-represented individuals and communities.
- Ensuring that people are engaged in a way which reflects their choice, including through the use of new technology.

In 15 Years Time...

More people are aware of the North York Moors National Park and what it has to offer. Promotion of the area focuses upon the 'unique selling points' of the area and leads to an increase in quiet enjoyment of the National Park's special qualities. Positive images are associated with the terms 'North York Moors' and 'moors' by the general public.



⁴⁶ National Parks Awareness Survey, 2007 GfKNOP

- 47 Regional Awareness Survey, 2008 (QA Research)
- ⁴⁸ Yorkshire Regional Visitor Survey 2010/11 (Welcome to Yorkshire)
- ⁴⁹ 30% of users of the National Park Authorities' visitor centres, website and events were from under-represented groups in 2011/12

Understanding and Enjoyment



AIM

A wide audience will be aware of and associate positive images with the North York Moors National Park.

POLICIES	MEANS TO ACHIEVE	KEY PARTNERS
U10. The awareness of the National Park	Communications Strategy	National Park Authority
amongst the regional population and visitors will be increased	Promoting the Park Plan (to be prepared)	National Park Authority Local and regional tourism organisations Tourism providers Local businesses Constituent local authorities
	Partnership agreement	Welcome to Yorkshire National Park Authority
U11. Under-represented groups will be supported to increase their awareness of and access to the National Park	Outreach work	National Park Authority Youth Hostel Association Community Champions (Mosaic project) Disability Advisory Group
U12. Opportunities to promote the wider North York Moors area and North York Moors National Park brand and sense of place will be created and taken	Promoting the Park Plan (to be prepared)	National Park Authority Local and regional tourism organisations Tourism providers Local businesses Constituent local authorities
	Partnership agreement	Welcome to Yorkshire National Park Authority

How Management Plan progress will be reported

INDICATOR	TARGET / DESIRED DIRECTION OF CHANGE
Proportion of under-represented groups visiting the National Park	Proportion will have increased
Proportion of the region's population who are aware of the North York Moors National Park	Proportion will have increased - see detailed targets below

	Ac	tual			Targets		
	2003	2008	2013	2018	2023	2028	2030
Regional awareness of NYMNP (%)	33	34	37	40	43	46	50

Yorkshire Dales NP/NYMNPA Regional Awareness Surveys, Qa Research

	Act	tual		Tar	gets	
	2004	2011	2016	2021	2026	2030
Visitor awareness of the NYMNP (%)	n/a	34	37	40	43	45

NYMNPA Casual User Surveys, Qa Research

	Ac	tual		Tar	gets	
	2004	2011	2016	2021	2026	2030
Visitor awareness of being in a NYMNP (%)	83	73	83	85	87	90

NYMNPA Casual User Surveys, Qa Research

3.4 Understanding the Park

Promoting understanding of the National Park's special qualities is about providing opportunities for people to discover and learn about the National Park, whilst appreciating the importance of conservation and the needs of local communities. Having an understanding of the National Park is part of appreciating its beauty and fragility and the need for its conservation and protection. In 2008, 43% of the region's population were aware of the National Park's special qualities⁵⁰.

A variety of media is used to engage with people including use of the arts, exhibitions, publications, working with schools, events, as well as interpretive panels, visitor centres, websites and social media. Interpretation must be informative, entertaining, thought provoking, stimulating and be socially inclusive.

The National Park Authority is not alone in its work to promote what is special about the National Park. Other government and non-government organisations such as English Heritage, Forestry Commission, local authorities and the numerous charity and voluntary sector organisations such as Ryedale Folk Museum all play a role in raising awareness of what is special about the National Park linked to their organisation's particular interest for example, woodlands, birds, cultural heritage or geology.

The National Park Authority is the main organisation with the specific role for promoting understanding of the special qualities and focuses on working with structured groups – such as school children. The National Park Authority's Education Service makes links with on average 14,000 people each year – 64% of groups

⁵⁰ Regional Awareness Survey, 2008 (QA Research)

Understanding and Enjoyment

are primary schools, 21% secondary and the remainder other groups. Links to the National Curriculum are of key importance, and increased emphasis is placed on social inclusion and outreach work.

Other organisations also provide educational activities linked to their specific focus. Local authorities provide a small number of outdoor activity centres allowing mainly school children to take part in activities such as canoeing or climbing, while local charities also deliver environmental education and heritage based activities through their own education services.

Over the past four years, the National Park Authority has expanded a successful and varied events programme and in 2009-10 nearly 4,000 people attended the bookable events. The programme is an important means of delivering face to face information about the National Park and is a key aspect to achieving a high level of understanding about the National Park. These events complement other organisations' events programmes running within the National Park again focussed around their specialisms such as birds, cultural heritage and wildlife.

The National Park Authority currently produces 60 publications encouraging people to discover the North York Moors and has installed on site information panels and numerous interpretation panels about the special qualities at key sites around the National Park. The two National Park visitor centres receive on average over 240,000 visitors per year and are key aspects of the second purpose work, both increasing understanding and also enjoyment of the Park. Substantial investment has taken place in the centres over the last five years to improve the offer to visitors. Future investment will continue to ensure a high quality product and service is offered whilst optimising revenue from the centres which can then be re-invested into looking after the National Park. Increasing understanding and awareness of the special qualities of the North York Moors can lead to changes in people's behaviour when visiting the National Park, which in turn can be beneficial for the environment.

Challenges

- Continuing to engage with under-represented groups as well as other visitors.
- Changes to the National Curriculum will impact upon the way in which the 'outside the classroom' experience is delivered.
- Changes to the provision of resources for lifelong learning opportunities.

- Promoting understanding of the special qualities through a range of media to suit people's choices and expectations, including through technology offering interactivity and real time information.
- Ensuring understanding of all 14 special qualities and communicating the idea of local distinctiveness.

In 15 Years Time...

More people of all backgrounds, ages and abilities understand what is special about the North York Moors and they are engaged with in ways which are fun and inspirational and enable enjoyment of the National Park's environment. A broad range of organisations work together to promote understanding of the National Park which leads to increased support for the conservation of the special qualities.



There will be an increased level of understanding of the special qualities of the National Park.

POLICIES	MEANS TO ACHIEVE	KEY PARTNERS
U13. Children living within and outside the National Park will be engaged with during their school career	Education Service Review and Strategy	National Park Authority
U14. Visitors' and the regional population's understanding of the special qualities will be increased	Interpretation Plan for Engaging with Casual Visitors to the North York Moors National Park	National Park Authority Tourism Businesses
	Visitor Centres	National Park Authority Forestry Commission
U15. Opportunities for lifelong learning	Education Service Review and Strategy	National Park Authority
about the National Park will be provided	Interpretation Plan for Engaging with Casual Visitors to the North York Moors National Park	National Park Authority
	Museums and visitor centres	National Park Authority Forestry Commission Museum operators
16. Outreach work amongst under-	Education Service Review and Strategy	National Park Authority
represented groups (both outside and inside the National Park's boundary) will be continued	National Park volunteers scheme	National Park Authority





How Management Plan progress will be reported

INDICATOR

Number of people who understand the special qualities of the National Park

Actual		Targets				
2003	2008	2013	2018	2023	2028	2030
n/a	43	45	48	51	53	55

Yorkshire Dales NPA/NYMNPA Regional Awareness Surveys, Qa Research.

	Act	tual		Targ	gets	
	2004	2011	2016	2021	2026	2030
/isitor awareness of Special Qualities (%)	n/a	18	21	24	27	30

NYMNPA Casual User Surveys, Qa Research

Nature trails Amazing view Tiring walks Interesting amimals On top of the cliffs Near to the Sea Animals kept safe Large grassy area

Peaceful picnics Astonishing cliffs Rural landscapes Kind walkers

Pupil from Hackness CE Primary School

Painting by Julie McLinden from the Coast Alive Tracker Pack 'A Bit of Bother with a Boggle'



4. Business and Land Management

The economy of the National Park benefits from its protected landscape designation. The National Parks Circular indicates that National Park strategies should be informed by their local economic circumstances and seek to foster improvements in productivity and incomes through appropriate policy and intervention.

The economy of the North York Moors has traditionally relied on the agricultural, forestry, shooting and tourism sectors, and this largely remains the case. The tourism industry employs $4,485^{51}$ people whilst $2,220^{52}$ are employed in agriculture in the National Park. Many people living in the National Park commute to areas outside the boundary for employment. The unemployment rate in the National Park is below the National and Regional figures however the median earnings of £18,362 are much lower than the median figure for England of £21,398⁵³.

The Economic Assessment⁵⁴ for the Moors Sub Region shows that in the last decade there has been a low level of job growth and, in terms of employment structure, high levels of self employment and micro businesses, a low proportion of younger working people and high dependency on hospitality and retail. The dependency on tourism jobs means that many jobs in the Park are seasonal and/or part time. It is understood that many younger people are moving away from the area for work with consequences for local facilities and communities. Future drivers of growth for the sub region have been identified in the cultural, creative and visitor economy, the higher education and science sector and the low carbon economy.

The York, North Yorkshire and East Riding Local Enterprise Partnership was formally recognised by the Government in February 2011 and has identified its priorities as agri-food, tourism, high speed broadband, business support, business networks, coastal regeneration and skills and training.

4.1 Tourism

Tourism remains an important element of the economy of the National Park both in terms of income generation and as a source of employment. In 2010, tourism was worth £416m to the local economy and supported 7,813 jobs in the area⁵⁵, including over 4,000 in the National Park itself. However, tourism is particularly seasonal and in 2010 tourism revenue in January was only 19% of that in August. Around half of the tourist days spent in the National Park are made by day tourists yet these only account for around 40% of the economic value. Staying tourists provide greater value to the economy for each day that they are here. Many of the businesses in the Park are interrelated with tourism and benefit from people visiting the Park. Many visitors will make combined trips, visiting both the Park and the surrounding area.

Equally, residents benefit from visitor facilities and are often customers. Any increase in value to the tourist economy needs to be mindful of social equity and allow residents and visitors access to and enjoyment of the National Park's nonnatural assets. Tourists visit the National Park for a variety of reasons including sightseeing and visiting cultural attractions or to undertake activities such as walking, cycling or horseriding.

The quality of the tourism offer, including accommodation, catering establishments and attractions, as well as the standard of hospitality offered, play an essential role in both attracting people to the area and their satisfaction levels from a visit.

Recent trends have shown that the value of tourism in the National Park is decreasing – between 2007 and 2010 the value of tourism in the Park declined by 4.4% in real terms. Employment in tourism related sectors has also declined by around 4.4% over this time. It appears that a decrease in the number of tourist days has played a large part in this decline. If this decline were to continue it is projected that there would be a further real terms decrease in the economic value of tourism of 6.7% and a further loss of around 400 jobs between 2010 and 2015⁵⁶. It is difficult to predict further ahead due to the variables involved.

Alternatively, if the ambitious VisitEngland 3% year on year real growth target⁵⁷ is achieved this will result in an increase in around 15% (£65 million) in the economic value of tourism by 2015 (compared to 2010 values) and around 1,200 additional jobs⁵⁸. These changes would help to strengthen the National Park's economy allowing businesses directly and indirectly affected by tourism to prosper and potentially enable young people to remain working in the National Park.

- ⁵⁵ Scarborough Tourism Economic Activity Monitor 2009 Report (Global Tourism Solutions (UK) Ltd, 2010) (Full Time Equivalents) (National Park and influence area)
- ⁵⁶ Scarborough Tourism Economic Activity Monitor Projections (Global Tourism Solutions (UK) Ltd, 2011) 2011
- ⁵⁷ England A Strategic Framework for Tourism 2010 2020 (VisitEngland 2011)
- ⁵⁸ Scarborough Tourism Economic Activity Monitor Projections (Global Tourism Solutions (UK) Ltd, 2011)

⁵¹ Scarborough Tourism Economic Activity Monitor 2010 Report (Global Tourism Solutions (UK) Ltd, 2011)

⁵² 2010 Agriculture Census (DEFRA, 2011)

⁵³ Annual Survey of Earnings and Hours 2010, ONS

⁵⁴ York and North Yorkshire Economic Assessment 2010 (York and North Yorkshire Partnership Unit, 2010)

Challenges

- Attracting more tourists to the National Park in line with the principles of 'wise growth'⁵⁹, which recognises that increases in tourism activity can be achieved alongside protection and enhancement of the natural and cultural environment.
- Increasing the value of tourist spend whilst in the National Park, taking account of VisitEngland's target for 3% year on year growth to the tourism economy in real terms.
- Attracting people into the National Park in the 'shoulder' seasons (autumn and winter).
- Increasing the number of people employed in the tourism industry in the National Park.
- Increasing the quality of the tourism offer and standard of hospitality.
- Promoting the wider North York Moors area and the North York Moors National Park brand and seeking business affiliation.
- Rising costs of transport and competition with other destinations.
- Reducing the environmental impact of tourism businesses.

⁵⁹ England – A Strategic Framework for Tourism 2010 – 2020 (VisitEngland 2011)

In 15 Years Time...

The value of tourism to the National Park's economy is greater and there are more people employed in tourism. In particular, more tourists visit outside of the peak seasons. There are a variety of quality tourist facilities which respect the special qualities of the National Park and encourage sustainable ways of visiting the National Park.



Business and Land Management



AIM

■ The economic value of tourism and the number of people employed in the industry in the National Park will be increased.

POLICIES MEANS TO ACHIEVE KEY PARTNERS B1. Visitor spend will be increased York, North Yorkshire and East Riding Ongoing promotional activities Local Enterprise Partnership Local Businesses Welcome to Yorkshire Local Enterprise Partnership priorities York, North Yorkshire and East Riding Local Enterprise Partnership Promoting the Park Plan (to be prepared) National Park Authority Partnership Agreement National Park Authority Welcome to Yorkshire **B2.** Opportunities for visiting the National Promoting the Park Plan (to be prepared) National Park Authority

omoting the Park Plan (to be prepared)	National Park Authority	
ngoing promotional activities	Welcome to Yorkshire Local businesses	
rtnership Agreement	National Park Authority Welcome to Yorkshire	
omoting the Park Plan (to be prepared)	National Park Authority	
ngoing promotional activities	Welcome to Yorkshire Local businesses	
rtnership Agreement	National Park Authority Welcome to Yorkshire	
ontinuing improvements	Local businesses Welcome to Yorkshire York, North Yorkshire and East Riding Local Enterprise Partnership	
omoting the Park Plan (to be prepared)	National Park Authority	
stainable Development Fund	National Park Authority	
n; rt o or	going promotional activities thership Agreement moting the Park Plan (to be prepared) going promotional activities thership Agreement htinuing improvements moting the Park Plan (to be prepared)	

POLICIES	MEANS TO ACHIEVE	KEY PARTNERS
B5. Tourism businesses will reduce their impact on the environment and use resources efficiently	Green Tourism Business Scheme and/or other schemes	National Park Authority Local businesses

How Management Plan progress will be reported

INDICATOR	TARGET / DESIRED DIRECTION OF CHANGE		
Value of tourism to the National Park's economy	Value will have increased		
Number of people employed in tourism	Number will have increased		
Average length of stay	The average length of stay will have increased		



4.2 Agriculture

Farming in the National Park produces food for wider populations, has a key role in the local economy and is integral to many rural communities. Unusually for an upland National Park, all farming sectors are represented with some 20% of farmland in the National Park being arable. Farming has greatly influenced the landscape of the North York Moors and also supports important habitats and wildlife, and helps to sustain tourism.

A report carried out by Askham Bryan College⁶⁰ on behalf of the National Park Authority estimated the output, in quantity and value, for each farming sector in the National Park. Throughout this section the figures for output are based on the calculations in this report and are subject to the assumptions that were made in it. Output values are all net of subsidies and other income and are based on 2009 agricultural census data.

From 1990 to 2009 stock numbers declined by; 38% dairy herd, 23% breeding sheep flock and 43% pig breeding herd. The suckler beef herd rose by 14% and 'other pigs' by 29% (equating to around 95% of total pigs). It would appear based on historic data that stock numbers could change significantly if there were the political and economic drivers to facilitate it.

The total value of output from agriculture in 2009 was calculated at £56m. Of this the largest proportion was dairy (24%) followed by cropping (23%). Further benefits to the local economy are provided by the employment of 2,554 people in agriculture, less than half of which are employed on a full time basis. The number of people employed in farming has fallen significantly over the last 20 years with the largest decline being in full time workers.

The farming sector relies heavily on payments provided via the Common Agricultural Policy, which at the time of writing is currently under review. These take two forms, direct payments from the Single Payment Scheme and agri-environment payments made in return for committing to varying levels of environmental management. These are currently the national Entry Level, Upland Entry Level, Organic Entry Level and Higher Level Environmental Stewardship Schemes. Access to the Higher Level Stewardship scheme is restricted to farms of high environmental quality. The financial viability of most farms in the North York Moors is dependent on the Single Payment Scheme and in some cases on access to agri-environment monies. Current estimated receipts from the Single Payment Scheme to agriculture in the National Park is around £16 million annually. There are currently around 634 Environmental Stewardship Scheme agreements active covering some 74,000 hectares of farmland and moorland, plus a further 90 Countryside Stewardship Schemes. Farm income is also often supported through diversification.

There is the potential for growth in energy crops, currently miscanthus or willow although the distance from markets is likely to limit this and there may also be adverse visual impacts whilst the overall energy benefits vary hugely. The development of biofuel markets could affect the proportion of crop (largely wheat) use between food and energy and may in time prove an incentive to increasing crop production.

As stated above, a wide range of food is grown or produced within the National Park, including crops such as cereals and potatoes, dairy products and meat. Initiatives such as marketing of North York Moors lamb have helped to raise the profile of food produced in the Park and a number of shops and cafes in the Park focus on selling locally produced food. It is considered however that more could be done to promote the North York Moors brand, reduce food miles and support local producers.

Challenges

- There is increased demand for food production nationally to meet demands of a larger population and also to increase food security and reduce reliance on imports, whilst also improving environmental outcomes and enabling habitat networks to be improved.
- Climate change is predicted to result in increased temperatures and changing rainfall patterns which will potentially lead to a longer growing season and the opportunity to grow a wider range of crops but may also lead to droughts and increase the risk of pests and diseases.
- The global economy and markets will continue to influence agriculture in the National Park and the future prospects for farming will be dependent on the level of financial support farmers receive from European Union and government grants. Changes to the Common Agricultural Policy are scheduled to take place in 2013 which will have an impact on farming profitability in the North York Moors.
- Scope to improve the economic performance of sheep farming and other sectors through the sharing of knowledge and education on good practice.

⁶⁰ Agricultural Output in the National Park Current Level and Future Prospects (Askham Bryan College, 2011)

- Maintaining the 'traditional farmed landscapes' in the area which contribute to landscape quality and supporting traditional skills such as dry stone walling and recognising the costs involved in maintaining the landscape.
- Trend for larger farm buildings due to animal welfare, larger machinery and economies of scale, which can have a dramatic impact on the landscape.
- Reducing emissions of methane and nitrous oxide from the farming sector together with CO₂ is increasingly important.
- Biosecurity will need to be maintained to minimise the risk of disease import and transfer.
- Integrating environmental measures alongside commercial farming to protect and enhance natural resources and wildlife.
- Local processing and marketing of produce grown and reared in the National Park.
- Matching landowner priorities with the optimum 'public' use for the land, whilst ensuring provision of public goods is sufficiently incentivised.



Prospects for Farming

An issue for the future is how to sustain or improve the productivity of farming whilst benefitting biodiversity, reducing greenhouse gas emissions and protecting the landscape and special qualities of the National Park. There is capacity to increase food production from current levels over the next five years and potentially large increases in the future though this will be dependent on successful research programmes. Many of the suggested measures may also help to increase farm incomes. Suggested ways of achieving increased productivity, given the financial incentive and assuming the management techniques, skills and capital investment are available could include:

- Moorland sheep could be increased by up to 6,000 giving an increase of around 24 tonnes of meat and 500 breeding lambs at current performance. This figure is based on an average stocking rate of one ewe per hectare. This could contribute positively to the conservation of moorland providing sheep were properly re hefted onto those areas currently undergrazed at stocking rates appropriate to the habitat type and carrying capacity on the individual areas of moorland.
- Livestock and milk output could be increased through better animal nutrition, stock selection, genetic improvements and health regimes with, in general, no environmental drawbacks. These measures would help improve liveweight gain and average milk yields, reduce stock replacement rates and help produce products more suited to the market. Zero grazing and

wholecrop silage can offer agricultural rewards but are likely to have environmental drawbacks.

- Increases in crop and grass output could be achieved by better crop management bringing average performance closer to the higher performing units. Plant breeding, adopting new technology and precision farming techniques to optimise the use of fertilisers, manures and other inputs in ways that minimise their impact on the environment are all measures that could be taken.
- Better use of crop rotations and more informed decision making on appropriate land uses will help make best use of increasingly finite inputs to deliver optimum outputs. Greater assessment of land use through using advancements in technology such as N sensing, soil and yield mapping and GIS technologies will enable land managers to identify those areas that respond to inputs particularly in an arable context and those areas of land that are more suited to a pastoral or environmentally focused land use.

It is considered that appropriate application of the above measures could result in a 5% increase in crop yields equating to around an additional 2,200 tonnes of wheat, 1,800 tonnes of winter barley, 620 tonnes of spring barley and 580 tonnes of potatoes based on current production figures.

The suggested measures above are not intended to be a prescription for any individual farm. The measures could be achieved without impacting on the special qualities of the National Park provided that:

- Any new buildings are appropriate in scale, design and location
- Changes in land use and field size are in keeping with the landscape character and do not damage existing habitats of high environmental value
- Inputs and waste are managed in a way that avoids diffuse pollution and damage to soils
- There are no incidences of overgrazing

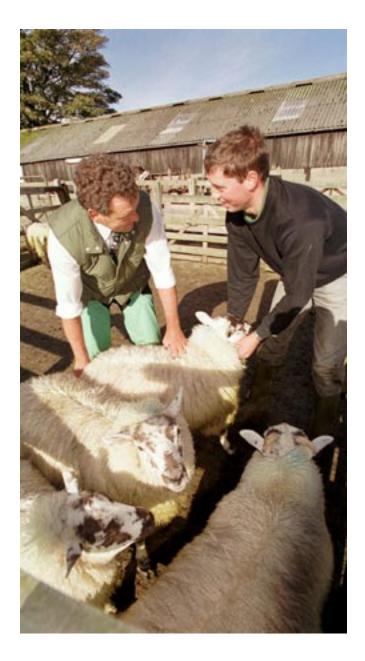
By implementing the above measures to increase agricultural productivity in ways that optimise the use of resources, particularly our finite land resource, it provides space to increase biodiversity on areas less suited to intensive agriculture. This might be for nectar rich margins on unproductive arable headlands or increasing the woodland resource on some unproductive bracken slopes. Farmers are already embracing this with environmental stewardship arable options covering 938.5ha or 5.8% of the National Park's arable land.

In 15 Years Time...

Farming in the National Park is viable and productive and contributes to the maintenance and enhancement of the landscape and natural environment and supports biodiversity. Best practice in animal husbandry and management techniques contribute to an increase in the amount of food that is produced without harming the special qualities and there are more training and employment opportunities in the sector.



Business and Land Management



AIM

Food production within the National Park will be increased and the farming sector will become more resilient and capable of adapting to changing economic circumstances whilst contributing to the National Park's special qualities.

POLICIES	MEANS TO ACHIEVE	KEY PARTNERS
B6. The production and profitability of agriculture will be increased through improved use of appropriate technology and transfer of knowledge,	Knowledge transfer	Land managers Land management organisations National Park Authority
without harming the Park's special qualities	Investment	Land and business owners
quantes	Specialist campaigns	Land management organisations
B7. High levels of engagement in Environmental Stewardship and other grant schemes will be sought	Agri-environment schemes	National Park Authority Natural England Land managers
B8. Proposals for the diversification of agricultural enterprises will be	Local Development Framework Development Policy 13	National Park Authority
supported where there is no harm to the National Park's special qualities	Partnership working	Farmers Local businesses Land management organisations Public sector organisations
B9. The market for locally produced food will be expanded	Partnership working	Farmers Businesses Land management organisations Public sector organisations
B10. Campaigns integrating good farming and environmental practices will be promoted	Industry led initiatives	National Farmers' Union Country Land and Business Association Farmers Land managers
	Various specific campaigns	National Park Authority Natural England Land management organisations Land managers

POLICIES	MEANS TO ACHIEVE	KEY PARTNERS
B11. Traditional farming skills such as de stone walling and hedgerow restoration techniques will be promoted		National Park Authority Natural England Land managers
	National Park Authority Apprentice Scheme	National Park Authority

How Management Plan progress will be reported

INDICATOR	TARGET / DESIRED DIRECTION OF CHANGE	
The area of farmland managed in line with conservation objectives ⁶¹	Area has been maintained or increased	
Number of moorland hill flocks	No decline	
Number of people employed in agriculture	Number has been maintained or increased	
Levels of agricultural output	n/a – indicator only	



⁶¹ Conservation objectives include a broad range of objectives covering landscape and nature conservation.

Business and Land Management

4.3 Forestry and Woodland

Timber production from both private and public woodlands is important to the economy and management of the National Park. Many estates run forestry operations and there are a number of small independent sawmills which process local timber thereby adding value and creating employment. Forests and woodlands are also important for supporting biodiversity and landscape (see Environment chapter).

Figures for the total volume of timber produced in the National Park are not available and will vary from year to year dependent upon felling cycles, management incentives and the timber market. The largest single timber producer in the National Park is the public forest estate which produced 115,000m³ in 2009. The total output value of this is estimated as £10 million. The public forest estate provides employment for 150 people in timber production and woodland management and associated forest based recreation and tourism sectors.

The recent growth in demand for timber as fuel, in particular the development of the biomass generator on Teesside, has put a 'floor' in timber markets. In addition there is a growing recognition of timber as a sustainable building material and of the uses for recycled timber.

Challenges

 Increased use of timber for fuel is likely to continue, driven by a range of factors including oil price and incentives for renewable energy. This may improve the viability of managing woodlands but it is important that such management is sensitive and appropriate.

- Large scale forestry activity has the potential to be damaging and needs to be carefully planned, not least in terms of timber traffic and the road network.
- There are a number of currently unmanaged private woodlands in the National Park which may have potential for timber and wood fuel production.

In 15 Years Time...

More woodlands are being managed sustainably for the production of wood fuel, timber and environmental benefits.



AIM

Woodlands will be managed sustainably to ensure that timber production can be maintained without damage to the National Park's special qualities.

POLICIES	MEANS TO ACHIEVE	KEY PARTNERS
B12. The use of timber as a sustainable product and the re-use and recycling of wood products will be increased	Ongoing involvement	Local businesses Forestry Commission
B13. New markets for sustainable woodland products including wood fuel will be promoted	Ongoing involvement	Forestry Commission Local businesses
B14. Best practice in forest management will be promoted. Resilient forests which deliver a range of services to the public and which are able to cope with the	Partnership working	Forestry Commission National Park Authority Private landowners
effects of climate change will be created	Joint Action Plan (local)	Forestry Commission National Park Authority Forest Enterprise
	Timber Freight Quality Partnerships	North Yorkshire County Council National Park Authority Haulage operators Plantation operators
	Compliance with UK Forestry Standard	National Park Authority Forestry Commission Plantation operators
B15. The appropriate management of presently unmanaged woodland will be supported and encouraged	Ongoing involvement	Private landowners National Park Authority Forestry Commission

How Management Plan progress will be reported

There are no relevant targets and indicators. See 2.9 Trees and Woodlands for other targets



Business and Land Management

4.4 Moorland Shooting

The majority of the National Park's moorland is managed for grouse. This involves rotational heather burning, ideally coupled with sheep grazing at appropriate levels, the control of predators and management of invasive vegetation, particularly bracken.

Moorland management for wild grouse shooting depends largely on investment by private owners and/or shooting tenants and is an important factor in the maintenance of the landscape, archaeological remains and a range of moorland bird species. Income from agri-environment schemes has recently become more important.

The activity brings significant investment to rural communities and in some upland areas has overtaken agriculture as the primary economic land use. Moorland management for grouse shooting requires the employment of 45 full time keepers and over 560 extra days of work for local contractors⁶². On average 130 grouse shooting days are run each year across the National Park. On shoot days an average of 23 extra staff are employed on each estate, which amounts to an extra 3,000 work days per year for local people. Grouse shooting also has an impact on the wider rural economy through some 340 hotel bed nights per season and the associated expenditure on eating and drinking in local establishments.

Management for grouse and sheep requires the maintenance and in some cases establishment of infrastructure such as tracks, grouse butts and boundary walls and fences. Generally this does not detract from the landscape and environmental value of the moors if it is carried out sensitively and in keeping with the landscape.

Challenges

- Moorland burning can have localised adverse impacts on air quality.
- Inappropriate burning of the moorland can have wider adverse impacts on air quality, wildlife, cultural heritage, soils and water quality as well as visual impacts.
- There is likely to be continued pressure for upgrading tracks and other infrastructure. It is important that these changes are carried out only where appropriate and in a sensitive way to maintain the distinctive quality of the National Park's moorland landscape, biodiversity and the natural environment.

In 15 Years Time...

Moorland management for grouse shooting continues to generate income in the rural economy without damaging the moorland environment, wildlife, landscape, heritage and tranquil and remote character of the moors.

⁶² Figures supplied by the Moorland Association



AIM

Game shooting will continue to provide benefits to both the environment and economy of the National Park, avoiding damaging developments.

POLICIES	MEANS TO ACHIEVE	KEY PARTNERS
B16. Support and encouragement will be given to the grouse shooting industry for its positive environmental and economic	Partnership working	National Park Authority Moorland Association
impacts	Code of Good Shooting Practice	Land managers
B17. New infrastructure for grouse shooting will be supported where it is located and designed to ensure there are no adverse impacts on the landscape and environment	Local Development Framework Core Policy A and Planning Advice Note 6 'Agricultural, Forestry and Recreational Tracks.'	National Park Authority Land managers

How Management Plan progress will be reported

There are no relevant targets and indicators



4.5 Lowland Shooting

Lowland shooting, based primarily on pheasant and partridge, occurs over significant areas of farmland and woodland in the National Park. These shoots vary from low key syndicates to highly organised commercial operations. In almost all cases they rely on the release of reared game birds. In common with upland shooting, most lowland shoots carry out varying degrees of predator control.

The wooded and steep sided valleys on the fringes of the National Park have made the North York Moors internationally known for driven pheasant shooting and this brings significant income to the area.

Management for lowland shooting can be beneficial to the National Park's environment in particular where the focus is on wild rather than released game. However, there has been an increase in shooting intensity in some areas of the National Park with larger numbers of birds released, inappropriate releasing and feeding practices and more shooting days. This has had negative impacts including greater disturbance for local communities, the visual impacts of rearing and release structures and cover crops, effects on highway safety and habitat degradation.

The Code of Good Shooting Practice⁶³ and Guidelines for Sustainable Game Bird Releasing⁶⁴ includes guidance on sustainable gamebird release and wider shoot management. These are based on minimising biodiversity loss, balancing it with improvements elsewhere, good neighbourliness and maximum stocking densities.

There is no readily available data on pheasant numbers in the National Park or on the economic benefits of lowland shooting.

Further research on this will be undertaken in partnership with landowners and other organisations in order to develop a 'baseline' for the activity against which future changes can be measured and environmental impacts assessed.

Challenges

 Intensification of shooting with greater densities of birds released, more shooting days and higher bag numbers with associated visual impacts and disturbance.

In 15 Years Time...

Management for reared bird shooting has been broadly beneficial to the National Park's environment.



- ⁶³ Produced and updated by a range of shooting and land management organisations
- ⁶⁴ Produced by the Game and Wildlife Conservation Trust

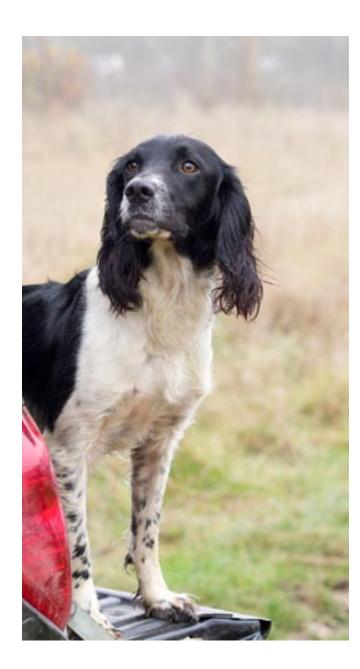
AIM

Lowland shooting will provide benefits to both the environment and economy of the National Park, avoiding damaging developments.

POLICIES	MEANS TO ACHIEVE	KEY PARTNERS
B18. The shooting industry will be supported where there are	Partnership working	National Park Authority Land managers
environmental and/or economic benefits which do not harm the special qualities of the National Park	Research on numbers of released game birds and economic benefits in the National Park	National Park Authority
	Research on environmental impact of released game birds	National Park Authority
	Code of Good Shooting Practice	Land management organisations Land managers
B19. The management of lowland shooting will be improved so as to provide environmental benefits	Ongoing involvement	Game and Wildlife Conservation Trust Landowners Land managers
	Guidelines on Sustainable Game Bird Release and Shoot Management	Game and Wildlife Conservation Trust Land managers

How Management Plan progress will be reported

There are no relevant targets and indicators



Business and Land Management

4.6 Local Businesses

The two biggest single employers in the National Park are Boulby Potash mine and RAF Fylingdales. The Boulby mine is the UK's only commercial potash mine and employs over 800 workers, making it the largest employer in the National Park. Exploration of other potash reserves is currently under way between Whitby and Scarborough. RAF Fylingdales provides a ballistic missiles warning and space surveillance service for the Government. Apart from employing around 360 people, it is also responsible for the protection and management of 1,200 hectares of the National Park.

Many local businesses are supported either directly or indirectly by tourism and recreation, including shops, accommodation providers, and food and drink establishments. There is a close relationship between tourism in the National Park and some of the settlements outside but close to the National Park such as Whitby.

There are a number of small scale industrial estates, offices and workshops serving the National Park including Hinderwell and Helmsley Industrial Estates⁶⁵ and Hutton le Hole craft workshops, however the largest site is Whitby Business Park. The Business Park straddles the boundary of the National Park and there are a number of employment uses on the Business Park including coach companies, tool hire, garages and seafood processing businesses. Other towns close to the National Park provide employment opportunities including Thirsk, Stokesley, Guisborough, Pickering and Kirkbymoorside.

A number of local businesses are selling and marketing local produce, which has wider reaching benefits in terms of supporting local producers, helping to establish a North York Moors brand and reducing food miles. Proposals for a wind farm 134km offshore at Dogger Bank will extend over an area similar to the size of North Yorkshire and will be capable of delivering around 10% of the total projected UK electricity requirements. Whitby is considered to be ideally placed to provide a significant element of the requirements of the industry for support vessel operation being the closest port to the proposed development. Good quality industrial units will be essential for the 'second tier' industries associated with the wind farm. The National Park Authority is drafting an Area Action Plan for Whitby Business Park in conjunction with Scarborough Borough Council as a means to improve some of the existing infrastructure, open up new areas for development and diversify employment opportunities in the Whitby area.

The policies contained in the Local Development Framework support new rural business and training opportunities and the extension of existing enterprises where they do not harm the special qualities of the National Park. Businesses that have been granted permission recently include micro breweries, an equine laundry and farm butchery units.

Challenges

- Recognising that the National Park contributes greatly to the regional and national economy and this should be encouraged and maximised where it complements National Park purposes.
- Supporting business in the National Park to create more employment, diversify the rural economy and create more opportunities to live and work in the National Park.
- Improving access to good broadband speeds at the present time 25% of households are still reliant on dial up internet access.

• The high number of self employed people living in the National Park reflects their entrepreneurial skills and this potential needs to be nurtured and encouraged.

In 15 Years Time...

Businesses within the National Park provide a wider range of employment opportunities for local people and the economy of the National Park is diversified and strengthened.

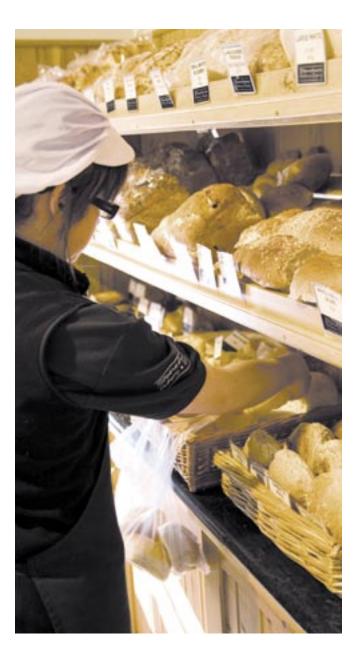


⁶⁵ Helmsley Industrial Estate is outside of the National Park Boundary

AIM

- There will be a range of business and employment opportunities available which benefit local people and which draw upon and enhance the special qualities of the National Park.
- The high quality environment of the National Park will continue to contribute towards the attractiveness of the surrounding area as a place for investment.

POLICIES	MEANS TO ACHIEVE	KEY PARTNERS
B20. Economic development will be supported where it is related to the	Local Development Framework Core Policy H and Development Policy 11	National Park Authority Constituent local authorities
special qualities of the National Park and the amount of allocated employment land will be increased	Whitby Business Park Area Action Plan (to be prepared)	National Park Authority Scarborough Borough Council
	Local Enterprise Partnership priorities	York, North Yorkshire and East Riding Local Enterprise Partnership
B21. The employment and training opportunities available to people in the National Park will be increased and	Local Development Framework Core Policy H and Development Policy 11	National Park Authority Constituent local authorities
maintained	Ongoing involvement including business support	York, North Yorkshire and East Riding Local Enterprise Partnership Constituent local authorities
B22. Improvements to broadband services will be supported	Connecting North Yorkshire (which includes NYnet)	North Yorkshire County Council Constituent local authorities Private sector
	Broadband provision across Tees Valley	Tees Valley Unlimited Private sector
	Ongoing involvement	York, North Yorkshire and East Riding Local Enterprise Partnership
B23. Modern and traditional skills will be developed within the workforce	Ongoing training	Local businesses Training providers
	National Park apprenticeship scheme	National Park Authority
B24. Opportunities for the production and sale of good quality local food and products will be increased	Ongoing support	York, North Yorkshire and East Riding Local Enterprise Partnership



How Management Plan progress will be reported

INDICATOR	TARGET / DESIRED DIRECTION OF CHANGE
Percentage of residents of the National Park 'in work'	n/a – State of the Park indicator
Percentage of residents of the Park claiming unemployment benefit	Percentage has reduced (from the current 1.9%) ⁶⁶
Area of allocated employment floorspace	Area has increased



⁶⁶ March 2012. Relates to the part of the National Park within North Yorkshire, figures supplied by North Yorkshire County Council

4.7 Fishing

Coastal Fishing

Although there are several villages located along the coast which developed as fishing communities, the industry has largely ceased in these settlements, with only 11 boats now operating from Staithes, Runswick Bay and Robin Hood's Bay employing a total of 22 people. However the coastal waters adjoining the National Park are used by fishing boats from Scarborough and Whitby and are an important fishery especially for crab and lobster. In recent years, warmer sea temperatures have resulted in other species, such as velvet crab, becoming commercially viable. These and other catch species are often exported, providing valuable income to the wider National Park area.

River Fishing

There are two river catchments in the National Park supporting potential sports fisheries – the Esk and the Derwent.

The river Esk is currently Yorkshire's only Salmon Action Plan river and is an important salmon and sea trout fishery. Sedimentation in the Esk has impacted on salmon reproduction but since the introduction of a stocking programme in the 1990s using Esk provenance stock the salmon catch has increased although is still not reaching target numbers. The Salmon and Trout Association suggests that the overall income to an area arising from salmon fishing is £2,500 per fish. Fishing on the Esk therefore has the potential to bring significant economic benefits to a remote upland area.



The Derwent catchment is significantly larger, and drains the majority of the southern area of the National Park. Most of the rivers within the National Park are small but support good, and potentially valuable, wild trout and grayling populations. Wild trout fishing is at a premium but, with a few exceptions, the economic potential of sports fishing is not exploited.

Recent improvements to water quality in the river Humber have meant that salmon and sea trout have started to run into the Humber catchment, including the Derwent. The main constraint on migratory fish entering the Derwent and Rye are physical barriers in the form of weirs. If these problems can be addressed, there is a strong possibility that the small rivers within the National Park will become increasingly valuable as sports fisheries.

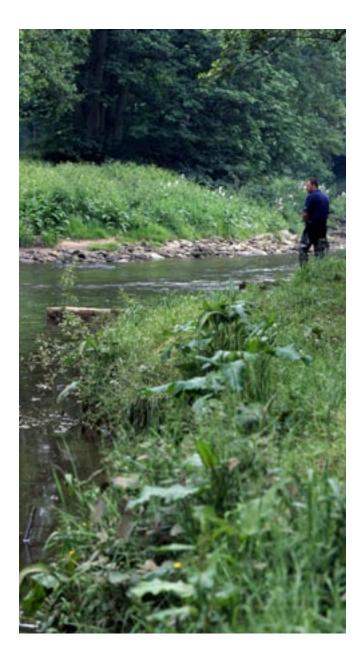
Challenges

- Removing physical obstructions to fish migration in the Esk and Derwent and supporting measures to increase the diversity and number of fish in the National Park's rivers.
- Increasing the potential for sports fishing in the National Park and its contribution to the rural economy.

In 15 Years Time...

There are salmon present in the upper river Derwent and more sports fishing takes place on the National Park's rivers.

Business and Land Management



AIM

The economic opportunities for sports fishing which are based on sound environmental practices will be supported.

POLICIES	MEANS TO ACHIEVE	KEY PARTNERS
B25. Sports fishing will be supported where it will have environmental and economic benefits	Ongoing involvement	Riparian owners and fishing interests

How Management Plan progress will be reported

INDICATOR	TARGET / DESIRED DIRECTION OF CHANGE
Number of salmon and sea trout in the Upper Derwent	Salmon and sea trout are present

Wall

Silent and still the stone wall winds its way Through the bracken of the moors. Seeing things come, stay and go.

Tom Adams, age 14, Pickering



5. Communities

The remote nature of the National Park and its dispersed pattern of small rural settlements with limited services, facilities and public transport are key challenges. The policies in the Local Development Framework allow for some limited development opportunities to improve the sustainability of communities including new facilities, housing and employment. There are strong cross boundary relationships with the larger towns and cities outside the National Park which provide services and facilities for a large rural hinterland, for example Whitby provides employment and facilities for the communities in the northern part of the National Park. The National Park has the potential to deliver some of the energy requirements for its communities from renewable and low carbon sources.

The culture and traditions of National Park communities are part of the cultural heritage that are to be conserved and enhanced under the first National Park purpose.

5.1 Involvement

Communities and individuals are more likely to support activities in the National Park if they have been involved in discussions and have had some influence over the development of proposals. The National Park Authority has a long track record of working with local communities in all areas of its work. The Authority convenes four Parish Forums which are a way of ensuring a regular dialogue between Parish Councils and the National Park Authority and other organisations working in the National Park.

There are also opportunities for involving local people in the work of the Authority through the Volunteer Service which provides the opportunity to experience a diverse range of countryside management activities as well as helping at events and visitor centres. Other organisations also offer opportunities for volunteering in the National Park, such as the Countryside Volunteer Service run by North Yorkshire County Council.

The National Park Authority has worked with two communities, Hutton Buscel and Osmotherley, to prepare Village Design Statements which have been adopted as Supplementary Planning Documents. There will be continued close working with other communities such as Helmsley in the preparation of a Development Plan Document for the town. The Localism Act has introduced legislation which enables local communities to produce their own Neighbourhood Plans.

Challenges

- Integrating Neighbourhood Plans and Neighbourhood Development Orders within the planning system.
- Addressing the introduction of the 'community right to challenge' in the Localism Act which enables voluntary groups, social enterprises, Parish Councils and others to run local authority services.

In 15 Years Time...

Communities have taken greater ownership of activities in the National Park and are more involved in the provision of services. The National Park Authority has a strengthened element of local representation via Parish Councils.



Communities will be better able to influence the delivery of services and decisions affecting the National Park.

POLICIES	MEANS TO ACHIEVE	KEY PARTNERS
C1. Local views will be sought in developing policies, priorities and activities in the National Park	Continual involvement	National Park Authority Parish Forums Local Strategic Partnerships Area Forums Local authorities
	Consultation on Local Development Framework / Local Plan documents	National Park Authority
C2. Opportunities for volunteering will be created	Various volunteer programmes	National Park Authority Local councils Voluntary sector
C3. Communities will be involved in plan-making and in delivering services, facilities and projects where appropriate	Ongoing involvement	Communities Residents National Park Authority Constituent authorities

How Management Plan progress will be reported

There are no relevant targets and indicators



5.2 Culture and Traditions

Conservation of the unique cultural heritage is one of the purposes of National Park designation. This heritage creates many of the special qualities which set this place apart from other National Parks and other parts of the country, and is an important element of the appeal of the National Park to visitors. Interest from tourists can also help to sustain cultures and traditions which may otherwise be lost.

The vernacular buildings and the unique villages are the most recognisable element of the National Park's cultural distinctiveness but it is the less tangible elements of culture, local communities, traditions and customs, dialect and local speech, folklore, legends and memories, that are some of the most precious yet vulnerable parts of the local culture.

In order to safeguard and promote this social heritage it is important to work with local community groups, individuals and organisations to develop projects and initiatives, which celebrate and develop elements of culture such as festivals, local artists and crafts and local produce.

Challenges

- Dialect and speech which have traditionally varied from dale to dale are losing their distinctiveness.
- Budget cuts will affect spending on cultural and arts services.

In 15 Years Time...

The North York Moors is a distinctive, well known brand of which local traditions and culture are an important part. The National Park is known for more than just its moorland. Traditions have been well documented for the benefit of future generations. High profile festivals celebrate local culture.

AIM

■ The National Park will be distinguished from other places through its locally distinctive culture and traditions.

POLICIES	MEANS TO ACHIEVE	KEY PARTNERS
C4. Local communities will be supported to maintain and celebrate local heritage, customs, traditions and skills and record their social, cultural and economic history	Projects through LEADER funding	National Park Authority
	York and North Yorkshire Cultural Strategy	York and North Yorkshire Cultural Partnership
C5. The interpretation of the landscape and cultural heritage of the North York Moors will be encouraged	National Park Events Programme	National Park Authority Community groups
	York and North Yorkshire Cultural Strategy	York and North Yorkshire Cultural Partnership
	Redcar and Cleveland Cultural Strategy	Redcar and Cleveland Borough Council
	Museums and visitor centres	National Park Authority Museum operators

How Management Plan progress will be reported

There are no relevant targets and indicators



5.3 Facilites

Outside the larger settlements, most villages have a limited range of facilities. There has been a loss of general stores, Post Offices and pubs over the lifetime of the last Management Plan, however there has been an increase in the provision of village halls and play areas. Post Office closures have resulted in the loss of some village shops where the two were run together. Local facilities are also often supported by tourism, and a declining number of visitors to the National Park may also contribute to the loss of community facilities. The loss of facilities can increase the need to travel which can have significant implications for those without access to transport, as well as leading to an increase in emissions.

Change in community facilities (1995 – 2009)

General Store	-30%
Post Office	-63%
Village Hall	+16%
Pub	-4%
Children's Play Area	+29%

Some smaller meeting rooms and chapels have been lost through conversion to residential and other uses, however some village halls such as Lythe, have benefited from improvements funded by a combination of sources including community fundraising, Heritage Lottery Fund, District and Borough Council grants and the Authority's Sustainable Development Fund and LEADER funding.

There is no control over the closure of facilities such as pubs and shops. However, in its role as Local Planning Authority, the National Park Authority can refuse planning permission for alternative uses where it has not been robustly demonstrated that the original use cannot continue. The Authority can also grant planning permission for different community or commercial uses, ensuring the continuing provision of services. The Localism Act introduces powers for local communities to identify assets of community value, which would provide the community with possible further opportunities to purchase these in the future.

Many communities across the National Park still have little or no access to high speed broadband. This is an important service for local enterprise and to enable better access to services across the National Park. Connecting North Yorkshire aims to bring the advantages of high speed broadband to 100% of businesses and citizens in North Yorkshire by 2015. A similar project led by Tees Valley Unlimited covers the Redcar and Cleveland part of the Park. There are significant areas of the Park which suffer from poor or no mobile phone reception.

Challenges

- Declining local services and facilities could undermine the sustainability of rural communities and have a disproportionately greater impact on those who rely on them such as the elderly, disabled and those without access to a car.
- The potential introduction of the 'community right to challenge' will enable different groups to run local services and could expand the role of the voluntary sector and social enterprises in running services.
- Expanding the role of Post Offices including longer opening hours, facilities to access bank accounts and information for job seekers could improve their long term future.
- Ensuring access to broadband to help to compensate for the loss of some other community facilities, particularly shops, and improving mobile phone coverage.

In 15 Years Time...

Those living in the National Park have access to a range of facilities to meet their everyday needs. Communities are actively involved in the operation of many local facilities and are using innovative ways to provide services, such as through the shared use of premises. Everyone living in the National Park has access to broadband.



AIM

■ The sustainability of local communities will be improved by supporting the provision of new facilities and resisting the loss of uses which provide an important service to local communities.

POLICIES	MEANS TO ACHIEVE	KEY PARTNERS
C6. The loss of existing facilities in villages including commercial premises such as pubs and shops will be resisted	Local Development Framework Core Policy I	National Park Authority
C7. Innovative ways of providing new community facilities including high speed broadband will be supported/ enabled	Connecting North Yorkshire (which includes NYnet)	North Yorkshire County Council Constituent local authorities Private sector
	Broadband provision across Tees Valley	Tees Valley Unlimited Private sector
	Community initiatives	Local communities
C8. Improvements to mobile phone coverage in the Park will be investigated	National programme to improve mobile phone coverage	North Yorkshire County Council

How Management Plan progress will be reported

STATE OF THE PARK INDICATOR	TARGET / DESIRED DIRECTION OF CHANGE 100% of households by 2017	
Percentage of households and businesses who have the opportunity of access to broadband		
Percentage of villages with key facilities (general store, Post Office, village hall, village pub, children's play area)	Percentage has been maintained or increased	



5.4 Housing and New Development

The policies for new development in the National Park are contained in the North York Moors Local Development Framework which was adopted in 2008. The principles of sustainable development underpin its policies. In a National Park, sustainable development involves putting special emphasis on conserving and enhancing the landscape, biodiversity, cultural heritage, tranquillity and natural resources. Promoting public understanding and enjoyment of these should lie at the very heart of developing a strong economy and sustaining thriving local communities⁶⁷.

The spatial strategy in the Local Development Framework focuses new development in the more sustainable settlements in the National Park whilst allowing for some small scale development in the smaller villages to maintain their vitality. It also seeks to reconcile potentially competing pressures – conserving and enhancing the National Park's natural beauty with meeting the development needs of local communities and encouraging opportunities for the understanding and enjoyment of the National Park.

There has been a significant increase in house prices over the life of the current Management Plan from an average of £119,000 in 1998 to £250,879 in 2010, although prices have dropped slightly following a peak in 2008. Affordability is an acute issue for newly forming households and young people many of whom move away to find more affordable properties. This is leading to an imbalance in the age and social structure in rural communities with less support for services such as schools and shops and a loss of social networks. The Local Development Framework makes provision for affordable housing and since 2006 77 affordable houses have been built through partnership working between the National Park Authority, Rural Housing Enablers, Housing Providers and the constituent Housing Authorities. The North Yorkshire Strategic Housing Market Assessment⁶⁸ identifies an ongoing need for affordable housing in the National Park.

Affordability problems are exacerbated by second homes which in the 2001 census were 12%⁶⁹ of all properties in the National Park, though in some communities the proportion is much higher. The planning process cannot prevent second home purchase unless a local occupancy condition is in place.

The Authority has also produced a number of Supplementary Planning Documents covering design, housing and renewable energy and is currently producing a Helmsley Plan jointly with Ryedale District Council and a plan for Whitby Business Park jointly with Scarborough Borough Council.

Challenges

- Dealing with the implications of the Localism Act which could lead to significant changes for the planning system including a more community led approach with more responsibility devolved to the town and Parish Councils.
- Cuts in public spending which will have a significant impact on the capacity of partner organisations to support rural services and deliver rural housing, for example grant funding to support rural affordable housing schemes on exception sites.
- Pressure for development outside but affecting the setting of the National Park, particularly wind farms.

In 15 Years Time...

The number of people in need of housing has decreased through the provision of more affordable homes. New development has preserved and reinforced the special qualities of the National Park.



⁶⁷ Adapted from English National Parks and the Broads – UK Government Vision and Circular 2010 (DEFRA, 2010)

- ⁶⁸ North Yorkshire Strategic Housing Market Assessment (North Yorkshire Strategic Housing Partnership, 2011)
- ⁶⁹ Defined as households with no occupants and includes holiday lets and second homes



■ More affordable homes to meet local needs will be provided and new development will protect and enhance the National Park's landscape and built heritage.

POLICIES	MEANS TO ACHIEVE	KEY PARTNERS
C9. Opportunities for affordable housing schemes to meet the needs of local people will continue to be identified and delivered through partnership working	Local Development Framework Core Policy K	National Park Authority
	Partnership working	Rural Housing Enablers Housing Authorities Registered Providers Parish Councils
C10. All new development will be of a high quality design and will conserve and enhance the built heritage	Local Development Framework Core Policy G	National Park Authority Architects and agents
C11. Development proposed outside but close to the boundary of the National Park will be assessed to establish whether there will be any harm to the setting of the National Park	Liaison with adjoining Local Planning Authorities	National Park Authority Adjoining planning authorities

How Management Plan progress will be reported

INDICATOR	TARGET / DESIRED DIRECTION OF CHANGE	
Number of affordable homes built per year	At least 75 built by 2017	
Average house prices	n/a – State of the Park indicator	

5.5 Transport

The scattered settlement pattern and population of the National Park means that services and facilities are dispersed and generate the need to travel, not just between settlements but across the National Park boundary to larger outlying urban centres such as York, Middlesbrough and Scarborough. A consequence of this is that car ownership within the National Park is relatively high with 87% of households owning at least one car compared to the regional and national averages of 70% and 73% respectively⁷⁰. Conversely, some urban communities just outside the Park have far lower levels of car ownership.

For many residents there are limited transport choices to access services. In rural areas the use of private vehicles is often the only means of transport and this is likely to remain the case for the foreseeable future. Where public transport services operate they do not always meet the needs of the user both in terms of scheduling and affordability. The Esk Valley Railway provides a service between Middlesbrough and Whitby, connecting the villages in between.

It is believed that 93%⁷¹ of the 6.4 million tourists who visit the National Park each year arrive by private vehicle. Traffic data indicates a 23% increase in the number of vehicles travelling through or to the National Park between 1998 and 2009⁷², however there has been a decrease of 13% between 2009 and 2010. Future monitoring will show whether this is the beginning of a downward trend or an anomaly.

⁷⁰ 2001 Census Data: Table KS17

⁷¹ North York Moors National Park Recreation and Access

Strategy (North York Moors National Park Authority, 2008)

⁷² Saltergate Traffic Counter

The Highways Authorities covering the National Park are North Yorkshire County Council and Redcar and Cleveland Borough Council. North Yorkshire County Council, which covers most of the Park, has worked closely with the National Park Authority on the production of its Local Transport Plan.

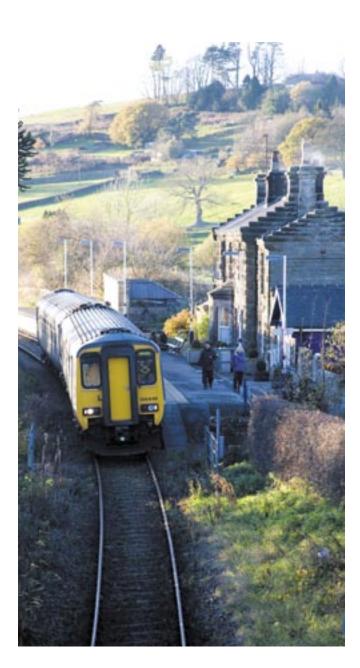
Challenges

- Accessing services from the more remote areas of the National Park where public transport is limited, particularly for the elderly, families with children, people with disabilities, low income households and the young. This issue may become more widespread if more local facilities and services close.
- Operating integrated, efficient and equitable public transport services in rural areas which are under threat because of reduced passenger numbers and escalating costs.
- Increasing role for the voluntary and community sector in transport provision.
- Dealing with the adverse impacts of transport on people and the environment such as visual intrusion, loss of tranquillity, road sign clutter, air pollution, CO₂ emissions and highway safety.

In 15 Years Time...

Whilst the car is still the predominant form of transport in the National Park, better links between buses and trains have led to an increase in the use of these. Community transport schemes enable more people to access the services and facilities they need. There are opportunities for tourists to use different types of transport such as electric bikes.





AIM

ir n

A safe and efficient sustainable transport network will be provided which is compatible with the National Park's high quality landscape.

POLICIES	MEANS TO ACHIEVE	KEY PARTNERS
. Local community transport projects	Ongoing involvement	National Park Authority
will be supported together with an innovative approach to small scale public transport initiatives linking the main villages, surrounding towns and visitor attractions	Local Sustainable Transport Fund or equivalent	North Yorkshire County Council National Park Authority
C13. Attractive and viable alternative means of transport to the private car will be promoted to enable people to travel in and around the National Park in a	Provide and promote well developed smart travel choices including safe cycling and walking routes.	North Yorkshire County Council Redcar and Cleveland Borough Council National Park Authority
more sustainable and integrated way	Focused bus services	National Park Authority
	North Yorkshire Local Transport Plan	North Yorkshire County Council
	Redcar and Cleveland Local Transport Plan	Redcar and Cleveland Borough Council
	Local Sustainable Transport Fund	North Yorkshire County Council National Park Authority
4. The demand for travel will be luced through;	Local Development Framework Core Policy M	National Park Authority
 encouraging home working; promoting the use of high-speed broadband for both business and leisure purposes, and 	Connecting North Yorkshire (which includes NYnet)	North Yorkshire County Council Constituent local authorities Private sector
 encouraging the uptake of video conferencing as an alternative to long-distance travel. 	Broadband provision across Tees Valley	Tees Valley Unlimited Private sector
	Video conferencing	National Park Authority

POLICIES	MEANS TO ACHIEVE	KEY PARTNERS
C15. Initiatives which decarbonise mobility and reduce CO2 emissions will be supported	Encouraging low emission vehicles and cycling	National Park Authority North Yorkshire County Council Redcar and Cleveland Borough Council Sustrans
	Local Development Framework Core Policy M	National Park Authority
C16. The visual and environmental impacts of highway improvements and new or replacement infrastructure will be minimised	North Yorkshire Local Transport Plan	North Yorkshire County Council
	Redcar and Cleveland Local Transport Plan	Redcar and Cleveland Borough Council
	Design Guidance (to be prepared)	National Park Authority North Yorkshire County Council
C17. The safety aspects of transport and benefits of more sustainable modes of travel will be highlighted	Campaigns and literature	North Yorkshire County Council Redcar and Cleveland Borough Council National Park Authority

How Management Plan progress will be reported

INDICATOR	TARGET / DESIRED DIRECTION OF CHANGE
Number of vehicles passing traffic counters in the National Park	n/a – State of the Park indicator
Percentage of households who own a car	n/a – State of the Park indicator



5.6 Energy

The businesses, residents and visitors to the National Park all use energy – for electricity, for heating and for transportation. There are some particularly large energy users in the National Park, specifically Boulby potash mine and Fylingdales early warning station. This use of energy results in the release of CO_2 emissions which are leading to changes in the climate. Transport accounts for nearly half of all emissions, industrial and commercial for around a third and domestic around 20%.

To put the level of emissions into perspective, if every farm in the National Park had a 6kW wind turbine and every house had photovoltaic panels this would offset the National Park's CO_2 emissions by less than 4%.

As well as resulting in emissions of greenhouse gases, energy use also has a financial cost to the consumer. In 2009, it is thought that around 20% to 30% of households in the National Park were in fuel poverty⁷³.

Reducing energy use and generating energy from sustainable sources will help to address issues of fuel poverty and offset some of the damage being caused by emissions, but it must be acknowledged that efforts must be made globally to have any real effect. It is considered that the National Park can become an 'exemplar' in creating opportunities for energy generation through wood fuels, micro-hydro, anaerobic digestion and wind and solar power installations appropriate to the national value of the landscape, whilst at the same time reducing its own emissions.

In recent years, efforts have been made to reduce energy use in the National Park and to use the National Park's natural resources to generate sustainable forms of energy. The National Park Authority's Community Renewable Energy Project supported communities in the Esk Valley and Appleton and Spaunton by providing funding and support for the community to implement energy efficiency measures and develop renewable energy schemes, including the development of a 50kW hydroelectric scheme on the River Esk at Ruswarp. Outside of this project, a range of renewable energy schemes have been installed in locations across the National Park including domestic scale wind turbines, solar hot water and photovoltaic panels, biomass boilers, air and ground source heat pumps and hydro energy schemes. Further, all of the Forestry Commission's surplus timber goes to SembCorp on Teesside where it is used to generate energy. Nevertheless, it is considered that a great untapped potential still exists in the National Park.

Probably the easiest way to reduce CO₂ emissions is to simply use less energy, which will leave no visual impact upon the National Park, has no upfront costs and will lower energy costs to the consumer. Energy efficiency measures can help with this and many buildings in the National Park already accommodate a range of these such as double or secondary glazing, loft insulation and draught proofing, but it is considered that there is potential to do a lot more. Wasting less energy and installing energy saving measures could save around a third of the National Park's domestic CO₂ emissions.

The importance of using less energy is clear when it is considered that to offset all of the CO_2 emissions in the National Park would require, for example, over 90,000 6kW wind turbines or nearly 500,000 PV panels. Nevertheless, there is a role for expanding the use of renewable energy in the National Park. It is considered that, provided they are installed in appropriate locations, a combination of domestic scale wind turbines, solar panels (both

PV and solar hot water), ground source heat pumps, air source heat pumps, wood pellet boilers and farm based hydropower schemes, along with increasing the use of energy efficiency measures and using less energy, could offset all of the National Park's domestic CO₂ emissions. Domestic emissions account for around 20% of the National Park's CO₂ emissions.

Whilst wind and solar technologies can clearly make an important contribution, it is considered that a great deal of potential exists for the use of air source and ground source heat pumps and wood fuel, all of which can have little or no impact upon the National Park's special qualities. In particular, wood pellet boilers installed in half of the National Park's dwellings could offset more than 10% of the National Park's total CO₂ emissions. Take up of wood fuel may also provide an impetus to put some currently unmanaged private woodlands into use. In addition to the potential for some medium scale hydropower development on the River Esk, there are a number of farms which have water courses that could accommodate a small scale hydropower installation.

Many small scale renewable energy installations now benefit from Permitted Development rights, meaning that they do not require planning permission. Take up of renewable energy is often driven by subsidies, and therefore future funding schemes are likely to largely dictate the amount and type of renewable energy that comes forward in the Park.

⁷³ Based on Department of Energy and Climate Change statistics for Hambleton District, Redcar and Cleveland Borough, Ryedale District and Scarborough Borough Councils, 2009)

Challenges

- A continuing drive to reduce greenhouse gas emissions.
- Rises in energy prices may motivate residents and businesses to use less energy and to look to generate their own energy from renewable sources.
- Government initiatives such as the feed-in tariff, Renewable Heat Incentive and the Green Deal may also provide an incentive for people to generate their own energy, depending upon the price offered for purchasing the energy generated.



Prospects for Future Energy Generation

It is considered that around a quarter of all of the National Park's CO₂ emissions may be able to be offset without harming the special qualities of the National Park through using energy more wisely and the installation of:

- A range of energy efficiency measures including loft insulation, wall insulation, draught proofing and double or secondary glazing where this will not cause harm to important historic buildings;
- Wood pellet boilers in around half of all houses and supplementary biomass heating in most houses;
- Small scale wind turbines in association with farm buildings, where this is appropriate in the landscape;
- PV and solar water panels on south facing, non-prominent roof slopes;
- Ground source heat pumps in dwellings with sufficient space;
- Air source heat pumps where these can be located in non-prominent locations;
- Small scale hydropower plants on some watercourses, many of which are associated with farms;
- There may be potential to generate energy from farm waste.

There is likely to be scope for other installations, which would further offset CO_2 emissions.

In 15 Years Time...

Less energy is used in the National Park and more use is being made of energy efficiency measures. More people generate their own energy from renewable sources. Small scale wind turbines as part of a farm complex and appropriately located solar panels have become accepted features in the landscape. The demand for wood fuel has significantly increased and as a result many previously unmanaged private woodlands have been put into use. New developments meet much of their energy needs from renewable sources and the sensitive redevelopment of Whitby Business Park has increased the opportunities for renewable energy generation.



AIM

 Residents and businesses will use less energy and will contribute to their energy needs through the generation of energy from renewable sources.

POLICIES	MEANS TO ACHIEVE	KEY PARTNERS
C18. Residents, visitors and businesses will be encouraged to reduce their	Sustainable Development Fund	National Park Authority Private sector
use of energy and the installation of appropriate energy efficiency measures in buildings will be supported	Local Development Framework Development Policy 3	National Park Authority Private sector
	Advice and finding funding	Energy Saving Trust
C19. The wood fuel industry in the National Park will be further developed	Partnership working	National Park Authority Forestry Commission Private landowners
C20. The installation of renewable energy technologies will be encouraged and supported where there is no harm to the National Park's special qualities	Sustainable Development Fund	National Park Authority
	Local Development Framework Core Policy D	National Park Authority

How Management Plan progress will be reported

INDICATOR	TARGET / DESIRED DIRECTION OF CHANGE
CO ₂ emissions attributed to the National Park	Decrease in CO ₂ emissions (from 2006 base of 396kt per year)

5.7 Waste Management

Communities and businesses in the National Park generate relatively low levels of waste. Local Development Framework policies allow small scale waste facilities where they will contribute to meeting the targets of the waste management authorities, manage waste that has been generated from within the National Park and enable waste to be managed as close to its source as possible. Within the North York Moors National Park the waste disposal authorities are North Yorkshire County Council and Redcar and Cleveland Borough Council, and the waste collection authorities are the District and Borough Councils.

Consultation feedback has shown that litter, including roadside littering, is of great concern to residents and has an adverse effect on the natural beauty of the National Park. Fly tipping, from domestic or industrial sources is also a concern in remote areas. Plastic drift along the coastline is a particular problem in the National Park.

Rates of recycling and composting of household waste have been increasing over recent years.

Challenges

- As well as being of concern to people, litter is visually harmful and a potential danger to wildlife.
- Increased recycling and re-use of waste may require additional facilities which would need to be designed and sited to minimise the impact upon the environment of the National Park.

- It is considered that there may be potential for energy to be generated from some agricultural waste, possibly through anaerobic digestion facilities.
- Potential growth in the spreading of industrial waste on agricultural land, which generates odour problems.

In 15 Years Time...

A high proportion of the waste generated in the National Park is re-used or recycled, and in some places community recycling schemes have been successfully set up. Litter problems in the National Park have been improved and all of the National Park's beaches are of a good standard.





AIM

- Waste produced from within the National Park will be reused or recycled wherever possible, and overall levels of waste will be reduced.
- The environment of the National Park will not be degraded by littering and illegal dumping.

POLICIES	MEANS TO ACHIEVE	KEY PARTNERS
C21. The cleanliness of beaches will be improved	Partnership working	National Park Authority Environment Agency Scarborough Borough Council Redcar and Cleveland Borough Council
C22. Particular locations where litter is a problem will be identified, and addressed if feasible	Ongoing involvement	National Park Authority Volunteers
C23. The illegal dumping of rubbish will be enforced against	Ongoing involvement	Waste collection and disposal authorities
C24. There will be increased encouragement of and opportunities for	Green Tourism Business Scheme and/or other schemes	National Park Authority Local businesses
re-using and recycling waste	Business Waste Handbooks	Local councils
	Local Development Framework Core Policy F	National Park Authority
	Let's Talk Less Rubbish - Municipal Waste Management Strategy for the City of York and North Yorkshire	York and North Yorkshire Waste Management Partnership
	Tees Valley Joint Waste Management Strategy	Redcar and Cleveland Borough Council

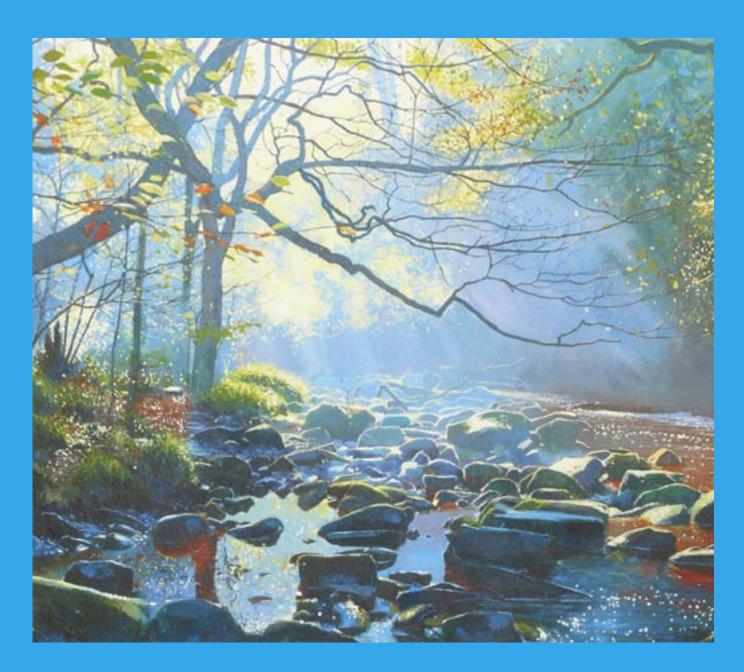
How Management Plan progress will be reported

There are no relevant targets and indicators.

Local Paradise

Spiky gorse and Purple heather Bright, cloudless sky, The perfect weather! Swooping lapwings In the air They dangerously dive As fast as they dare. Dippers and Kingfishers Just by the stream The fish are all silky, small And hard to be seen

Emma, age 12, Middlesbrough



Acknowledgements

Photographs

North York Moors National Park Authority 4, 12, 18, 29, 35, 36, 40, 41, 42, 47, 50, 53, 54, 57, 65, 67, 75, 79, 86, 89, 94, 98, 100, 101, 105, 106, 107, 108, 111, 113, 114, 115 Chris Ceaser 28, 44 Colin Dilcock 87 Discovery Photography 60, 68, 69, 70, 81, 83, 95, 104, 109, 110 Game and Wildlife Conservation Trust 93 Forestry Commission 70 Janet Burdon 4, 61 Mike Kipling 3, 4, 5, 6, 9, 15, 16, 23, 25, 27, 45, 46, 49, 52, 59, 66, 71, 72, 80, 91, 97, 103, 116 Peter Thompson 92 Shockthesenses 31, 56 Tessa Bunney 5, 74, 76, 85, 88, 90, 96 Wildstock Images 37, 55, 58 York Astronomical Society 39

Illustrations page 34: Hedgehog - Hovingham Primary School. Ladybird / flowers - St. Benedict's Primary School, Ampleforth

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