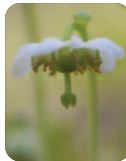


Strategic Directions

for the National Forest Estate

Treasured



Healthy



Productive



Accessible



Cared for



Good value



2012-2015



Strategic Directions

for the National Forest Estate

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Stewart Stevenson
Minister for Environment and Climate Change

Simon Hodge
Chief Executive for Forest Enterprise Scotland

Introducing the national forest estate

Scotland's national forest estate covers nearly 9% of the nation's land mass. It comprises forests, woodlands and open ground. Widely distributed around Scotland, the estate has developed over the last 93 years in response to the forestry objectives of successive governments. Around two-thirds is woodland and one-third is open ground, including agricultural land, mountains, peat bogs, water bodies and coast. These habitats and land uses are a defining feature of Scotland's internationally-renowned landscapes,

In the west – from Slattadale down through Skye, Mull, Lochaber, Ardnamurchan and Argyll - we look after extensive areas of quick-growing conifers (mostly Sitka spruce in these areas), but we also look after important areas of native woodlands, like the Sunart Oak Woods,

The North Highlands, the Cairngorm Massif and the Great Glen are also renowned for high quality conifer forests set within the grandeur of mountain and moorland landscapes. The high yield forests along the Great Glen provide a magnificent backdrop for tourism but here too native woodland restoration is a high priority, as exemplified by our work to restore the Caledonian pinewoods in Inshriach and Glenmore.

The dry and sandy soils of eastern Scotland tend to support pine forests like Culbin Forest, Roseisle and Lossiemouth on the shores of the Moray Firth and Tentsmuir at the mouth of the Tay, but Clashindarroch and Fetteresso, in the wetter eastern glens, are more suited to high-yielding Sitka spruce.

Across Perthshire, Loch Lomond and the Trossachs and the central belt of Scotland, the mixed forests and habitats of the national forest estate are part of the rich landscape tapestry that provides the setting for much of urban Scotland.

In the south east, the rolling hills of the Borders farmland are interwoven with forests, like the Tweed Valley's Glentress, which provide extensive outdoor recreation opportunities, while in the south west, larger conifer woodlands spread from Eskdalemuir across the Southern Uplands to form some of our largest forest areas, supporting a concentration of saw mills and many forestry jobs.

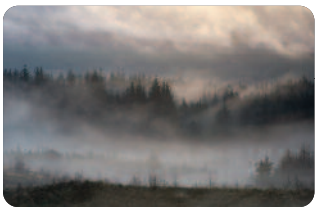
Lael Forest includes one of the first small scale hydro schemes on the NFE.



Sunart Oak Woods
ancient semi-natural woodland, home to one of Scotland's finest collections of "lower plants"



Easterhouse Woods, Glasgow
Urban woodlands managed in consultation with the local community



Galloway Forest District
produces around 700,000 m³ of timber per annum



Culbin Forest
mainly pine growing on a frozen sand dune system



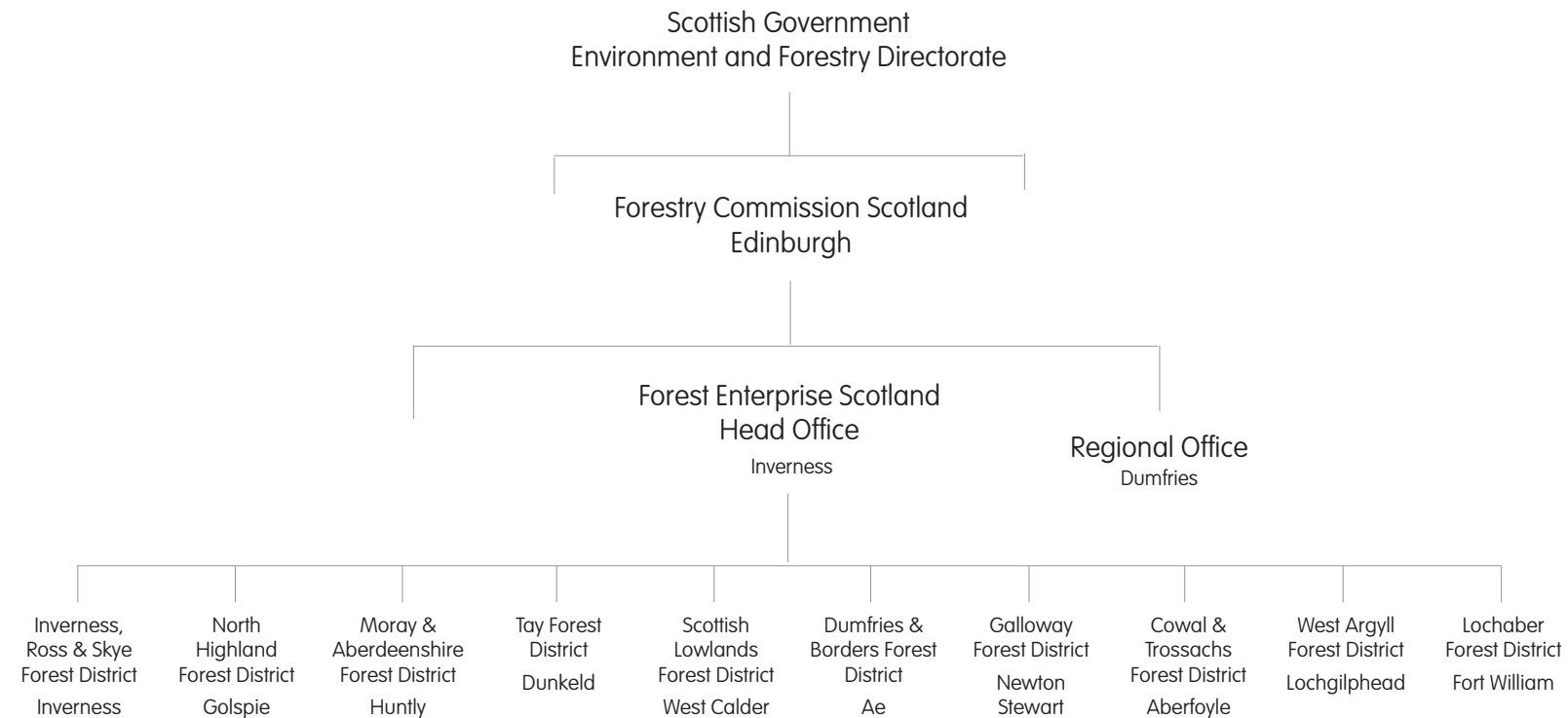
Glentress
One of the UK's premier mountain bike trail centres

About Forest Enterprise Scotland

How we fit in

As an Agency of Forestry Commission Scotland, Forest Enterprise Scotland provides Scottish Ministers with a direct land management capability for delivering the Scottish Forestry Strategy and other Scottish Government priorities. Our main role is to manage the national forest estate, to deliver public benefits and help develop best practice in land management.

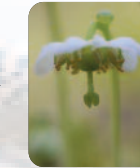
Whilst forestry is at the core of what we do, we also deliver a range of wider land-based outcomes, often in partnership with communities, NGOs and other public bodies.



What Scotland's' national forest estate is for:

- Safeguarding 'national forestry treasures'
- Delivering forestry for people and rural development benefits
- Timber production for market stability and development
- Contributing to the Scottish Government's climate change targets
- Landscape-scale management for biodiversity and ecosystem services
- Supporting policy, R&D and exemplars of land use integration and best practice

Our aspiration is that Scotland's' national forest estate is:



Treasured as a multi-purpose resource that sustains livelihoods, improves the environment, and offers enjoyment and involvement



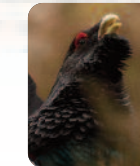
Healthy, achieving good environmental and silvicultural condition in a changing climate



Productive sustainably, utilising the potential of the land



Accessible, so that local woodlands and national treasures are welcoming and open for all



Cared for, with well looked-after countryside, natural and cultural heritage



Good value, generating income to minimise the net cost of delivering public benefits

The wider context

Our management of Scotland's national forest estate is not conducted in isolation. As well as developing our own strategy we contribute to the wider Scottish Forestry Strategy, which applies to all of Scotland's woods and forests.

We align our work to the Scottish Government Scotland Performs objectives and the Scottish Government's Land Use Strategy.

Our organisational priorities and commitments can be found in the Forestry Commission Scotland Corporate Plan.

The way these strategic directions will be implemented is described and reported in greater detail through;

regional implementation plans and local spatial land management plans, which are subject to public consultation;

our organisation's
corporate plan and annual reports;

Scottish Forestry Strategy

implementation plans and annual reports; and more detailed descriptions of the

economic, social and environmental policies and work programmes we work to.

All these documents can be found at www.forestry.gov.uk/scotland

Spare page to allow for changes through the consultation process



The story of the estate

The origins of Scotland's national forest estate go back one hundred years. The Forestry Act of 1919 and the need to develop a strategic timber reserve coincided with post-war opportunities to acquire large areas of land, but even before this the government was recognizing the need to develop Britain's forest resources



Between the wars, the Forestry Commission's estates continued to grow, and by 1937 the Commission was working with the Board of Trade on detailed plans for felling in the event of another conflict.

After 1945 work began on restoring the forest estate. Many newly-acquired felled or neglected woodlands were planted, but the availability of land for new forests was mainly in areas unsuitable for food production, although some of these were not ideal for forestry either.

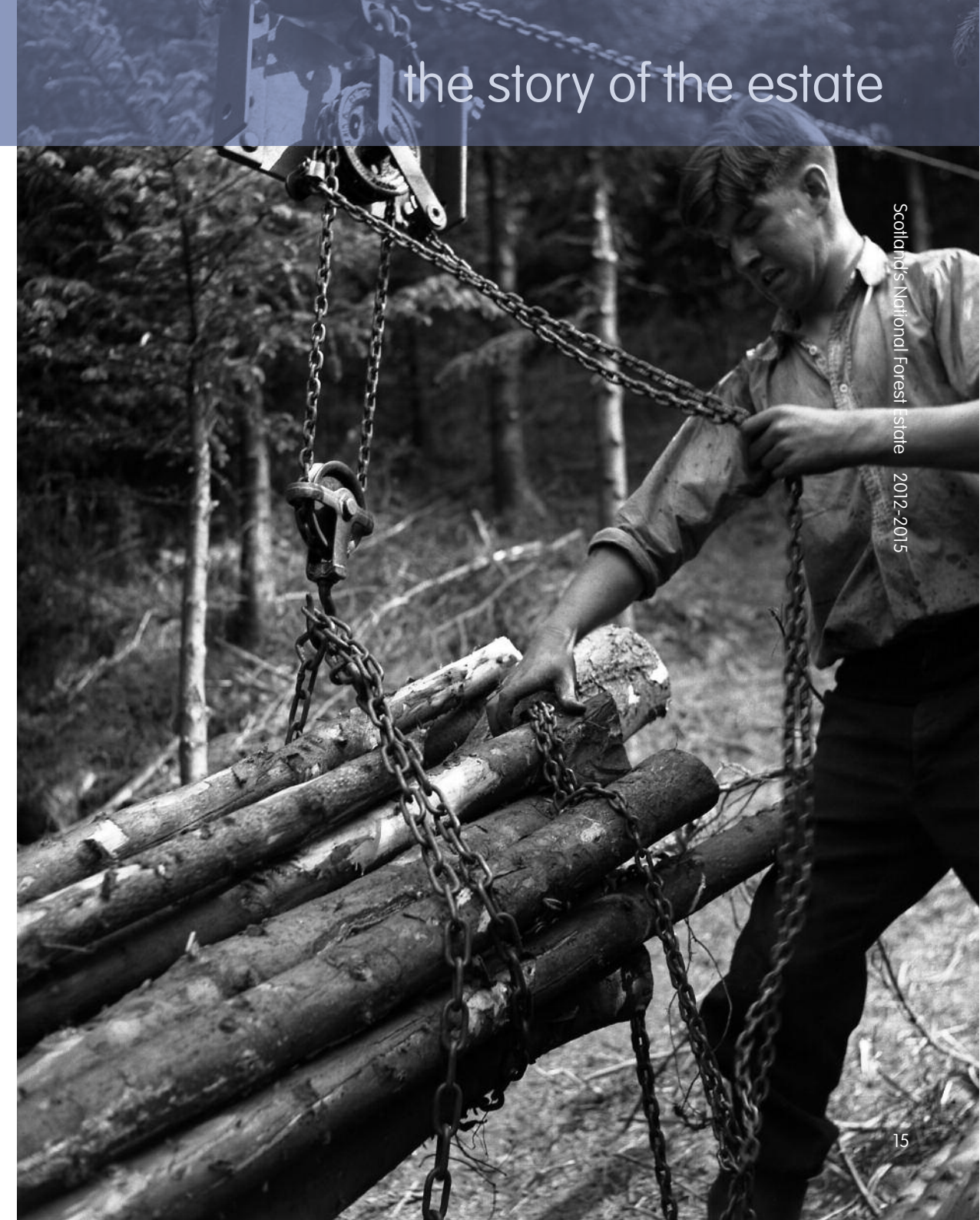
In the early years of the estate, the foresters turned to North America for productive trees that would suit our wet climate. One in particular – sitka spruce – became the cornerstone of the Scottish timber-processing industry, supporting thousands of jobs.



The post-war era also saw increased recognition of the need for access and recreation. The public were given a 'right to roam' in state-owned forests and the first Forest Parks were established. Also at this time the seeds were sown of today's understanding of landscape design – unfortunately too late for some of the straight-edged early plantings. From the 1970s, conservation and amenity issues grew in importance, with a new emphasis on woodland diversity, broadleaves, and creating a sympathetic landscape. For the first time, forests were seen as important wildlife reserves. Also at this time, the value of Scotland's extensive bog habitats became recognized, bringing a halt to extensive woodland creation on peatlands.



the story of the estate



A new perspective

The story of Scotland's national forest estate over the past 30 years has been one of diversification, as our objectives have broadened to include recreation, community and environmental benefits.

The post-War forests are now being carefully restructured as they reach maturity, although where trees grow less quickly change will take longer. Today Scotland's national forest estate is managed as a productive, recreation and environmental resource, comprising a range of habitats and a diversity of woodland types.

We are restoring not only ancient woodland sites that were planted with non-native species, but also rare open habitats such as lowland raised mires and blanket bogs whose value was once overlooked. We have also been able to re-align the straight edges of plantations and achieve a better, more sympathetic landscape and better integration between woodland and open ground.

The estate now has national importance for red squirrels, capercaillie, osprey, and many rare plants and lichens. It is

also Scotland's main recreation provider, offering unique walking, cycling and wildlife-watching amenities, and contributing an estimated £165m annually to the tourism economy.

We have extended the benefits of forestry to urban areas through our Woods In and Around Towns programme. In the last 10 years we have created around 1400ha (2000 football pitches) of new woodlands in and around towns, and we are closely involved in transforming Scotland's legacy of derelict industrial land.

We have contributed to around 100 community woodland partnerships since 2000, helping people get involved with managing their local woodlands, and supporting groups that want to buy or lease part of the estate through the National Forest Land Scheme. We are significant partners in the management of Scotland's two National Parks.

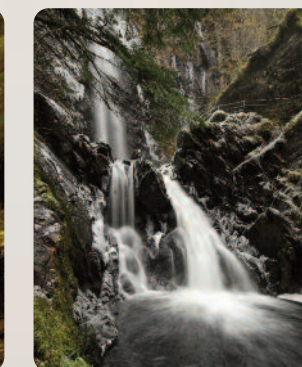
The NFE is being increasingly recognised as an important carbon store and we are working to steward this resource wisely, recognising the importance of carbon locked up both in tree growth and in the Estate's soils.

'Serried ranks of conifers'

The extensive 20th century conifer plantings were once described as 'serried ranks of conifers marching over the hills'.

Modern forest design is much better at creating diversity and blending with the landscape.

We still need some tightly-spaced trees to produce straight stems for high quality timber, but as these trees grow older we thin them out where we can to let in the light and create the 'cathedral groves' that so many of our visitors admire.



Realigning our assets

In order to increase the delivery of benefits we are changing the composition of Scotland's national forest estate by selling land and forests that contribute least public benefits, and re-investing in priority areas.

An ongoing programme of portfolio analysis is guiding where to invest most effort in improving the existing estate, and to make decisions about what to sell and what to buy in our Repositioning Programme. The criteria for sale and acquisition are agreed with Ministers and published on the FCS website along with details of the area and value of land bought and sold in each year.

Between 2005 and 2011 we sold about 21,000 ha and acquired about 20,000 ha.

The effects of the policy have been to:

- Allow us to create new woodlands, currently around 1000ha per year
- Give more people a chance to enjoy the estate by creating new woodland and increasing our land holdings in and around urban areas
- Improve management efficiency by rationalising the location of forest areas and reducing areas of high cost/low output

the story of the estate

The National Forest Land Scheme allows community organisations and non-governmental organisations (NGOs) to buy or lease NFE land in order to provide public benefits. These houses were built by the Albyn Housing Society using Scottish timber, and offer affordable accommodation to local people.



Planning to deliver

Our strategic aims for Scotland's national forest estate are underpinned by comprehensive planning, monitoring and research.

We routinely undertake site-by-site assessments of things like the activity of rare species, the survival and growth of trees, the presence of any pests or diseases, and how visitors feel about their visit to the forests. This information helps inform local planning, and the setting of national directions and commitments, for example on the amount of timber we can produce or on how much native woodland we can create.

Where there are gaps in our knowledge, we work with Forest Research and other experts to learn, and then to share new knowledge with our staff and other land managers.

Each of our ten Forest Districts publishes local plans to show how we will deliver local benefits that all add up to national success. These plans are developed with local consultation and public involvement, often based on visiting different parts of the estate together.

We are currently looking at how we can strengthen the links between our national directions and these local plans – helping us look at the big picture when we take local decisions, and ensuring that our national directions make sense locally.

In this way we will focus our resources to maximum benefit, and integrate the different land uses on the estate to sustainably deliver more.



Forestry Stewardship Council approved sustainable woodland management certification and ISO14001 Environmental Management Systems accreditation.





I started with the Forestry Commission as a teenager working on cutting squads. But when I got the chance to become a wildlife ranger, it changed everything. Now I'm a conservation manager responsible for everything from newts to golden eagles.

Species management means looking after habitats. This can involve taking out trees, supplementary planting and removing invasive shrubs like rhododendron. Black grouse, for example, do best where the forest edge is open, with good vegetation and well-spaced trees.

I work closely with the operational squads, checking for nests and letting them know when and where it's safe to work. I also track birds of prey to help our understanding of how they fit into forest systems.

It's a job that's also a way of life.

David Anderson, conservation manager

Treasured

as a multi-purpose resource that sustains livelihoods, improves the environment, and offers enjoyment and involvement

Loch Katrine

FCS manages the huge Loch Katrine water catchment – the source of much of Glasgow’s water supply. We are restoring a mosaic of habitats across the landscape, including extensive new native woodlands that will form part of the Great Trossachs Forest and safeguard these important water resources.

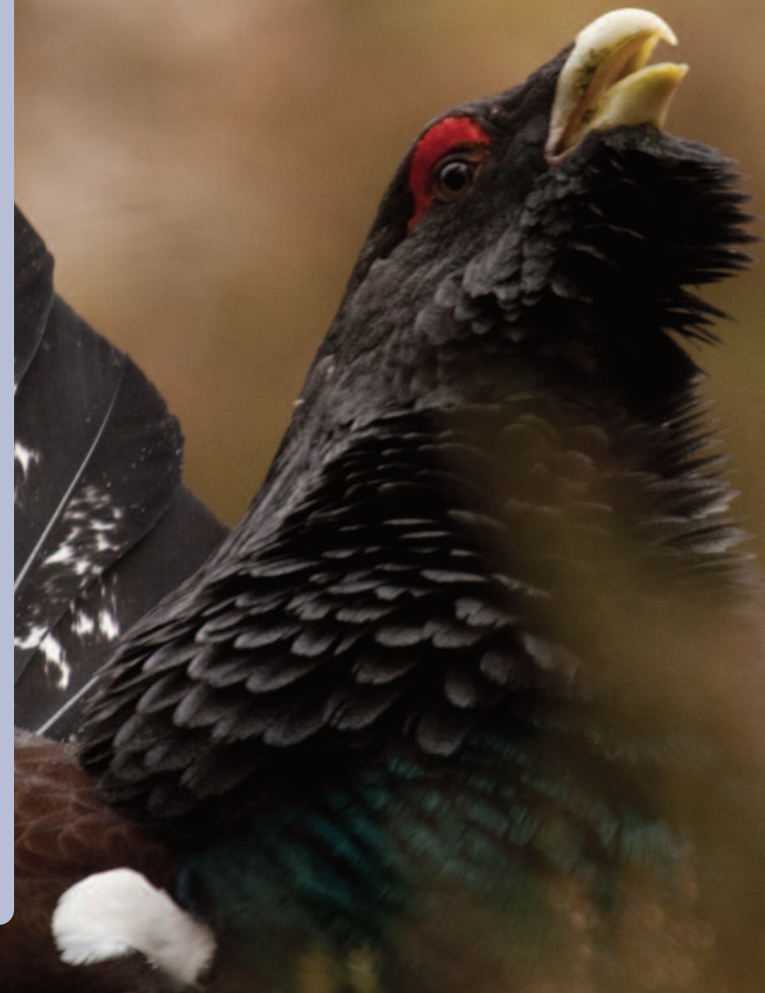
Rhododendrons have been removed and deer browsing is being managed. Conservation cattle grazing is helping to look after habitats for black grouse and mountain hares, and encouraging the natural regeneration of woodland remnants.

Our partners in this flagship project included the RSPB and The Woodland Trust Scotland.



treasure : **capercaillie** *Tetrao urogallus*

A huge woodland grouse, the large black males are unmistakable. They spend a lot of time feeding on the ground, but may also be found in trees, feeding on shoots. Localised breeding species, found in Scottish native pinewood, a rare and vulnerable habitat, and in commercial conifer plantations. The UK capercaillie population has declined so rapidly that it is at very real risk of extinction (for the second time) and is a 'Red List' species.



The national forest estate is one of Scotland’s greatest assets, providing economic, social and environmental benefits to the people of Scotland, wherever they happen to live.

It’s also home to many treasures, recognised for their natural and cultural heritage or as exceptional woodlands. Spectacular views, rare plants and ancient monuments all contribute to a vital sense of place and belonging, whether they’re found on the doorstep of our cities or in the furthest reaches of our wildernesses.

With free and open access encouraged throughout the estate, Scots, and visitors from around the world, can connect with our forests and wide open spaces, and enjoy the diversity of landscapes shaped by our management of woodland, farmland and wild places.

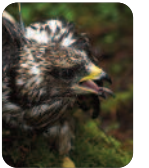
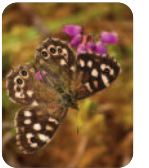
We want to encourage local people to get involved with managing local Estate woodlands so **we will actively engage with local communities**, be open

to work in partnership, and through the National Forest Land Scheme, facilitate communities who would like to buy or lease part of the Estate.

As guardian of Scotland’s national forest estate, Forest Enterprise Scotland is committed to creating more and more uniquely special places across the estate and to delivering benefits to an increasingly diverse range of Scottish people.

The visual attractiveness of the estate is an important part of its appeal. We use professional landscape architects to help us design forests that complement the landscape, redesigning hard edges and creating a more natural tree line. We plan the size and shape of timber harvesting areas to fit into the landscape, although the windy Scottish weather sometimes over-rides our efforts!.

We are committed to providing a high quality countryside experience, free from litter, fly-tipping and clutter.





Healthy forests don't just happen, they have to be planned for. I'm working on a new spatial planning strategy for the estate that makes better use of the information we collect about our land and forests to ensure they have a sustainable future.

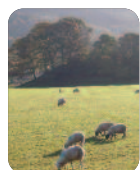
In drawing up our plans we need to take account of a whole range of things like soil type, water-quality, climatic exposure, important species and habitats, and how people are wanting to access the forest. Anticipating climate change means revising our understanding of which species suit which locations.

New GIS and remote sensing technologies are giving us new perspectives on integrated land management planning, on everything from monitoring tree diseases to planning recreation sites and regenerating native woodlands. It's awesome to think that the work I do now will have an impact on the landscape for years - centuries - to come.

Helen Sellars, research programme manager

Healthy

achieving good environmental and silvicultural condition in a changing climate.



We have around 43,000ha designated for conservation importance, and more than 300 sites designated for archaeological heritage.

Our increasingly ecological approach to land management means working with natural processes and within the limits of soil and climatic conditions. We are reducing management intensity where we can, for example by having longer rotations and using natural regeneration. **We are increasingly using alternatives to clear-felling** where soils and climate allow – we think this might work on about 20% of the Estate's forest area. **We are exploring how to best steward the carbon resources locked up in both the estate's trees and soils.**

The scale of our land holdings gives us a unique ability to plan our land management at a landscape/catchment scale to look at how we can combine land uses and objectives to deliver the widest range of benefits. This includes developing habitat networks, often based around river systems to also deliver water quality benefits.

We are looking at how the estate should adapt to climate change, by diversifying species composition

and choosing the best seed sources for changing conditions. We are diversifying the forest structure to increase resilience. We have contingency plans for major disasters such as storm damage and fire, and are implementing strategies to deal with new pests and diseases like Dothistroma needle blight of pine and Phytophthora ramorum disease on larch.

We have major programmes to remove invasive plant species that threaten habitats and biodiversity, including the rapid-spreading and stifling Rhododendron ponticum.

In some places we control the introduced grey squirrel to protect red squirrel refugia and to try and prevent the deadly squirrel pox disease spreading into Scotland.

Grazing and browsing by animals is an important natural process in shaping forests and other habitats, but whilst it can promote diversity, too much can be damaging. We actively manage deer populations to keep their impact positive. In some places we graze cattle and sheep to help manage the land.

Pine tree lappet moth

The caterpillars of the pine tree lappet moth *Dendrolimus pini* can grow to be 5-8 cm long. Feeding mainly on pine needles, they have been known to cause large-scale damage to plantations in continental Europe.

A breeding population was found in Scotland in 2009, but has been confined to a small area near Beaulieu. We don't yet know if this is part of an overlooked remnant population, or a more recent introduction. To date we have not found the moth in any of Scotland's native Caledonian pine woods.

Timber movement controls were put in place as a precaution and the public has been asked not to take home foliage or woody material from the affected forest.



As a Harvester Operator my job is to help to prepare the way for the next generation of forests.

When we clear stands of trees we need to be clear on our mix of objectives for the site in the future, be it conservation, recreation, community or mainly timber supply. I am responsible for felling around 50,000 m³ of timber every year, which is vital to maintain our productivity. What I'm doing, is implementing the plans that are created to produce the multi-purpose forests of the future.

I know I'm working for an organisation, but it really feels like I'm working on behalf of everyone who benefits from Scotland's national forest estate.

Stevie Thomson, harvester operator

Productive

sustainably, utilising the potential of the land.

As we increase the diversity of the estate, our timber will come from a greater range of species. Sitka spruce will remain important because of its ability to achieve good growth rates and desirable timber in Scottish conditions but **we intend to manage at least a quarter of our expanding broadleaved woodlands to produce quality hardwoods** and fuel wood.

As a wider range of timber is harvested, we will **market it in ways that encourage value adding and additional jobs** in manufacturing and processing.

Managing the estate provides work in rural areas and we **will use our work programmes to promote the development of the forestry and land management sectors.**

We also plan to **increase the productivity of our agricultural land.**

We already have over 100 agricultural tenancies and grazing lets extending to 17,000ha, but we hope to bring more of our open ground into active agricultural use. Where buildings and suitable land are available, we are creating starter farms to help integrate farming and forestry.

The renewable energy potential of the estate is estimated at 2GW. We will work with the wind and hydro sectors to **realise the estate's renewable energy potential** whilst achieving a reasonable balance with other objectives, and encouraging community involvement. We will work with the biomass energy sector to utilise the wood fuel that can be sustainably won from the estate.

We are currently creating around 1000ha of new woodland every year **supporting the Scottish Government's woodland expansion policy**. Suitable land is acquired through our repositioning programme, or leased through our short-term leasing scheme. These new woods are designed to be productive, attractive and good for wildlife, and will help meet Scotland's greenhouse gas reduction targets.

We have also developed the estate into a major tourism resource adding some £165m to the Scottish economy each year.



In meeting our responsibility to promote timber market stability and development, **we aim to provide at least three million cubic metres of softwood timber every year on a sustainable basis.**

By co-ordinating information from individual forest plans we know exactly when and where harvesting will take place and can predict and schedule timber production for many years into the future.

The increasing diversity of timber producing species on the estate will provide new opportunities to develop employment in manufacturing and traditional crafts.

We are looking at ways that Scotland's National Forest Estate can help meet anticipated demand in the biomass sector, with a particular focus on underused materials such as waste branches and tree tops.

About 1 million tonnes of carbon are locked up in the trees on Scotland's national forest estate every year.

Combating climate change - a role for UK forests. ' TSO ', 2009

My role largely focuses on communication and public relations. We have many fantastic resources within the Galloway Forest Park for locals and visitors to enjoy.

I'm really lucky, I'm involved in loads of things, from initial website enquiries, to interpretation panels and leaflets to improving access facilities. I work with other organisations and businesses on wildlife tourism projects promoting, and encouraging visitors to experience, the fantastic wildlife watching opportunities we have in our region. No one day is the same as the next.

I love meeting new visitors to the Galloway Forest Park, as I know this is likely to be their first of many visits for years to come.

Lucy Hadley, recreation ranger

Accessible

so that local woodlands and national treasures
are welcoming and open for all

When a section of the Galloway Forest Park was designated as the UK's first Dark Sky Park, the move generated worldwide interest.

There are now ten recommended viewing sites, including four key sites with interpretation boards, and a number of other places where visitors can simply pull off the road and look at the stars.

To find out more, or download the monthly podcast, visit www.forestry.gov.uk/darkskygalloway

"It's really about raising awareness of light pollution, but the stars are the "wow" factor. That's what makes people realise what it means to be on this tiny planet floating in the vastness of space."

Keith Muir, Head of Tourism and Recreation
Galloway Forest District.



Photo trails created by the Fieldfare Trust allow potential visitors to see if a given path will suit them. Users can view countryside routes online through photographs and descriptions, taking in surface, path width, gradients, barriers and amenities such as seats, disabled parking, and accessible toilets.

FES has worked with the Trust to develop 13 Phototrails (approx 27km) on the estate, including this one in the Devilla Forest in Fife. They can be viewed at www.phototrails.org.



Our Woods In and Around Towns (WIAT) programme has improved and created dozens of new urban woodland sites across the central belt and beyond. We manage these sites to a high environmental standard, and Woodland Wardens and Community Rangers are on hand to **help people enjoy and get involved in their local woods.**

We are encouraging use of the estate as an outdoor classroom, a green gym, a place to escape the pressures of modern life, to enjoy adrenaline sports, to glimpse iconic wildlife, to get involved, a place to make a difference - and a place that develops and sustains green jobs.

We hold events and provide information aimed at a diverse range of users. New recreation facilities are designed to maximise accessibility, and we are working to identify other sites where accessibility can be improved. Continuing investment in road and track networks is making it easier for the public to reach the remoter parts of the estate as well as assisting our management and conservation work.

We are working with Visit Scotland, the National Parks and local partners to find new ways to harness our natural and cultural heritage and **develop the estate's potential for tourism**. It has already made Scotland one of the world's premier mountain biking locations and is raising Scotland's reputation as a wildlife-watching destination.

Across the estate we pay special attention to the most visited areas – we call them visitor zones, including areas with recreation facilities or next to busy public roads. These require detailed management to make them as attractive as possible.

Matt Ritchie
FCS Archaeologist

The path to Castle Dounie

Castle Dounie is a classic example of a late prehistoric dun: a small stone-built stronghold on a rocky knoll, intended as much to impress as to defend. Part of the same settlement tradition as brochs and crannogs, it was included in recent laser scan surveys on the National Forest Estate in West Argyll.

In line with the Monument Management Plan for Castle Dounie, we recently replaced an existing informal path with a well-defined and durable new access route with natural stone steps so that more people can appreciate this stunning vantage point.





Things have changed a lot during my 25 years working as a forester

We've shown that producing timber can work alongside doing a huge amount of good for habitats and species, and we're learning all the time. For example, we now have fewer deer fences to prevent woodland grouse flying into them.

Thanks to the resources of Forest Enterprise Scotland I can make sure things happen when it best suits the wildlife. It's satisfying to manage conservation projects on the large-scale needed by species ranging from wood ants to capercaillie.

I'm a keen nature photographer and I often find myself spending my days off in my outdoor workplace. The national forest estate is a fantastic resource for nature and it's great that everyone can enjoy it.

Colin Leslie, environment officer

Cared for

with well looked-after countryside,
natural and cultural heritage

The estate includes a wide range of special species, habitats and features. We have around 67,000ha designated for conservation importance, and more than 300 sites designated for their archaeological heritage. We are committed to maintaining these sites in good condition.

Ancient woodland sites with a long continuity of woodland management represent around 4% of the estate. **We are restoring around 85% of areas on ancient woodland sites to largely native species**, using where possible, techniques designed to maximise the survival of their rich assemblage of species. **The remaining areas will be enhanced through our management**, but retaining some non-native trees where they are delivering special benefits.

We are also expanding our native woodlands across the estate. In the north and east Highlands this includes the expansion of 'Caledonian' pinewoods, but elsewhere the focus is on native broadleaves, and we are planning for a long-term **increase in broadleaved tree cover from the current 8% of woodland cover to around 20%.**

The diversity of our open habitats is equally important. From coastal sand dunes to upland blanket bogs **we are committed to maintaining the best open habitats in good ecological condition.** In some places we are removing plantation forests to restore rare habitats such as lowland raised mires.

There are thousands of species on the estate. The best way to care for most of them is to care for their habitats, and we have identified six that are especially vulnerable need the highest level of management that we can provide:

- Red squirrel
- Capercaillie
- Black Grouse
- Pearl-bordered fritillary butterfly
- Chequered skipper butterfly
- Juniper

These are listed as priority species in the Scottish Biodiversity Strategy. Scotland's national forest estate is also valued as a place for research, development, trials and establishing best practice. As well as hundreds of long-term forestry experiments, it hosts major biodiversity and wildlife management trials, wildlife reintroductions, a network of energy forestry sites, and a wide range of management trials and long-term monitoring programmes.



One-flowered wintergreen (*moneses uniflora*)

One-flowered wintergreen is found in timber-producing pine plantations and Caledonian forest and can be hard to spot amongst the small shrubs and decaying pine needles in the shade of the forest floor. It is so rare that one of our woods contains 90% of the plants in the UK.

Also known as St Olaf's candlestick and wood nymph, its long stem bears a single white flower in summer. In order to protect it we must also protect the bryophyte carpet that keeps it moist and safe from frost, as well as the fungus which gives it nutrients. We go to great lengths to identify and safeguard these colonies and protect them during forest operations.



The Woodmuir Coke Ovens

This battery of ten coke ovens near Woodmuir Farm in West Lothian is a scheduled monument.

The coke oven was once a vital component of Britain's heavy industries, and coke from beehive ovens was used by Abraham Darby to fuel the blast furnaces at Coalbrookdale. Using coal from nearby Woodmuir Colliery, these ovens would have been operated day and night and may have been in use as late as the 1960s.

The historic building survey carried out at Woodmuir included detailed drawings based on 3D laser scans of the surviving structures.



I am responsible for harvesting over half a million tonnes of timber from our woodlands in the North of Scotland every year. I also responsible for making sure the areas that are felled are replanted. That's about 800ha's of replanting every year. Add to that 12 kilometres of road building and maintenance every year and I'm really kept busy.

We negotiate to get the best income possible from our timber, and I keep a very close eye on achieving best value from the resources we invest in the forest.

I run the 'Log Shop' near Inverness. It's an area set aside for us to sell some of our high grade timber to niche markets - a great way to add value and provide timber for special projects.

It's a fantastic job that gets me to some brilliant parts of Scotland and allows me to shape how Scotland looks now and in the future.

Julian Fryer
area operations manager, Highlands



Good Value

generating income to minimise the net cost of delivering public benefits

Direct government funding accounts for around a third of our management budget and is channelled towards recreation, community and environmental benefits, and strategic capital investments including visitor centres and forest roads. By bring in income from other sources we seek to minimise the amount of Scottish Government funding needed to manage the estate.

Our main source of income is from timber production, and this is supplemented by income from other activities like, renewable energy, commercial recreation, venison sales, all of which helps us to finance the sustainable management of the estate.

As well as disposing of land by estate repositioning, we market some carefully selected sites as building land and are looking at how we can add more value to these sites.

We do not charge visitors for access on foot, bicycle or horseback, but we do charge for special permissions and for parking at locations with special facilities. This income is reinvested in sustaining and improving our recreation facilities.



The Glasgow and Clyde Valley Joint Structure Plan, is just one initiative that recognises the value of high quality greenspace as a tool for urban regeneration.

By co-operating in this and similar programmes we are helping to improve Scotland's urban areas and to make Scotland an attractive place to locate and invest.

Forestry Commission Scotland is the first national forestry service to achieve international recognition for its greening initiatives and environmental management systems.

Lloyd's Register Quality Assurance auditors looked at our programmes to minimise energy use and travel emissions, and our efforts to reduce, recycle and re-use waste. They certified all of our offices, workshops and work practices as complying with ISO 14001.

We are also proud to have Forest Stewardship Council (FSC) UK accreditation for sustainable forest management, so achieving ISO 14001 means that environmental quality of every aspect of the organisation's work is internationally recognised.



Priorities and progress

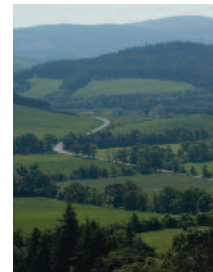
This section summarises our top priorities for developing the contribution of the National Forest Estate over the next three-year period. Where possible these are organised around Forestry Commission Scotland's main programmes.

Cross-cutting

Implement mitigation strategies for current tree disease threats such as red band needle blight of pine and Phytophthora disease of larch.

Develop and implement a landscape scale spatial planning approach as a climate change aware context for individual forest plans.

Through effective business management, sustain the level of resource investment in silviculture and environmental management.



Continue to build local expertise in low impact silvicultural systems.

Renewable energy

Increase renewable energy generation on the Estate in line with the SG 2GW 2020 target without unacceptable loss of environmental quality.

Provide community benefits through renewable energy developments.

Increase availability of forest residues as a biofuel.

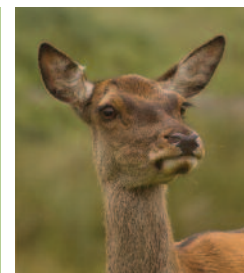
Woodland creation

Sustain a 1000ha/year woodland creation programme.



Continue the repositioning programme, selling assets offering few additional public benefits in order to acquire land that will deliver greater public benefits.

Communicate and collaborate on our approach to sustainable deer management.

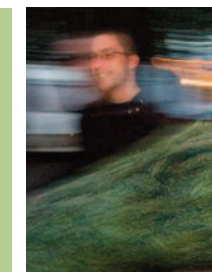


Make further significant progress with creating road access to allow active management across the Estate.

Implement a programme of work to mitigate slope stability hot spots on the Estate.

Urban forestry

Continue to build contribution to the Woods In and Around Towns Initiative and the Central Scotland Green Network.



Access, tourism and health

Refresh our visitor centre facilities to increase their contribution to local economic growth.

At key locations provide high quality, low key facilities that significantly enhance the visitor experience (such as toilets, wildlife viewing hides, inspiring and informative on-site interpretation).

Industry development

Work with Forest Research and other specialists to demonstrate best practice and provide long-term monitoring sites, for example in relation to ecosystem management, climate change adaptation and energy forestry.

Move from a 'production forecast' to a 'sustainable yield' approach to management of timber resources.



Harness the biological productive potential of the Estate woodlands where this will not compromise higher priority objectives. This includes looking at how to sustain yields of softwood timber into the long term, and developing a significant hardwood timber resource, including on appropriate native woodland sites.

With partners, seek new timber transport solutions for inaccessible area, using sea and rail where practical.



Establish starter farms linked to woodland creation proposals.

Natural and cultural heritage



Strengthen our monitoring and status reporting for key habitats and species.



Make significant progress with implementation of our Rhododendron eradication plan.



Notes, references etc
Glossary
Acknowledgements & credits



Forestry Commission Scotland serves as part of the Scottish Government's Environment and Forestry Directorate and is responsible to Scottish Ministers.

Forest Enterprise Scotland is an agency of Forestry Commission Scotland charged with managing the National Forest Estate.

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